ORIGINAL PAPER

Coastal societies, exchange and identity along the Channel and southern North Sea shores of Europe, AD 600–1000

Chris Loveluck · Dries Tys

Published online: 11 November 2006

© Springer Science+Business Media, Inc. 2006

Abstract This paper explores the functioning of coastal societies against the background of the changing role of coastal 'contact zones' on both sides of the Channel and southern North Sea region, between AD 600 and 1100. In so doing, it reassesses aspects of the generalising frameworks of interpretation applied over the past quarter of a century in favour of a more contextual approach, enabled by long known (although sometimes forgotten) and recent archaeological discoveries, together with new geological research. Regional and local complexity is a recurrent feature. A revolutionary increase in our awareness of the extent to which marginal coastal landscapes were occupied and exploited is matched by a commensurate increase in our knowledge of the number and complexity of settlements and seasonally used sites, involved in maritime exchange networks. Ultimately, this contribution confronts the dynamism of regional coastal societies with the wider socio-political structures in which they were incorporated.

Keywords Europe · Southern North Sea · English Channel · Emporia · Coastal identities

Introduction: background, aims and scope of the review

Since the end of the 1970s, archaeological interpretation of the remains of societies in early medieval northern Europe has been articulated primarily through concepts and models borrowed from social anthropology, sometimes linked to textual sources

C. Loveluck (⊠)

Department of Archaeology, School of Humanities, University of Nottingham, Nottingham, UK

e-mail: christopher.loveluck@nottingham.ac.uk

D. Tys

Department of Archaeology and Art History, Free University of Brussels (Vrije Universiteit Brussels), Brussels, Belgium e-mail: dtys@vub.ac.be



(Polanyi and Polanyi 1978: 92–96; Hodges 1982, Arnold 1982a: 124–131; Hodges and Moreland 1988: 79-95). The major trading and artisan centres (often called emporia), founded on both sides of the English Channel and southern North Sea coasts, between the seventh and ninth centuries, have been interpreted as 'ports-of-trade' or 'gateway communities', controlling the redistribution of imported luxuries, surpluses and manufactured goods for kings or regional rulers (Hodges 1982). At the time of their application, the interpretations of the roles of these coastal centres could not be easily placed within the context of the early medieval societies and settlement patterns in their immediate vicinities because of a general lack of wider archaeological survey or excavation. During the past 10 years, however, discoveries and rediscoveries on both sides of the Channel have produced indications of a much more complex range of settlement patterns and sites of exchange than has previously been envisaged in coastal zones. The purpose of this paper is to begin to situate the diverse elements of coastal societies against the background of the changing role of coastal 'contact zones', on both sides of the Channel and southern North Sea region, between AD 600 and 1100 approximately (Cunliffe 2001: 55, Fig. 1). In so doing, we aim to reassess aspects of the frameworks of interpretation applied in the past twenty years, which have tended towards generalising theories, in favour of a more contextual approach.

New archaeological finds from the coastal regions of the Channel waterway, discovered through systematic or chance methods of recovery, now indicate that early medieval societies in this coastal area had a much wider access to imported

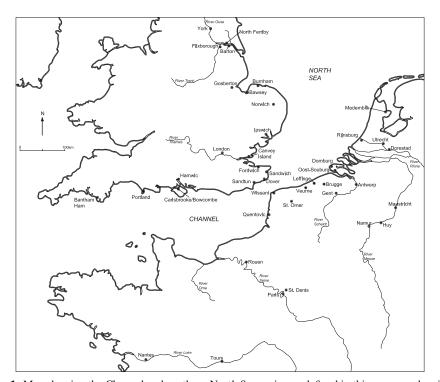


Fig. 1 Map showing the Channel and southern North Sea region as defined in this paper, and major sites discussed in the text (drawn by P. Copeland)



commodities at all levels of society, than might be expected if the anthropological models of access to rare imported luxuries or 'prestige goods' were appropriate to societies as a whole, whatever their geographical circumstances (Friedman and Rowlands 1978: 224–232). There is no doubt that the appreciation of the socially active role of material culture and the application of these anthropological models, and now post-processual ideas, has resulted in huge advances in interpretation of early medieval archaeological remains (Theuws 1999: 339-346; Scull 1999: 17-24; Moreland 2000: 1-34). Yet, they have also been 'normative' in the sense that for them to have worked in reality all sections of societies would have had to hold the same notions of value towards particular material culture (Loveluck 1996: 46). Deviation and regional differences from the perceived norms of hierarchical access and attitude to resources have not been easily explainable in these models, but the application of the theories on the scale of 'societies as a whole' renders it easy to discount apparent 'exceptions to rules' (Verhaeghe 1992, 1999). The discoveries discussed below, however, now apparent on both sides of the English Channel and southern North Sea coasts, can be described as 'consistent exceptions' to the general models of social interpretation, especially in relation to access to perceived luxury commodities or 'prestige goods' as markers of rank, and the extent of exchange (Loveluck 2001: 111–112).

Surveys, excavations and chance discoveries in these coastal zones indicate that social practices and use of material culture may not have aligned with those of societies away from maritime communications or those possibly desired for societies as a whole by contemporary elites. Ease of access to maritime communications now suggests specifically coastal attitudes to commodities, which developed because of situation on major waterborne thoroughfares and the perceived marginal situation of coastal dwellers, in relation to inland settlement and social hierarchies (Tilley 1994: 16-19; Tys 2003; Loveluck 2005: 236-237). Geographical location and access to social networks via marine and river waterways provided coastal societies with both opportunities and constraints. Certain artefacts and commodities which now appear to have been commonplace on the coasts may have been imbued with a much greater social value further inland, and in different social contexts. Conversely, certain resources may not have been available in coastal zones, encouraging exchange. The brief review which follows aims to confront the problem of different scales of interpretation, analysing the archaeological reflections of coastal societies and the reality of their social networks against generalising models of social relations. If, as we believe, current frameworks of general interpretation are now limiting our ability to identify the complexities of how early medieval societies functioned in north western Europe, then greater awareness of regional and local complexity, and the potential actions of individuals as agents of social change, must be incorporated more thoroughly into the general explanatory theories (Hodder **2000**: 21–22).

The theme of local and regional complexity and specialisation has also been a primary focus for historical research, going back to the works of Georges Duby and Robert Fossier; and increasingly, research on Continental evidence emphasizes the differences between societies rather more than similarities at the local level, for the period between the seventh and eleventh centuries (Innes 2000; Verhulst 2002: 73–83). This is especially the case with regard to the range of exchange mechanisms in operation from the eighth and ninth centuries, and the extent of specialist husbandry or artisan activity undertaken by communities in particular locations. Adriaan



Verhulst, in particular, cites the existence for specialist ironworking communities, and salt, wool, flax, glass and pottery producers, amongst others. Critically, he also demonstrates the range of options those producers had in the distribution of their specialist products. The majority probably had to render a certain proportion of their produce to the secular or monastic estates to which they were linked. However, it is also clear that the specialist products could be 'sold' in the sense of alienable exchange, for bartered commodities or coinage (Gregory 1982: 43; Verhulst 2002: 74–78). It would, therefore, seem that a greater degree of 'free' exchange took place on the part of specialists than is generally allowed by the social anthropological models (Loveluck 2005: 253).

Since inhabitants of coastal zones often lived in marginal landscapes, housing a limited range of crops, animals or products, it can be expected that specialist activities would have developed for the purpose of exchange, and this is certainly indicated in documentary sources. The inhabitants of the coastal plains are attested as having been heavily involved in wool, textile and salt production along the Continental Channel and North Sea coasts in the eighth and ninth centuries (Verhulst 1995: 500, 2002: 75–76). The historical visibility of these actions, however, is seen through the filter of documents linked to monastic landholders, and this does not allow an exploration of the full range of interactions on the part of coastal dwellers vis à vis all their maritime-, river- and land-focussed links. This discussion of the existing, recent and emerging archaeological evidence on both sides of the English Channel and southern North Sea region attempts to take into account both the limitations of the generalising anthropological models of social interpretation, and the complexities and potential distortions indicated in the textual sources. The geographical scope of the study extends primarily from northern France and Flanders to the Scheldt-Meuse-Rhine deltas and Friesland on the Continental shore; and from Cornwall to the Humber Estuary, in England (Fig. 1). The ultimate aim is to begin to arrive at a greater understanding of how coastal societies worked and interacted with the wider socio-political structures in which they were incorporated, during the second half of the first millennium AD.

Emporia, imports and coastal identity, AD 600-900

The most important discoveries and rediscoveries of recent years emphasize the complexity of exchange and other social networks operating through the coastal zones of the Channel and North Sea, between the seventh and eleventh centuries. In the past, major *emporia* settlements have been viewed as royal foundations or re-foundations linked to specific kingdoms (Hodges 1982) but this was becoming increasingly untenable on the basis of the English and Continental evidence, during the 1990s (Scull 1997; Lebecq 1997: 75; Samson 1999; Gardiner et al. 2001: 161–162). It would now appear that the range of trading and artisan centres was significantly larger than has been assumed, on both sides of the Channel and southern North Sea coasts, between the seventh and late ninth centuries, and possibly later.

Examining the archaeological and textual evidence for significant trading and artisan settlements on the Continent, extending from northern Holland westward, through the Rhine–Meuse–Scheldt deltas and into Flanders and northern France, there were centres at Medemblik (Besteman 1974; Bazelmans et al. 2004: 22–23); Dorestad (Van Es and Verwers 1980); Domburg/Walcheren (Lebecq 1995: 80–86;



van Heeringen 1995: 28–32); Antwerp; Bruges, Veurne; the currently unlocated *Iserae Portus* on the River Ysère (Tys 2003); Wissant; Quentovic (Hill et al. 1990; Lebecq 1993); and a range of trading settlements on the River Seine leading to Rouen (Le Maho 2003: 234–237), (Fig. 2). In addition, an array of beach exchange sites probably existed in the belts of sand dunes along the coast and at the mouths of tidal channels, two of which may be indicated by imported pottery and coin finds near Oostende and at De Panne, in coastal Flanders (Tys 2003; Scheers 1991: 32–42). All of the fore-mentioned sites were in existence between the seventh and ninth centuries.

Not all of the remains from these settlements are new finds, and perhaps the most significant omission in consideration over the past fifty years has been the role of Antwerp as a major trading and central place during the early medieval period. Between 1952 and 1961, Van De Walle excavated a number of tenements on the Mattenstraat, near the waterfront of the town. He discovered a complex and long occupation sequence, which was never fully excavated or published. The earliest excavated buildings were of wood, and probably dated from the ninth century, but there were also significant unexcavated structures and deposits below these buildings, in addition to a range of imports, suggestive of a major trading settlement (Van De Walle 1961: 123–136; Tys 2004, 186) (Fig. 3). Documentary sources also describe Antwerp as a *castrum*, *castellum*, and *civitas* burnt down by the Vikings in 836 (Verhulst 1977: 196–198; Rombaut 1989). Furthermore, it was also a known mint for gold tremissis coinage during the seventh century, and was the first centre used by

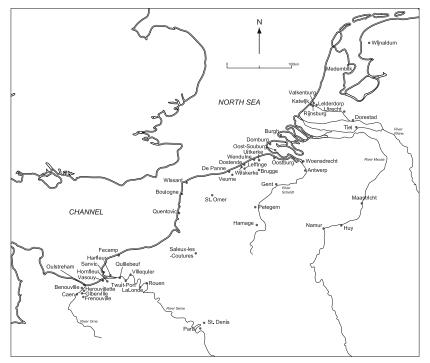


Fig. 2 Map showing the location of *emporia*, other major centres involved in exchange, coastal and estuarine settlements, and beach/dune sites on the Continental shore, from Friesland, Netherlands, to Brittany, France, (drawn by P. Copeland)





Fig. 3 Photograph of the late ninth- to tenth-century wooden buildings and walkways, excavated by Van De Walle (1961) on the Mattenstraat, in Antwerp (photograph courtesy of Stad Antwerpen and Johan Veckman)

the Anglo-Saxon St Willibrord, in his mission to convert the Frisians to Christianity in the 690s (Rombaut 1989; Parsons 1996: 35). All of these pieces of evidence suggest that Antwerp was already a significant centre in the seventh century, probably akin to the major sixth- and seventh-century 'poly-focal' settlements of the Meuse/Maas valley, excavated in the past 15 years at Maastricht (Dijkman and Ervynck 1998: 3; Dijkman 1999: 46–51), Namur (Plumier 1999: 24–30) and Huy (Peters 1997: 110–113, 1999: 31–35), with their multiple roles as administrative, artisan and exchange centres, including mints for gold coinage. New finds from Bruges also reflect a significant poly-focal settlement there by the ninth century, including a mint for silver denier coinage from at least 864, during the reign of Charles the Bald (Verhulst 1977: 193; Ryckaert 1999: 17–19). Bruges was sited on the River Zwin, in between two royal estate centres (*fisci*) at Snellegem and Sysele. The other sites mentioned above are known from a combination of archaeological and textual sources (Tys 2003; Le Maho 2003: 234–243).



The foundation of coastal and estuarine emporia centres has been interpreted as a direct reflection of the desire to control access to luxury 'prestige' commodities on the part of Anglo-Saxon, Frankish and Frisian 'royal' aristocracies (Hodges 1982; Hodges and Moreland 1988: 93; Heidinga 1997: 27–32). Although, Verhulst recently observed that on the Continent, the Carolingian Kings were interested in the collection of tolls in silver coinage rather than in the control of specific exotic luxuries (Verhulst 2002: 130). Stéphane Lebecq has also highlighted that the foundation of settlements like Dorestad and Quentovic was a result of the maritime dynamism of Frisian and Anglo-Saxon cross-Channel exchange contacts, which had controls imposed on them significantly later than their foundation, in the form of Carolingian royal officers administering toll collection (Lebecq 1997: 75). Verhulst noted the titles of these royal officers in relation to Quentovic and Dorestad-procurator or prefectus emporii (Verhulst 2002: 130). There is no evidence of great concern about access to imported luxuries as long as tolls were paid. At other significant settlements involved in exchange, there is less evidence of strict taxation, although toll collection is indicated at Medemblik, Domburg and Rouen, and can probably be assumed for Antwerp (Bazelmans et al. 2004: 22-23; Le Maho 2003: 235). The extent to which tolls were collected at smaller ports, beach, and dune sites is totally unknown.

If, as appears to be the case, revenue generation through tolls at the extremities of the Frankish realms was the primary concern of the later Merovingian and Carolingian kings, then the ways in which major emporia and other sites of exchange functioned need to be reassessed. Tolls appear to have been raised primarily on exported and imported bulk goods, in coin and perhaps, sometimes 'in kind'. There is no denying the likely paramount importance of Dorestad, Quentovic and Rouen as the pre-eminent conduits for long-distance exchange on the Continental coast of the Channel and southern North Sea region. This is reflected in their early emergence as trading settlements during the seventh century, their multiple functions, their roles as mints, and their high visibility in textual sources of evidence until the mid to late ninth century (De Groot 1996: 13–17; Lebecg 1997: 75–76; Le Maho 2003: 235). Yet, the demonstration of real power and royal prestige associated with them lay in the royal ability to tax bulk goods. This is not to say that rarer imported items were not 'entangled' with particular social values, within exchange systems (Moreland 2000: 29). Rather, control of access to them does not appear to have been a particular concern of kings and royal lineages. It becomes increasingly difficult, therefore, to hold the view that establishment of royal control over major Continental emporia was ever linked directly to control of access to apparently rare, imported 'prestige goods', as opposed to taxation of lower-value bulk commodities and finished manufactured products. Indeed, it is only possible to hold the notion that possession of rare luxuries reflected and created high social standing with an assessment of the true rarity of those items perceived as luxury prestige goods (Loveluck 2001: 111–112).

The old idea of major Continental *emporia* acting as centres for controlled redistribution of imported, rare 'prestige goods' can now be examined against the evidence from the larger range of significant centres involved in exchange and production in coastal locations, as well as the more ephemeral beach and dune-belt trading sites, and a growing corpus of coastal rural settlements. It is also possible to make some comparisons with remains from a growing range of settlements situated further inland. Most of the evidence for coastal sites outside the major *emporia* is known currently from the area extending from the Dutch province of Friesland,



through the Rhine delta and into the western extremity of Flanders, with less archaeological evidence from the coast of northern France, at present (Fig. 2). The terp settlements of Tjitsma-Wijnaldum and Tritsum in Westergo, Friesland provide examples of settlements in the Frisian coastal area with excavated evidence for access to high value materials in the form of silver and gold, together with imported pottery from the Rhineland (Tulp 2003: 232; Heidinga 1997: 38). Indeed, seventh-century gold *tremissis* coinage and early to mid eighth-century silver *sceatta* coins, struck in the Rhine mouths area and Frisia, have been recovered consistently with other imports on terp settlements across Westergo and Oostergo (Heidinga 1997: 32). Anthonie Heidinga has also pointed out that the occupants of these raised mound settlements possessing these imports did not live in settlements with ostentatious structures (Heidinga 1997: 38). Consequently, Heidinga, Lebecq and Schmid have all suggested that the wide dispersion of imports on terps indicates occupants who could be characterised as wealthy 'free peasant traders' or 'marchands-paysans', rather than an aristocracy (Lebecq 1983; Schmid 1991; Heidinga 1997: 31–32).

Thus, the settlement pattern and society around the eighth-century and later trading settlement at Medemblik, at which tolls were collected for the Carolingian kings, possessed a wide access to imports, precious metals, and coinage, prior to and during its early stages of existence, at the very least. Moving westward from Friesland to the Rhine delta region, it is also becoming clear that imported items and commodities are consistently present on the known rural settlements and in cemeteries, dating from the late sixth- and early seventh century onwards. Some finds reflect long-distance exchange contacts across the North Sea to England, prior to the foundation of Dorestad further upstream. Work by Menno Dijkstra on the settlement and cemetery at Rijnsburg and the cemetery at Katwijk, all at the mouth of the Old Rhine in south Holland, has demonstrated the presence of Anglo-Saxon gilded display artefacts with affinities to Kent and East Anglia, including a style II drinkinghorn terminal, with close parallels to those from Sutton Hoo, mound 1 (Bazelmans et al. 2004: 26). From the seventh to mid eighth century it is suggested that the settlement at Rijnsburg acted as an agricultural estate centre, involved in some interregional exchange for the supply of an assumed lord and clients (Bazelmans et al. 2004: 22). The excavated remains of another settlement in the Old Rhine delta, at Valkenburg De Woerd are also thought to represent a settlement controlled by an aristocratic family, although with a significant element of the population involved in craft-working and exchange rather than agriculture, between the seventh and ninth centuries (Bult and Hallewas 1990: 86; Bazelmans et al. 2004: 22). In the Scheldt delta area too, a concentration of seventh- to ninth-century settlements, with large quantities of imported ceramics, has also been excavated near Woensdrecht (Trimpe Burger 1973; Verwers 1986), reflecting a regional pattern in the Scheldt-Meuse-Rhine delta zone.

Although the researchers working on the Rijnsburg and Valkenburg sites currently interpret the evidence for exchange as controlled by a regional aristocracy (Bazelmans et al. 2004: 22–23), the occurrence of imported materials could be interpreted in exactly the same context as the material from the Friesland sites. The presence of imports amongst the coastal and riverside settlements of the Old Rhine delta is such that the extent of control on exchange by an aristocracy can be questioned in favour of a wider access to imported goods amongst free lineages in general. Bazelmans et al. themselves note an absence of any documentary evidence for toll collection or control of exchange in the coastal area of the Old Rhine delta,



in contrast to Dorestad further inland (*ibid*, 2004: 23). And Heidinga has suggested that Rijnsburg, Valkenburg, and Leiderdorp could have acted as market sites (Heidinga 1997: 32). To some extent, the long-term focus on the trading role of the seventh- to ninth-century Frisians, from Friesland to the Rhine mouths area, might encourage the view that their coastal social relations were exceptional. Yet, recent and current research, further south-west in coastal Flanders, suggests that this relatively abundant access to imported goods amongst households of coastal societies represents a wider picture along the Continental shore of the southern North Sea and Channel.

Detailed landscape research in the Kamerlings Ambacht of west Flanders (Fig. 5), has brought together archaeological finds, textual and topographic studies (Tys 2003), and new archaeological survey projects, conducted by the authors (Loveluck and Tys 2002) in conjunction with Marnix Pieters (Flemish government archaeology service) and the provincial government of West Flanders. This has demonstrated that at least small quantities of later seventh to ninth-century imported goods are present on nearly all known early medieval sites in this part of the Flanders coastal plain. This evidence is discussed in greater detail in the following section below; here, it is appropriate to note that the Kamerlings Ambacht is the only part of the Flanders coastal plain where systematic study has taken place, and that the imported material has been recovered in the form of pottery (Tys 2003), from the Rhineland (Badorf wares) and southern England (fabrics from Hamwic-Southampton). The pottery has been found during integrated surface collection, geophysical and geochemical survey. The settlement and dune or beach trading sites (near Oostende and De Panne) in the Kamerlings Ambacht are currently unexcavated, and are known only from surface or chance finds of pottery and coinage. Yet, the apparently wide geographical distribution of imports in the coastal plain is extremely reminiscent of the situation in the coastal areas of the Rhine delta and Friesland. Access to imported goods may have been limited to higher ranking households or particular members of their families on these Flemish coastal sites, but it is extremely difficult to make a case for aristocratic or royal control of access to imported goods, on the basis of the emerging evidence for wide dispersal in the southern North Sea coastal plains.

The reality of the Continental settlement patterns along the coast of the southern North Sea, between the seventh and late ninth centuries AD, was a complex hierarchy of significant coastal settlements acting as central places involved in long-distance inter-regional exchange, in addition to the centres of Dorestad, Quentovic and Rouen. Alongside the larger coastal settlements was a range of beach or dune-belt trading sites, either focussed on permanently occupied rural settlements in these situations, or on seasonal gathering points. Then, there was a wider network of rural settlements, also possessing imported items and raw materials. The extent to which this was also the case on the Channel coast of northern France, across the Pas de

¹ The archaeological survey work has been conducted through the 'Leffinge medieval settlement and landscape pilot survey project' in 2002, funded primarily by the University of Southampton and the British Academy, with additional funding from the province of West Flanders, the Free University of Brussels and the IAP Vlaanderen; and by follow-up survey in 2003 as part of the ACI-Techniques, Terrain, Théories project, funded by the IAP Vlaanderen, CNRS-University of Tours—Laboratoire Archéologie et territories, and the British Academy. Only results from the Leffinge pilot project of 2002, and pottery analyses completed prior to the ACI project are discussed here.



Calais, and into Normandy and Brittany is less clear from the standpoint of the archaeological evidence.

The presence of 'Anglo-Saxon' dress accessories has long been known from sixthcentury graves in the cemeteries of the lower Orne valley, between Caen and the Channel coast at Ouistreham, in Normandy (Lorren 1980: 231–250; Arnold 1982b; Pilet et al. 1990: 34–35), (see Fig. 2). They have their closest parallels with the material culture of the Isle of Wight, southern Hampshire and Kent, demonstrating cross-Channel contacts, and perhaps elements of a common sense of identity created by use of the Channel seaways, especially between the Isle of Wight and lower Normandy. Yet, the social dispersion of imported items and goods amongst communities, and different elements of settlement and social hierarchies is difficult to assess from this mortuary evidence, other than to say that Anglo-Saxon artefacts were present in wealthier furnished graves. Archaeological evidence for the receipt and dispersion of imported goods beyond the sixth century is scarcer, although pottery made in the Rouen area at La Londe was exported to southern England during the eighth to ninth centuries (Hodges 1991: 882-887; Roy 1993). The textual evidence on Rouen and other trading sites in the lower Seine valley (Le Maho 2003: 242-243) might also reflect a similar situation to the coastal zones of Flanders, Holland and Friesland, although this cannot be proven at present. The discovery, on the south-west coast of England, of sixth and seventh-century pottery made in western France (DSP- and E-wares), and common monumental and iconographic traditions also demonstrates cross-Channel contacts with Brittany and the Bay of Biscay until the late seventh century, if not later (Thomas 1981; Campbell 1996: 88– 92; Davies et al. 2000). Linguistic links seen in Old-English/Anglo-Frisian placenames from coastal Normandy, such as Ouistre-ham, also reflect maritime contacts and perhaps aspects of a common group identity; just as the P-Celtic place-names of Brittany and Cornwall provide more certain evidence of strong group and 'ethnic' affiliation on facing shores of the western Channel waterway.

As on the Continent, the importance of the major coastal *emporia* in England has also been stressed in relation to the control of trade and exchange by Anglo-Saxon royal dynasties, from the later seventh to ninth centuries AD. The archaeological assemblages from the majority of these settlements, such as Hamwic-Southampton (Hodges 1981; Morton 1992; Andrews 1997), London (Vince 1990; Blackmore et al. 1998: 60–63; Malcolm, Bowsher and Cowie 2003), Ipswich (Wade 1988; Scull 1997); and York (Kemp 1996) were relatively isolated when excavated, due to the absence of many larger scale surveys and excavations in their hinterlands. Archaeological evidence from rural settlements or finds concentrations in regions nearby the coastal centres tended to come from sites associated with documentary references, i.e., they were important enough to be mentioned, and were usually royal or aristocratic estate centres or monasteries (Loveluck 2001: 104–107). Quantities of apparently rare, imported luxuries were found on these important rural settlements, and this reinforced the equation of imports with high social status, and the idea that they were funnelled through emporia controlled by royal officers. Fortunately, like the European mainland, a combination of new excavations, surveys, reassessment of existing archaeological evidence, and metal-detected finds now allows us to begin to place the dispersion of imports in coastal landscapes within a wider settlement, social and geographical setting, for the period contemporary with the major emporia.

On the south and east coasts of England, as far north as the Humber estuary, we are faced with an ever growing number of sites, occupied or used between the



seventh and ninth centuries, which received imported goods via North Sea and Channel maritime networks (Fig. 4). Beginning the review with the Channel coast, the finds concentrations from the south coast of Kent, the Wantsum channel and the Isle of Thanet have long been thought to reflect either royal-controlled, major trading settlements or toll collection points (Kelly 1992, 10; Hill et al. 1990). These settlements at Dover (Parfitt 2001: 95-98; Philp 2003); Fordwich (Hill 2001: 98); Sandwich (Holman 2001: 100–102); and Sarre (Perkins 2001: 102–103), amongst others, took advantage of their geographical situation and long-established communications routes (Brookes 2003: 96). Alongside the latter sites, it is now possible to gauge access to imports outside these probable centres. Excavations at Sandtun, West Hythe, on the south coast of Kent, have revealed a beach and dune settlement on a coastal inlet, involved in cross-Channel exchange from the seventh century until the late ninth century, with additional later reuse in the eleventh century (Gardiner et al. 2001: 268-270). The discoveries at Sandtun have provided the first comprehensive archaeological profile of such a dune-beach site from the south-east coast of England, facing the Pas de Calais and Flanders. Gardiner has presented a very convincing argument for the site having been a settlement and landing place which housed a community involved in fishing, salt production, cross-Channel exchange and supporting craft activity, including iron smithing, textile production and leatherworking (Gardiner et al. 2001: 272). He sees the site as linked with, and possibly dependent on another settlement(s) nearby, as reflected in the imported animal and crop remains, and cites the possibility that the settlement was occupied on a seasonal basis (*ibid* 2001: 272–273).

Moving west along the English south coast there are archaeological indications of landing places, possibly similar to *Sandtun* or more substantial permanent

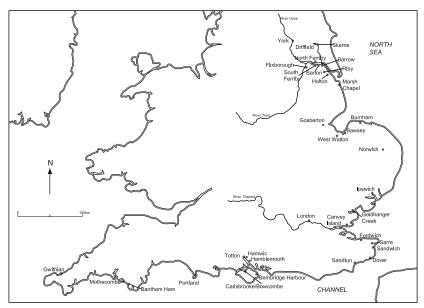


Fig. 4 Map showing the location of *emporia*, coastal and estuarine settlements, beach/dune sites and finds concentrations on the English shore, from the Humber estuary to Cornwall (drawn by P. Copeland)



settlements, at Carisbrooke/Bowcombe, and possibly Benbridge and Benbridge Harbour, on the Isle of Wight (Ulmschneider 1999: 30–32; Rippon 1997, 130); and a series of sites around the River Solent and south Hampshire coast, such as Hamblemouth (Morton 1999: 51) and Totton (Ulmschneider 2003: 83). All these landing places were in close proximity to the emporium at Hamwic-Southampton, and chance finds from the majority indicate probable involvement in cross-Channel exchange with a high proportion of imports in the form of coins, dating from the seventh to ninth centuries, some of which have never been recovered from Hamwic (Ulmschneider 2003: 80). Further west again, a series of excavations on the dunes and beach at Bantham Ham, at the mouth of the River Avon in Devon, has revealed the remains of a site with substantial quantities of eastern Mediterranean and north African pottery, in the form of amphorae and fine wares dating from the later fifth to early seventh centuries, and also pottery wares from Cornwall, with some later finds (Fox 1955: 55–67; Silvester 1981: 89–118; May and Weddel 2002: 421). Other beach sites involved in cross-Channel or longer distance exchange networks have been suggested at Mothecombe, southern Devon, on the basis of imported amphorae fragments (Thomas 1981: 12); and Gwithian, west Cornwall, where middens, huts and a range of Mediterranean imports were excavated on a bluff of blown sand, at the mouth of a tidal creek (Thomas 1958: 19). The Gwithian beach settlement also continued in use, between the eighth and twelfth centuries (Thomas 1958: 23).

On the North Sea coast of eastern England to the River Humber, there is also a growing abundance of coastal sites on major estuaries, at the mouths of tidal creeks, and in delta locations. A range of coastal landing places is being located in the Thames estuary, East Anglia and the Fen edge of Norfolk and Lincolnshire. On the Thames estuary, another site like Sandtun may be reflected in pottery and coin finds from the shore of Canvey Island, Essex; whilst other shore finds from Goldhanger Creek, Essex, and sites on the north coast of Kent, probably reflect further landing places and settlements (Rippon 1997: 130–3). The settlements at Bawsey, West Walton and Burnham provide examples from East Anglia: Bawsey seemingly a wealthy settlement on a tidal inlet, West Walton located on raised silt banks of former river channels in the Fenland, and Burnham just inland from a beach landing place (Rogerson 2003: 112–119; Fig. 4). Others are located on the Humber estuary, either in beach or inlet locations or overlooking the river deltas feeding into it. For example, late seventh- to mid eighth-century silver sceattas indicate probable beach trading and ferry sites at North Ferriby, East Yorkshire (Loveluck 1994, vol 1: 311, vol 2: 258–259; 1996: 44), Barton-upon-Humber (Drinkall 1998: 291; Didsbury 1998: 311; Williams and Martin 2002: 920) and South Ferriby (Blackburn 1993: 89), north Lincolnshire. Whereas, the materially rich settlement at Flixborough, north Lincolnshire overlooks the lower floodplain and delta of the River Trent as it flows into the Humber (Loveluck 1998: 146, Fig. 4). Again all of the places above have provided evidence for the receipt of imports or involvement in exchange, dating from the period between the seventh to late ninth centuries, in the form of coinage, pottery, lava querns or scales and weights. They encompass a range of permanently occupied settlements, such as Flixborough and Bawsey; and beach sites like Sandtun, Bantham, Gwithian, and North Ferriby which reflect landing places possibly occupied on a seasonal basis as fishing and trading sites.

We are, therefore, presented with a picture of a complex range of landing places, settlements and other sites of exchange on the English side of the Channel and southern North Sea coasts, in addition to the major *emporia*. These, in turn were



faced with the Continental shore from Normandy to Friesland, with its own network of beach trading sites, and both small and larger trading centres, in addition to Dorestad, Quentovic and Rouen. Not all the fore-mentioned sites on the Channel and southern North Sea coasts of England need have been landing places for ships, between the seventh and late ninth centuries. Landing places relating to the Flixborough settlement, were probably located on the River Trent in the floodplain below the site (Loveluck in press); whilst the Burnham landing place was probably a beach site, perhaps like *Sandtun*. This raises the issue of the wider dispersion of imported goods from the coastal landing places in England, other than the *emporia*. In coastal and estuarine areas, and also on major river communications routes leading to them, access to imported commodities appears abundant when compared to most settlements further inland. This situation seems to mirror the wide dispersion of imports in Frisia and Flanders already discussed, and appears to be characteristic of the 'entry-point regions' or 'contact zones' along the Channel and southern North Sea coasts.

For example, all the settlements subjected to systematic excavation on or in the hinterland of the Humber estuary have yielded imported goods, whether coinage, pottery or lava guerns (Loveluck 1998: 158–159; 2001: 111–112; Ulmschneider 2000: 57; Fig. 4). Some river landing places running inland from the estuary could have been directly controlled within estate structures. For example, the excavated jetty on the River Hull at Skerne, East Yorkshire could have been directly linked with the nearby royal estate centre at Driffield (Loveluck 1996: 45; Swanton 1996: 41; Dent et al. 2000). Silver coinage was certainly used in the area of Driffield contemporary with its appearance on the Humber, which was earlier than at York, and this suggests royal interest in the role of the estuary for exchange (Teasdill 1965: 355–359, Loveluck 1996: 44–45). Yet, not all the settlements with imports can be viewed as high-status centres, housing secular aristocrats or monasteries. The dispersion of imports is too wide in the hinterland of the Humber to suggest denial or control of access to imported goods by royal authority. There is certainly textual evidence from law codes and the Anglo-Saxon Chronicle which suggests that royal officers (reeves) administered collection of tolls at major centres, as on the Continent, but the number of reeves and their ability to administer all coastal trade is unlikely to have covered all landing places or exchange transactions. The limitations of their power away from major centres are demonstrated graphically in the killing of a reeve at Portland, Dorset, by 'three ships of Northmen' from Hordaland in western Norway, in 789 (Swanton 1996: 55). Away from the presence of a royal officer with enough manpower to enforce taxation of exchange directly, control in coastal areas may have been sporadic—especially in marginal coastal locations with difficult landward access.

Even if reeves did manage to be present at all coastal sites involved in exchange, proximity of coastal populations to goods needed by mariners, such as water, food and desirable commodities for exchange, such as salt, presented even low ranking coastal dwellers with much greater opportunity to enter into exchange transactions with foreign traders than their counterparts living further inland. This made a relative abundance of imported commodities normal rather than exceptional, with regard to certain items, which have been interpreted in the past as both 'utilitarian' (lava querns) and 'prestige' or high-value objects (silver coinage, fine-ware pottery). Furthermore, as many coastal dwellers lived in marginal landscapes, such as marshes, this increased the incentives for trade because their living environments



necessitated specialist husbandry and production for exchange. In such a way, specifically coastal material culture identities can be distinguished which were divorced from the hierarchical distributions of imported goods which seem to have operated in most regions away from the sea, with some exceptions. In England, the excavated evidence from Gosberton on the seaward side of the northern Fen marshlands, in Lincolnshire, has provided indications of a modest settlement involved in animal husbandry, salt production, and some crop cultivation (Lane 1993: 30–1). Significantly, Katharina Ulmschneider has pointed out that this site and others on the former seaward side of the Fens possessed imported pottery, made at the *emporium* at Ipswich, together with lava querns from the Rhineland. She also observed that contemporary sites, on the landward side of the Fens, did not have access to Ipswich ware and that the presence of the querns and Ipswich ware on the seaward side represented a specifically coastal distribution (Ulmschneider 2000: 70). This coastal exchange network may have been totally free of any control.

A similar coastal material culture profile can be suggested for the Humber estuary, although there, more direct elite toll collection at sites of exchange may have occurred, due to proximity of royal authority. However, there is no evidence of restriction of access to high value items or goods in coastal zones once tolls and other forms of embedded redistribution had been exacted, such as renders of livestock, crops or products to estate centres. Furthermore, once socially embedded dues had been paid, there is no evidence that alienable exchange was controlled, whether it was conducted by barter or purchase with coinage. Advantageous geographical situation, possession of essential provisions for mariners and specialist products, and in certain instances distance from authority, gave coastal societies outside emporia the opportunity to obtain imported products to an extent that would have seemed exceptional further inland. In this sense, the growing indications of wide social dispersion of imported goods reflects a specific phenomenon of coastal societies, which is common at least to eastern England and the region from Friesland westwards through Flanders and probably into northern France, on the Continental shore of the southern North Sea and Channel waterways. The extent that this was also true of the Channel coast of southern England is less clear at present, but the fact that imported pottery and coinage stayed at the dune-beach settlement at Sandtun also suggests a relatively wide access to imported goods amongst a significant proportion of coastal households not of aristocratic status. The indications of the sheer range of coastal sites involved in exchange, whether the largest *emporia*, other significant centres like Antwerp, beach trading sites, or coastal settlements, and above all their contemporaneity, demonstrates the need for the abandonment of any evolutionary categorisation of these sites, as has occurred in the past (Hodges **1982**: 50–52)

Maritime situation and the necessity for specialist husbandry and manufacture of certain products, for estate renders and exchange without attached social obligations, created the material identity of the societies of the coasts, and their dune belts and marshes, between the sixth and late ninth centuries. The broad access to imports amongst coastal societies contrasts with the apparent hierarchical access to imports and fashions of social display in regions inland from the northern French, Flemish and Dutch coastal areas, and into the German Rhineland (Loveluck 2005). Major royal palace, palace-monastery complexes and poly-focal settlements, like Saint-Denis, reflect conspicuous consumption using imported 'feasting kits', in the form of drinking vessels and pottery fine-wares from the Rhineland (Wyss 2001: 195).



Secular estate centres and smaller monasteries, such as Petegem, Flanders (Callebaut 1994: 95-97), Serris, Seine-et-Marne (Foucray and Gentili 1995: 139-143) and Hamage, Nord (Louis 1997: 55–60), reflect display in stone or stone sill architecture, elements of ostentatious display in drinking vessels, and integration into inland exchange networks using coinage. Whilst nucleated settlements, such as Saleuxles-Coutures (Somme), involved primarily in mixed farming had limited access to imported commodities (Catteddu 1997: 143–144). The exceptions to this pattern of dispersion were settlements of craft specialists. The excavations at the settlement of Develier-Courtételle, Jura, have uncovered the remains of a metalworking community, which had access to imported items from the northern Rhineland, although the inhabitants do not appear to have been of high social standing (Federici-Schenardi and Fellner 1997: 125–128). Their access to imported goods seems to reflect the greater necessity and opportunity for exchange on their part, once any obligations to linked estates had been fulfilled; and in this sense they show distinct similarities with inhabitants of coastal zones, with their incentives for specialist production and exchange (Loveluck 2005: 236). Similar hierarchical access to imports is also reflected in England, although settlements of specialists away from coastal zones have proved more elusive.

Ease of communication by rivers, tidal creeks and seaways may also have created a perspective on the part of coastal dwellers, which looked seawards with regard to group affiliation and 'cultural ties'. Authority and government usually manifested themselves and approached these coastal societies in marshes and dunes from the landward side, sometimes via difficult communications routes. Indeed, the perception of these marginal landscapes and societies, from an inland perspective, appears as highly peripheral and negative in eighth- and ninth-century documentary sources (Coates 1998: 58). This may have resulted in a greater willingness on the part of coastal dwellers to adopt and co-operate with new influences and fashions arriving via the sea. It is within this context, that the developments of the tenth century must be viewed, in relation to permanent habitation of coastal areas, and the control of the activities of their populations.

Living in coastal landscapes: seasonality and permanently occupied settlement hierarchies, ${\bf AD}$ 600–1000

Up until the late 1990s, and major reassessments of the formation of coastal plains, estuarine landscapes, and their inhabitability through the first millennium AD (Baeteman 1999; Baeteman et al. 2002; Tys 2001, 2005), prevailing explanations of occupation in these areas have favoured their exploitation for seasonal activities. Such explanations were based on models of cyclical marine transgression (sea-level rise) and regression, when coastal plains and lowland estuaries became permanently inundated by water; or became wetland ecological habitats, whether saltmarsh, silt fen or lowland moors for peat accumulation, during periods of sea-level rise (Behre et al. 1982). Within the transgression and regression models, the period between AD 300 and 800 has been characterised as an era of marine transgression (the Dunkirk II transgression), and exploitation and occupation of the North Sea coastal plains, low lying estuarine zones and coastal dune belts has been suggested as seasonal and limited in nature, due to inhospitable conditions.



The suggested absence of the potential for permanent settlement in most coastal areas during the defined Dunkirk II transgression has been based on an apparent correlation between archaeo-botanical evidence from Lower Saxony and other areas around the North Sea coast, with certain charter references to grants of coastal pasture to leading monasteries, from the seventh to tenth centuries AD (Behre et al. 1982; Verhulst 1995, 1998; Hooke 1998). Such ideas became an accepted orthodoxy on both the Continental and British sides of the Channel and North Sea, with historical references of land grants to major ecclesiastical institutions often being viewed as immediate precursors to wetland drainage and land reclamation, especially in Flanders and the English Fens. For example, despite the Fenland archaeological survey in England, the historian Jordan still considered a handful of charters concerning donations of coastal estates to Cistercian abbeys as the main argument to support the idea of embankment of the Fenland coastal plain under their auspices, during the thirteenth century (Jordan 2002).

The historical sources have also tended to be used in an inconsistent way by archaeologists, in relation to early medieval activity in coastal zones, often following assumptions made on the basis of sporadic and limited textual sources. For example, the first references to settlements or individuals associated with settlements in the Flanders coastal plain date from the end of the eighth century. They were land grants to the abbey of St. Peters, Ghent, comprising seasonal grazing, and an estate associated with at least one settlement in the coastal plain, near Oostburg (Gottschalk 1955: 16). Verhulst saw these grants as an indication of the end of the Dunkirk II transgression, and an onset of land reclamation, primarily sponsored by major monasteries from the Scheldt valley. The general absence of textual evidence relating to activities in the coastal plain prior to the late eighth century was then used as evidence of an absence of permanent activity and settlement in this area, i.e. textual visibility governed all interpretation of early medieval activity in the Flemish, northern French and Zeeland coastal claylands.

Yet, in Frisia (from the Rhine delta eastwards to Friesland), the oldest textual references to settlement and activities in the coastal tract also date from the eighth century, but the archaeological research on terp settlements has long demonstrated the permanent habitation of this region, in the early medieval period, several centuries before activity became visible in the historical records (see above; De Langen 1992). In Flanders and northern France, however, the archaeological record was forced into the textually dated chronological framework (Verhaeghe 1977). Prior to the English Fenland survey, in southern Lincolnshire, Cambridgeshire and Norfolk, the role of major monasteries has also been stressed in colonisation, land drainage and reclamation of the Fens from the tenth century onwards, co-ordinated from the sites of re-founded seventh-century monastic centres, often on island locations (Stocker 1993: 101-110; Hooke 1998: 172-3). Yet, as in Frisia, survey by surface collection and some subsequent excavation has demonstrated wider settlement within the Fen wetlands, and on the sea coast of the Fens, from at least the seventh century (Hayes and Lane 1992; Lane 1993; Ulmschneider 2000: 70). Nothing in the evidence demonstrated seasonal occupation, as opposed to permanent settlement, although seasonal occupation has been suggested on the basis of scarcity of metalwork compared to sites on good land communications routes, further inland (Ulmschneider 2000: 71).

Recent detailed and systematic geomorphological research in Flanders, based on sediments and their radiocarbon dating, by Cecile Baeteman and her team from the



Belgian Geological survey and the Free University of Brussels (VUB), has shown that in the early medieval period the Flemish coastal plain was a stable and not significantly inundated area of saltmarsh, interspersed with tidal channels which were actively silting up and evolving into channel ridges (Baeteman 1999; Baeteman et al. 2002). These findings render the Dunkirk II transgression model redundant as a significant barrier to permanent human activity and settlement in this coastal plain. They may not only have localised implications for coastal Flanders, they may also have considerable relevance to other areas of the Channel and North Sea littoral. Even if, however, the results are specific to coastal Flanders, they highlight diversity in the potential for human activity in low-lying coastal regions during the early medieval period, rendering allegiance to generalising models dangerous.

In the light of the re-assessment of the geomorphological evidence in coastal Flanders, and the demonstrable danger of following the textual sources as indicators of settlement, recent and current research in the coastal plain, combining analyses of medieval and early modern cadastral (terrier) sources, field and dyke systems, and archaeological sources, has sought to evaluate the evidence for the development of settlement in this area from an inter-disciplinary perspective (Tys 2003). This research has suggested the existence of a settlement hierarchy of *Flachsiedlungen* farmsteads on the contemporary ground surfaces of silted-up tidal channel ridges, focussed on nucleated settlements of multiple households, located on *terp* mounds such as Leffinge and Bredene (Tys 2003: 588–598, 2005; see Fig. 5). The nucleated settlements like Leffinge became the central foci for their microregions of approximately fifteen square kilometres, at the administrative, religious and economic levels, from at least the tenth century; and there are indications of

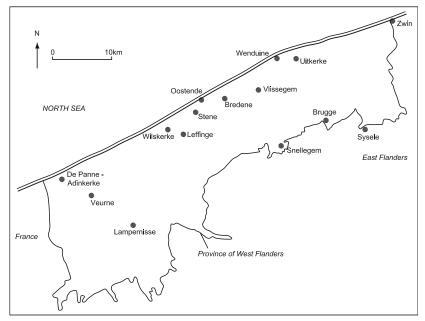


Fig. 5 Map showing the location of settlements, beach sites and finds concentrations, dating from the period between the sixth and eleventh centuries AD, in the coastal plain of West Flanders (drawn by P. Copeland)



their central role from at least the Carolingian period. This has parallels with the suggested role of "trade terps" in Frisia, suggested by Halbertsma (1963) and others.

Analysis of the textual sources for property relations in the Flanders coastal plain, from the tenth to fifteenth centuries, also shows that the populations of these terp-focussed settlement hierarchies were free proprietors (Tys 2003: 266–273, in press). That is to say, they may have owed some dues to respective regional lords, whether Counts or Kings, but with the exception of these possible obligations there is no evidence that they came under any other significant socio-political control, in the period covered by this paper. As mentioned above, a similar situation can be suggested for the Westergo and Oostergo regions of Friesland (Heidinga 1997: 31–32) and Oost Friesland in Germany, where Schmid has suggested that free farmers (*Bauerenkaufleute*) lived in the higher coastal salt marshes, involving themselves in wool production and trade from their *Langenwurten* settlement mounds (Schmid 1988: 134–137).

Therefore, in the area containing the known early medieval coastal trading settlements, at Wissant, Veurne, Bruges, Antwerp and Walcheren/Domburg, and the unlocated Iserae Portus, there appear to have been permanent surrounding settlement patterns, with at present unconsidered relationships to them (see below; MGH Formulae Imperiales). Again, as stated in the previous section, this further demonstrates the potential significance of this coast line and the connection with open water for exchange, with its coastal centres lying between Quentovic and Dorestad. The populations of the coastal landscape, largely located on tidal channels up until the tenth/eleventh century (Verhaeghe 1977; see below) possessed a maritime focus within a landscape which is unlikely to have fulfilled all their subsistence needs. The primary activities for the nutritional support of their households would have focussed on sheep husbandry and fishing (Verhulst 1995, 2002). The population, like others involved in specialist production of limited products, must also have been involved in a significant degree of exchange for the provision of the cereal component of their diet, and commodities such as wood. The likely major commodities for exchange would have been wool or finished wool garments (the so-called pallia fresonica), fish and salt (Ervynck et al. 2004; Tys 2005).

The physical nature of the settlements surrounding the terps in coastal Flanders is gradually becoming apparent through reconsideration of previously excavated material and current surveys (Fig. 5). At Lampernisse, in West Flanders, a sequence of settlement deposits dating from the seventh to ninth centuries was excavated on the sand ridge of a tidal channel, demonstrating the presence of a settlement of some status which was also the predecessor of a later manor (Verhaeghe 1977; Demolon and Verhaeghe 1993; Ervynck et al. 1999). More recently, in the same modern province, rescue excavations in advance of modern development have uncovered the remains of earth-fast foundations of farm buildings, dating from the seventh to the eleventh centuries at Uitkerke (Pype 2002), and from the ninth to twelfth century at Plassendale (Vanhoutte and Pieters 2003). Further east, in the area around Oostburg, in the Dutch part of the former County of Flanders, Van Heeringen and others have also excavated a series of settlement sites, dating from the ninth to tenth century (Vos and Van Heeringen 1997: 96–97). Until now, these excavated sites have been interpreted as isolated and exceptional evidence of settlement in areas where only seasonal activity was deemed possible.



This view, however, is increasingly unsustainable, not simply in relation to the excavated evidence but also in relation to the surface pottery concentrations and coin finds, dating from between the fifth to the early twelfth centuries AD (Fig. 5). In west Flanders, clusters of surface pottery finds from this period have been identified at Wenduine; Oostkerke (Hillewaert 1984); Stene (Decoster 1984); the beach near Middelkerke (Cools pers comm.; Tys 2005); Leffinge-Oude Werf (Tys 2003: 232–242), and Wilskerke-Haerdepollems Wal (Loveluck and Tys 2002; Tys 2003: 232-242). Coin finds may also indicate other beach and dune sites, represented by Carolingian silver coins from Adinkerke, near Veurne (Termote 1992: 57–58); and a gold tremissis of the first half of the sixth century, from Walraversijde (De Boe 1967; Tys 2005). The pottery concentrations at Wilskerke-Haerdepollems Wal and Stene were associated with enclosures or ring dikes for parts of their occupation sequences (Fig. 6). The Wilskerke-Haerdepollems Wal site was also selected by the authors for systematic and superimposed geophysical, topographic, geochemical and grid-based surface collection surveys, which took place in September 2002. These superimposed surveys showed that the main concentration of fifth/sixth- to fifteenth-century pottery lay within the previously identified enclosure, which was located on either side of a probable tidal channel, and does not appear to have shifted in that time period. Although, it is possible that it formed the primary settlement focus from which the village of Wilskerke developed, immediately to the north, on land reclaimed in the tenth century (see footnote 1).

In short, in the coastal plain of western Flanders (the Kamerlings Ambacht) there is evidence for unbroken activity relating to settlement, probable specialist husbandry and commodity production, and cross-Channel and coastal exchange from the sixth century onwards. Furthermore, there is no archaeological evidence at present to assume that activity in the coastal plain was seasonal. Indeed, the emerging settlement evidence suggests the opposite—a permanently occupied settlement hierarchy. A permanently occupied and productive landscape in the coastal marshes of Flanders, and eastwards to the Scheldt–Meuse–Rhine delta region, and beyond, also helps explain a long-standing textual and archaeological paradox:



Fig. 6 Photograph of the partially preserved enclosure or ring-dyke at Wilskerke-Haerdepollems Wal, West Flanders, Belgium (photograph taken by the authors)



namely, the large ring-forts constructed at the end of the ninth century/early tenth century, from Veurne in West Flanders to Oost Souburg, Domburg and Burgh, in the Scheldt delta, and Rijnsburg, in the Rhine delta (Henderikx 1995: 76–81; Dijkstra pers comm.). These large ring forts have been interpreted as vluchtburgen or 'refuge forts' during periods of Viking raiding, in their late ninth- to tenth-century stages (Henderikx 1995: 71). Yet, historians and most archaeologists have, until now, viewed the Flanders and Zeeland coastal plain as seasonally occupied, which begs the question 'Why build large and ostentatious ring forts in a coastal region occupied only by a sparse population of fishermen, shepherds and salt-workers in the summer?' The answer to the paradox of the past is now apparent in the indications of a vibrant, permanently occupied settlement hierarchy, which was worth protecting and controlling closely.

The detailed discussion of the new finds from Flanders, and the review of the better known evidence from the Scheldt-Meuse-Rhine deltas and Frisia (Dutch and German Friesland) all points to the value of coastal location and the opportunities for coastal societies. In England too, the remains from the beach settlement at Sandtun, the sites from the coastal edge of the Fens and East Anglia, and settlements overlooking deltas and coasts also testify to similar opportunity. Although, most English beach sites and settlements in wetlands are still often equated with seasonal use, although often without proof. Evidence for use of the coastal wetlands and the inter-tidal zone of the Channel and southern North Sea coast is growing all the time (Rippon 1997: 143–145), but remains of habitation sites have proved elusive in certain coastal wetlands of England, for the period prior to the tenth century. For example, the Humber wetlands survey of the late 1990s did not identify any new Anglo-Saxon settlement sites, with the exception of tenth- to eleventh-century salt workings at Marsh Chapel, in the Lincolnshire marshlands of the Humber estuary (Fenwick 2001: 231–241). Activity on the Humber seems to have been focussed on the beach sites on the estuary itself, linked to better drained settlement areas overlooking the rivers and on river banks, leading into the estuary. Rather than assume uniform levels of habitation of marginal coastal landscapes, it would seem to be most sensible to envisage regional patterns of coastal settlement and use, but it remains likely that the extent of occupation within marginal coastal zones of England has been significantly underestimated. Indeed, Rippon has previously observed that coastal landing places and settlements are more visible in textual sources from the eleventh century, especially in the Domesday survey, than in the archaeological record (Rippon 1997: 132); and this could be a reflection of limited work in dune belts, in particular.

A final phenomenon associated with the English and the Continental coastal sites relates to the visibility of tenth-century activity. In Flanders, Zeeland and the Rhineland, tenth- to eleventh-century phases of occupation and use of sites tend to be visible from the presence of small but consistent quantities of fine-ware pottery, usually Pingsdorf-type ware. Metalwork and coinage are rarer, and were it not for the diagnostic and highly visible forms of pottery, most of the tenth- and eleventh-century phases of settlements would be invisible archaeologically. In England, tenth-century phases of activity for coastal fishing and trading settlements such as *Sandtun* are not suggested, despite 'Later Saxon' types of pottery which are suggested to be late ninth century in date, and mid eleventh-century activity reflected in silver coinage and some pottery forms (Gardiner et al. 2001: 267–270). The appearance of a hiatus in occupation or use during the tenth century is a recurrent trend for eastern



and south-eastern England. Much of the occupation sequence for the tenth century at Flixborough, in the hinterland of the Humber estuary, would have been archaeologically invisible but for the exceptional vertical stratigraphic sequence of buildings and refuse, dated later than the end of the ninth century, and before the arrival of diagnostic later tenth- and early eleventh-century pottery (Loveluck 2001: 117–119). It is also true that most of the pottery-based chronologies for ninth- to eleventh-century England are ultimately cross-referenced by association with coin dates. Coinage is rare between the end of the 880s and the 970s in much of eastern England, outside certain key centres like York, Norwich and London (Story 2003: 248), and use of hack silver and bullion-exchange systems was the norm at sites such as Flixborough in the tenth century (Loveluck 2001: 103–104; Kruse 1992). Hence, pottery date ranges may emphasise association with mint dates for coinage up to the 880s and from the 970s onwards, rather than real late ninth-century production and loss dates. It is, therefore, conceivable that an apparent hiatus in use of a site like Sandtun, during the tenth century, could be a product of the way we construct our artefact chronologies, rather than an image of reality.

Indeed, more and more evidence is emphasising the long-term continuity in the use and occupation of coastal landscapes along the Channel and southern North Sea coasts, between the sixth and eleventh centuries AD. In this sense, it is interesting to observe that with the exception of the demise of the two largest continental emporia most closely associated with the Carolingian kings, at Dorestad and Quentovic, other significant coastal centres like Antwerp did not decline. Indeed, the construction of the large ring fort at Domburg at the end of the ninth century, adjacent to the earlier *emporia* site, also reflects continuity of occupation and use of significant coastal settlements through the tenth and eleventh centuries, integrated by the sea and river waterways (Lebecq 1995: 75–76). Long-term continuity in the exploitation of a significant proportion of coastal sites into the eleventh century, and sometimes later, is also reflected in England, if the tenth century 'hiatus' is more apparent than real. This is true not only on the Channel and east coasts (Gardiner et al. 2001; Pestell 2003: 126–131), but also on the Irish Sea, as at Meols, in the Wirral (Griffiths 2001: 20–25, 2003).

Conclusions: coastal dynamism and social identity, AD 600-1000

This brief review of the evidence for the settlement patterns and social relations of coastal societies along the shores of the English Channel and southern North Sea, during the early Middle Ages, has highlighted the need for a total re-evaluation of the generalising social and environmentally deterministic interpretations of the past. New archaeological survey work, publication of excavations, and renewed analysis of known and forgotten sites, indicates that there was a much greater degree of exploitation and occupation of marginal coastal landscapes than has been suggested, on both the Continental and English shores, between the sixth and tenth centuries AD. Not all coastal environments need have been covered with permanently occupied settlements, but the archaeological evidence is emerging which indicates that most of them were permanently inhabited landscapes. Previous assumptions of seasonal exploitation and occupation were based largely on assumptions led either by past absence of evidence or adherence to models of coastal plain environments as subject to extensive marine inundation, between AD 300 and 800 approximately.



The evidence from settlements on the coastal edges of the English Fenlands, the estuarine zones of the Humber and Thames, the dune belts of the English south coast; coastal West Flanders, the Scheldt–Meuse–Rhine delta, and Dutch and German Friesland, all now suggest permanently occupied and vibrant settlement hierarchies in coastal areas.

Settlement and exploitation of the Channel and southern North Sea coasts comprised utilisation of poorly drained delta and estuarine landscapes, saltmarshes, peat and silt fens, former banks of palaeo-channels, and coastal dune belts and beach sites. Embankment of these environments within sea dykes does not appear to have occurred until the tenth and eleventh centuries, imposed by authorities which wanted to impose agricultural regimes based on those from better-drained regions further inland. There is no evidence to suggest a lack of dynamism within coastal societies, prior to this time. Indeed, the limitations and opportunities of coastal environments encouraged specialist production of finished goods and materials for exchange, in the form of products like fish, salt, livestock, wool and finished textiles. Where the evidence is available a significant proportion of coastal dwellers in marginal landscapes also appear to have been 'free proprietors', although some were tied to inland estate structures. Yet, once any renders of goods had been delivered to estate centres within socially embedded redistribution networks, there is no evidence that alienable exchange of surpluses did not take place, on the part of tied settlements. The need to be involved in exchange for goods not available in marginal coastal landscapes, and direct access to maritime and river waterways gave coastal households opportunistic access to products exported over long distances, and abundant access to them, relative to communities further inland. Such a degree of access on the part of, often modest households, put coastal dwellers outside the social norms and relations reinforced by access to imported commodities, within settlement hierarchies away from the coasts. Hence, any interpretations of social status and identity founded on exchanged items must be viewed within their immediate context.

The revolution in our awareness of the habitability of seemingly marginal coastal landscapes has been matched by the increase in our knowledge of the number and complexity of settlements and sites involved in maritime and cross-Channel exchange. The documented major emporia of the seventh to ninth centuries AD can no longer be viewed as the controlling points for the funnelling of imported 'prestige goods'. They were, instead, the main points at which royal authorities taxed longdistance exchange in finished goods and bulk commodities through the collection of tolls. There is no evidence of royal interest in limiting access to imported materials once tolls had been paid. In addition to the *emporia* there were also other significant centres involved in exchange all along the coast of the continent, such as Antwerp, together with a host of smaller trading centres, coastal settlements, and beach or dune sites. The degree of toll collection or control at the smaller sites of exchange is unknown. Furthermore, all these settlements involved in long-distance exchange were contemporary, and it seems to be a mistake to place them into an evolutionary typology in terms of their development, or a hierarchical framework of redistribution as controlled exchange sites or markets. A significant number of the smaller sites of exchange and beach sites have access to imported items, such as coinage and pottery fine-wares, which have not been found in larger centres or emporia, suggesting an independent role in cross-Channel and long-distance exchange, rather than funnelled redistribution of imports from major centres. The simple fact appears



to be that a broader social spectrum of coastal societies had access to a greater quantity of imports than contemporaries inland, even if the sites of exchange were overseen by local royal officers.

Fortunately for landward political authorities, any socially destabilising influences, which may have been caused by more abundant access to luxuries in coastal areas were counterbalanced by difficult access to marginal coastal landscapes, with their marshes and tidal creek systems. Indeed, the attitudes of landward elites towards the coasts treated marginal coastal landscapes as inhospitable and 'unholy' places in comparison to better drained and more stable topographical environments (Coates 1998: 58). Ideologies of socio-political control focussed on land and land-derived resources, and it is not clear how they viewed sea-going and river communities involved in fishing, long-distance maritime travel, and its related opportunities, in the form of trade and piracy. The perceived marginal and boundary situation of coastal dwellers in land-dominated societies promoted greater affinity with coastal communities on either side of the Channel and southern North Sea coasts (Jenkins 1997: 53-56). Hence, we see elements of the expression of a common, maritime group identity in the relative abundance of exchanged material in coastal zones, distributed both across the Channel and along the Continental coastline. Greater affinity with other maritime groups, in certain instances, rather than with the social elites based inland, may also have promoted rather different links than textual sources suggest in coastal locations. For example, elements among coastal societies may have used the disruption of existing political authority, caused by Viking raiders in the ninth century, to undertake a greater degree of alienable exchange for profit than may have been the case in the eighth and early ninth centuries. The location of coastal societies in a geographical and social environment which can be defined as 'outside' or 'other' than anything further inland may also have been a reason for the construction of the ring forts at the end of the ninth and early tenth centuries, on the Continental shore. They can be interpreted as the first signs of direct control on coastal dwellers by central authorities based further inland, as much as protection from Scandinavian raiding.

The more limited datable material from the tenth century on the English and Continental shores of the Channel and southern North Sea seems to be a sign of the growing regionalisation of political structures and the reorganisation of exchange networks. The evidence from coastal Flanders suggests total continuity in occupation of the coastal settlement hierarchy, as does the construction of the large ring forts overlooking earlier trading places, not just in Flanders but also eastwards to the Rhine delta and beyond. Similar indications of settlement continuity through the tenth century are suggested in England, although there are archaeological visibility problems relating to the demonstration of tenth-century activity in eastern England. Maritime and river-borne contacts in England and on the Continent are reflected in regional and inter-regional distribution of pottery, rather than in abundant coinage, suggesting a regional focus and an increasing outlook towards the growing towns of the tenth and eleventh centuries AD. Greater integration within increasingly centralised 'kingdom' and town-focussed authorities changed the relationship of town and countryside, and also elements of the outward-looking and maritime perspective of coastal societies, incorporating them within the overarching collective regional identities of the Central Middle Ages.



Acknowledgments Chris Loveluck would like to acknowledge the support provided by a British Academy postdoctoral research fellowship and a British Academy Small Grant for the funding of this research. Sincere thanks must also go to the University of Southampton for funding the majority of the research undertaken during the Leffinge Pilot project, and grateful thanks are also extended to Dr Marnix Pieters, Glenn Gevaert, the Province of West Flanders, and the community of Middelkerke.Dries Tys would like to acknowledge the support provided by the Research Foundation-Flanders research assistant-mandate and postdoctoral research fellowship and the support by Brussels Free University (VUB). Thanks also go to Dr Marnix Pieters from the Flemish Heritage Institute for all his support and friendship in our joint research in the Flemish coastal plain; Prof Dr C. Baeteman for sharing her insights with us and special thanks go to my promotor, Prof Dr F. Verhaeghe for his everlasting inspiration.We are also very grateful to Antwerp City Council and Johan Veckman for providing Figure 3, and to Penny Copeland for producing the location maps.

References

- Andrews P (ed) (1997) Excavations at Hamwic: Vol 2, CBA Research Report 109, Council for British Archaeology, York
- Arnold CJ (1982a) Stress as a stimulus for socio-economic change: England in the seventh century. In: Renfrew C, Shennan S (eds) Ranking, resource and exchange: aspects of the archaeology of early European society. CUP, Cambridge
- Arnold CJ (1982b) The Anglo-Saxon cemeteries of the Isle of Wight. British Museum Publications, London
- Baeteman C (1999) The Holocene depositional history of the IJzer palaeovalley (western Belgian coastal plain) with reference to the factors controlling the formation of intercalated peat beds'. Geol Belgica 2-1-2:39–72
- Baeteman C, Scott DB, Van Strydonck M (2002) Changes in coastal zone processes at high-sea-level stand: a late Holocene example from Belgium. J Quaternary Sci 17(5–6):547–559
- Bazelmans J, Dijkstra M, De Koning J (2004) Holland during the First Millennium. In: Lodewijckx M (ed) Bruc Ealles well—archaeological essays concerning the peoples of north-west Europe in the First Millennium AD. Leuven University Press, Leuven, pp 3–36
- Behre K-E, Brandt K, Kucan D, Schmid P, Zimmermann WH (1982). Mit dem Spaten in die Vergangenheit. 5000 Jahre Siedlung und Wirtschaft im Elbe-Weser-Dreieck, Bremerhaven: Niedersächsisches Institut für Historische Küstenforschung, Wilhelmshaven
- Besteman JC (1974) Carolingian Medemblik. Berichten ROB 24:43-106
- Blackburn MAS (1993) Coin finds and coin circulation in Lindsey, c. 600–900. In: Vince A (ed) Pre-Viking Lindsey, Lincoln Archaeological Studies 1. Lincoln, CLAU, pp 80–90
- Blackmore L, Bowsher D, Cowie R, Malcolm G (1998) Royal opera house. Curr Archaeol 158, 14.2: 60–63
- Brookes S (2003) The Early Anglo-Saxon framework for middle Anglo-Saxon economics: the case of East Kent. In: Pestell T, Ulmschneider K (eds) Markets in early medieval Europe—trading and 'Productive' sites, vol 650–850. Windgather Press, Macclesfield, pp 84–96
- Bult E, Hallewas D (1990) Archaeological evidence for the early medieval settlement around the Meuse and Rhine deltas up to c. AD 1000. In: Besteman J, Bos J, Heidinga HA (eds) Medieval archaeology in the Netherlands: studies presented to H.H. van Regteren Altena, Assen/Maastricht, pp 71–98
- Callebaut D (1994) Résidences fortifiées et centres administratifs dans la vallée de l'Escaut (IXe-XIe siècle). In: Demolon P, Galinié H and Verhaeghe F (eds) Archéologie des villes dans le Nord-Ouest de l'Europe (VIIe-XIIIe siècle). Actes du IVe Congrès International d'Archéologie Médiévale, Douai, pp 93–112
- Campbell E (1996) The archaeological evidence for external contacts: imports, trade and economy in Celtic Britain, AD 400–800. In: Dark KR (ed) External contacts and the economy of late Roman and Post-Roman Britain. Boydell Press, Woodbridge, pp 83–96
- Catteddu I (1997) Le site médiéval de Saleux "Les Coutures": habitat, nécropole, et églises du haut Moyen Age. In: De Boe G, Verhaeghe F (eds) Rural Settlements in Medieval Europe, Papers of the 'Medieval Europe—Brugge 1997' conference, Vol 6. Zellik, I.A.P., pp 143–148
- Coates P (1998) Nature—western attitudes since ancient times. Polity Press, Cambridge
- Cunliffe B (2001) Facing the ocean—the Atlantic and its peoples. Oxford University Press, Oxford



- Davies W, Graham-Campbell J, Handley M, Kershaw P, Koch JT, Le Duc G, Lockyear K (2000) The inscriptions of early medieval Brittany. Celtic Studies Publications, Oakville, Connecticut and Aberystwyth
- De Boe G (1967) Middelkerke: Frankische triëns. Archeologie 1:39–40
- Decoster M (1984) Archeologisch onderzoek van de Gemeente Stene (Oostende). Prospectie—Analyse—Synthese. Unpublished disseration University of Gent
- De Groot HL (1996) Utrecht and Dorestad: fifteen miles apart, a world of difference. In: de Bièvre E (ed) Utrecht, Britain and the continent: archaeology, art and architecture. British Archaeological Association Conference Transactions XVIII. Leeds, Maney, pp 12–21
- De Langen G (1992) Middeleeuws Friesland. De economische ontwikkeling van het gewest Oostergo in de Vroege en de Volle Middeleeuwen. Wolters, Groningen
- Demolon P, Verhaeghe F (1993) La céramique du Vième au Xième siècle dans le nord de la France et en France belge, Etat de la question. In: Piton D (ed) Travaux du groupe de Recherches et d'Etudes sur la Céramique dans le Nord Pas-de-Calais. Actes du colloque d'Outreau (10–12 avril 1992). Nord-Ouest Archéologie Hors-Serie, Berck-sur-Mer, pp 385–407
- Dent J, Loveluck CP, Fletcher W (2000) The early medieval site at Skerne. In: Van de Noort R, Ellis S (eds) Wetland heritage of the hull valley—an archaeological survey, Humber Wetlands Project (English Heritage). Hull, University of Hull, pp 214–242
- Didsbury P (1998) A Frankish Jug, in G. Drinkall, M. Foreman. The Anglo-Saxon Cemetery at Castledyke South, Barton-on-Humber: 311. Humber Archaeology Partnership, Sheffield Excavation Reports 6. Sheffield, Sheffield Academic Press
- Dijkman W (1999) Maastricht. In: Plumier-Torfs JS, Régnard M, Dijkman W (eds) Mosa Nostra—La Meuse mérovingienne de Verdun à Maastricht, Ve-VIIIe siècles. Ministère de la Région wallonne, Namur, pp 46–51
- Dijkman W, Ervynck A (1998) Antler, Bone, Horn, Ivory and Teeth: The Use of Animal Skeletal Materials in Roman and Early Medieval Maastricht. Municipality of Maastricht/Instituut voor het Archeologisch Patrimonium Vlaanderen, Archaeologica Mosana 1, Maastricht
- Drinkall G (1998) Scales and weights (Grave I). In: Drinkall G, Foreman M (eds) The Anglo-Saxon cemetery at castledyke south, Barton-on-Humber: 291. Humber Archaeology Partnership, Sheffield Excavation Reports 6. Sheffield, Sheffield Academic Press
- Ervynck A, Baeteman C, Demiddele H, Hollevoet Y, Pieters M, Schelvis J, Tys D, Verhaeghe F (1999) Human occupation because of a regression or the cause of a transgression? A critical view on the interaction between geological events and human occupation history in the Belgian coastal plain during the first millennium AD. Probleme der Küstenforschung im südlichen Nordseegebiet 26:97–121
- Ervynck A, Van Neer W, Pieters M (2004) How the North was Won (and lost Again). Historical and archaeological data on the exploitation of the north Atlantic by the flemish fishery. In: Housley R, Coles G (eds) Atlantic connections and adaptations. Economies, environments and subsistence in lands bordering the North Atlantic. Oxbow, Oxford, pp 230–239
- Federici-Schenardi M, Fellner F (1997) L'habitat rural du haut moyen âge de Develier-Courtételle (Jura, Suisse). In De Boe G, Verhaeghe F (eds) Rural settlements in medieval Europe. Papers of the 'Medieval Europe, Brugge 1997' Conference, Vol 6. Zellik, IAP, pp 121–130
- Fenwick H (2001) Medieval salt production and landscape development in the lincolnshire marsh. In: Ellis S, Fenwick H, Lillie M, Van de Noort R (eds) Wetland heritage of the lincolnshire marsh: an archaeological survey. University of Hull/English Heritage, Kingston-upon-Hull, pp 231–241
- Foucray B, Gentili F (1995) Le Village de Haut Moyen Âge de Serris (Seine-et-Marne), lieudit 'Les Ruelles' (VIIe-Xe siècle), In: Lorren C, Périn P (eds) L'habitat rural du haut Moyen Âge (France, Pays-Bas, Danemark et Grande-Bretagne). A.F.A.M., tome 6, Condé-sur-Noireau, Corlet, pp 139–143
- Fox A (1955) Some evidence for a Dark Age trading site at Bantham, near Thurlestone, South Devon. Antiq J 35:55-67
- Friedman J, Rowlands MJ (1978) Notes towards an epigenetic model of the evolution of 'civilisation'. In: Friedman J, Rowlands M (eds) The evolution of social systems. Duckworth, London, pp 201–276
- Gardiner M, Cross R, Macpherson-Grant N, Riddler I (2001) Continental trade and non-urban ports in mid-saxon England. Excavations at sandtun, West Hythe, Kent. Archaeolog J 158:161–290
- Gottschalk MKE (1955) Historische geografie van westelijk Zeeuws-Vlaanderen I: Tot de St-Elisabethsvloed van 1404. Van Gorcum, Assen
- Gregory C (1982) Gifts and commodities. Academic Press, London



- Griffiths DW (2001) Meols. Brit Archaeol 62:20-25
- Griffiths DW (2003) Markets and 'Productive' sites: a view from Western Britain. In: Pestell T, Ulmschneider K (eds) Markets in early medieval Europe—trading and 'Productive' sites, vol 650–850. Macclesfield, Windgather Press, pp 62–72
- Halbertsma H (1963) Terpen tussen Vlie en Eems. Een geografisch-historische benadering. Vereniging voor terpenonderzoek, Groningen
- Hayes P, Lane T (1992) Fenland Project 5: Lincolnshire survey, The South-West Fens, East Anglian Archaeological Report 55, Sleaford
- Heidinga HA (1997) Frisia in the first millennium—an outline, Frisia project. Matrijs, Utrecht
- Henderikx PA (1995) De ringwalburgen in het mondingsgebied van de Schelde in historisch perspectif. In: Van Heeringen R, Henderikx PA, Mars A (eds) Vroeg-Middeleeuwse ringwalburgen in Zeeland. ROB, Amersfoort/Goes, pp 71–112
- Hill D (2001) Fordwich, Kent, in Appendix 2: Gazetteer of possible Anglo-Saxon Wics: 95–103. In: Hill D, Cowie R (eds) The early mediaeval trading centres of Northern Europe. University of Sheffield, Sheffield
- Hill D, Maude D, Warburton K, Worthington M (1990) Quentovic defined. Antiquity 64:51–58Hillewaert B (1984) Oostkerke-bij-Brugge, Archeologische Inventaris Vlaanderen 2, Ghent: University of Ghent
- Hodder I (2000) Agency and individuals in long-term processes. In: Dobres M-A, Robb J, (eds) Agency in archaeology. Routledge, London and New York, pp 21–33
- Hodges R (1981) The Hamwih pottery: The local and imported wares from 30 years' excavations at Middle Saxon Southampton and their European context. Southampton Archaeological Research Committee Report 2. CBA Research Report 37, London
- Hodges R (1982) Dark age economics: the origins of towns and trade, AD 600-1000. Duckworth, London
- Hodges R (1991) The 8th-century pottery industry at La Londe, near Rouen, and its implications for cross-channel trade with Hamwic, Anglo-Saxon Southampton. Antiquity 65:882–887
- Hodges R (2000) Towns in the Age of Charlemagne, Duckworth Debates in Archaeology Series. Duckworth, London
- Hodges R, Moreland J (1988) Power and exchange in Middle Saxon England. In: Driscoll ST, Nieke MR (eds) Power & politics in early medieval Britain and Ireland. Edinburgh University Press, Edinburgh, pp 79–95
- Holman D (2001) Sandwich, Kent, in D. Hill et al., Appendix 2: Gazetteer of Possible Anglo-Saxon Wics: 95–103. In: Hill D, Cowie R (eds) The early mediaeval trading centres of Northern Europe. Sheffield, University of Sheffield
- Hooke D (1998) The landscape of Anglo-Saxon England. Leicester University Press, London
- Innes M (2000) State and society in the early middle ages: the middle Rhine valley 400–1000. Cambridge University Press, Cambridge
- Jenkins R (1997) Rethinking ethnicity—arguments and explorations. Sage, London
- Jordan E (2002) Patronage, prayers and polders: assessing cistercian foundations in thirteenth century Flanders and Hainaut. Citeaux Commentarii Cistercienses 53–3–4:99–126
- Kelly S (1992) Trading privileges from eighth-century England. Early Medieval Europe 1:3–28
- Kemp RL (1996) Anglian settlement at 46–54 Fishergate, The Archaeology of York, vol 7: Anglian York, Fascicule 1, York: York Archaeological Trust/Council for British Archaeology
- Kruse SE (1992) Late saxon balances and weights from England. Med Archaeol 36:67–95
- Lane T (1993) Fenland Project 8: Lincolnshire Survey, The Northern Fen Edge, East Anglian Archaeological Report 66. Sleaford, East Anglian Archaeology
- Lebecq S (1983) Marchands et navigateurs frisons du haut Moyen Âge, vol 2. University of Lille, Lille
- Lebecq S (1993) Quentovic: un état de la question. Studien zur Sachsenforschung 8:73–82
- Lebecq S (1995) L'Emporium Proto-Médiéval de Walcheren-Domburg: Une mise en perspective. In: Duvosquel J-M, Thoen E (eds) Peasants & Townsmen in Medieval Europe—Studia in Honorem Adriaan Verhulst, Belgisch Centrum voor Landelijke Geschiedenis/Centre Belge d'histoire Rurale 14. Ghent, Snoeck-Ducaju & Zoon, pp 73–89
- Lebecq S (1997) Routes of change: production and distribution in the west (5th–8th century). In: Webster L, Brown M (eds) The transformation of the Roman World AD 400–900. London, British Museum Press, pp 67–78
- Le Maho J (2003) The fate of the ports of the lower seine valley at the end of the ninth century. In: Pestell T, Ulmschneider K (eds) Markets in early medieval Europe—trading and 'Productive' sites, vol 650–850. Macclesfield, Windgather Press, pp 234–247



- Lorren C (1980) Des Saxons en Basse Normandie au Vie siècle? A propos de quelques découvertes archéologiques funéraires faites récemment dans la basse vallée de l'Orne. Studien zur Sachsen Forschung 2:231–258
- Louis E (1997) Archéologie des bâtiments monastiques, VIIème—IXème siècles: Le cas de Hamage (France, Département du Nord). In: De Boe G, Verhaeghe F (eds) Religion and Belief in Medieval Europe, Papers of the 'Medieval Europe Brugge 1997' conference, vol 4. Zellik, I.A.P, pp 55–63
- Loveluck CP (1994) Exchange and society in early medieval England, 400–700 AD, vol 2. Ph.D Thesis, University of Durham
- Loveluck CP (1996) The development of the Anglo-Saxon landscape, economy and society 'on Driffield', East Yorkshire. In: Griffiths D (ed) Anglo-Saxon studies in archaeology and history, vol 9. Oxford University Committee for Archaeology, Oxford, Oxbow, pp 25–48
- Loveluck CP (1998) A high-status Anglo-Saxon settlement at Flixborough, Lincolnshire. Antiquity 72:146–61
- Loveluck CP (2001) Wealth, waste and conspicuous consumption: Flixborough and its importance for middle and late Saxon rural settlement studies. In: Hamerow H, MacGregor A (eds) Image and power in the archaeology of early medieval Britain—essays in honour of rosemary cramp. Oxbow, Oxford, pp 78–130
- Loveluck CP (2005) Rural settlement hierarchy in the age of Charlemagne. In: Story J (ed) Charlemagne, empire and society. Manchester University Press, Manchester, pp 230–258
- Loveluck CP (in press) Rural settlement, lifestyles and social change in the later first millennium AD. Excavations at Flixborough, Vol 4. Oxford, Oxbow/English Heritage
- Loveluck CP, Tys D (2002) The development of the medieval settlement pattern and landscape in coastal Flanders, AD 400–1500: the Leffinge pilot project, unpublished report, University of Southampton
- Malcolm G and Bowsher D, Cowie R (2003) Middle Saxon London: Excavations at the Royal Opera House 1989-1999, MoLAS monograph series 15, London
- May J, Weddell P (2002) Bantham: a dark age puzzle. Curr Archaeol 178, 15.10:420–22
- Moreland J (2000) Concepts of the early medieval Economy. In: Hansen IL, Wickham C (eds) The long eighth century – production, distribution and demand. The Transformation of the Roman World Series, Leiden, Brill, pp 1–34
- Morton A (1992) Excavations at Hamwic, vol 1. CBA Research Report No. 84. Council for British Archaeology, London
- Morton A (1999) Hamwic in its context. In: Anderton M (ed) Anglo-Saxon trading centres: beyond the Emporia. Cruithne Press, Glasgow, pp 48–62
- Parfitt K (2001) Dover, Kent. (Appendix 2: Gazetteer of Possible Anglo-Saxon Wics 95–103). In: Hill D, Cowie R (eds) The early mediaeval trading centres of Northern Europe. University of Sheffield, Sheffield
- Parsons D (1996) England and the Low Countries at the time of St Willibrord. In: de Bièvre E (ed) Utrecht, Britain and the continent: archaeology, art and architecture. British Archaeological Association Conference TransactionsXVIII, Leeds, Maney, pp 30–48
- Perkins T (2001) Sarre, Isle of Thanet, Kent (Appendix 2: Gazetteer of Possible Anglo-Saxon Wics: 95–103). In: Hill D, Cowie R (eds) The early mediaeval trading centres of Northern Europe. University of Sheffield, Sheffield
- Pestell T (2003) The Afterlife of 'Productive' Sites in East Anglia. In: Pestell T, Ulmschneider K (eds) Markets in early medieval Europe—trading and 'Productive' sites, vol 650–850. Macclesfield, Windgather Press, pp 122–137
- Peters C (1997) Les fouilles de la rue Sous-le-Château à Huy: évolution d'un quartier medieval. In: De Boe G, Verhaeghe F (eds) Urbanism in Medieval Europe. Papers of the 'Medieval Europe Brugge 1997' Conference, Volume 1, Rapporten 1, Zellik, Instituut voor het Archeologisch Patrimonium, pp 109–115
- Peters C (1999) Huy. In: Plumier-Torfs J&S, Régnard M, Dijkman W (eds) Mosa Nostra—La Meuse Mérovingienne, de Verdun à Maastricht, Ve-VIIIe siècles. Namur, Ministère de la Région wallonne, pp 31–35
- Philp B (2003) The discovery and excavation of Anglo-Saxon Dover, Kent Monograph Series Research Report 9. Dover, Kent Archaeological Rescue Unit
- Pilet C, Alduc-Le-Bagousse A, Blondiaux J, Buchet L, Grevin G, Pilet-Lemiere J (1990) Les nécropoles de Giberville (Calvados), fin du Ve siècle—fin du VIIe siècle après J.C. Archéol Méd 20: 3–140



- Plumier J (1999) Namur. In: Plumier-Torfs J&S, Régnard M, Dijkman W (eds) Mosa Nostra—La Meuse mérovingienne, de Verdun à Maastricht Ve-VIIIe siècles. Namur, Ministère de la Région wallonne, pp 24–30
- Polanyi K, Polanyi I (1978) Trade, markets and money in the European early middle ages. Norwegian Archaeolog Rev 11:92–96
- Pype P (2002) Archeologisch onderzoek van een landelijke bewoningskern uit de Vroege en de Volle Middeleeuwen te Uitkerke (Blankenberge) (West-Vlaanderen). Archaeol Med 25:33–34
- Rippon SJ (1997) The Saxon, medieval and post-medieval periods. In: Allen JRL, Bradley RJ, Fulford MG, Mithen SJ, Rippon SJ, Tyson HJ (eds) The archaeological resource: chronological overview, in Fulford M, Champion T, Long A (eds) England's Coastal Heritage—A survey for English Heritage and the RCHME: 103–153, English Heritage Archaeological Report 15, London: English Heritage
- Rogerson A (2003) Six middle Anglo-Saxon sites in West Norfolk. In: Pestell T, Ulmschneider K (eds) Markets in early medieval Europe—trading and 'Productive' sites, vol 650–850. Macclesfield, Windgather Press, pp 110–121
- Rombaut H (1989) De Echternachteksten betreffende Antwerpen: nieuwe argumenten. Bijdragen tot de geschiedenis 72:1–2, 3–26
- Roy N (1993) Un atelier potier du Haut Moyen âge en forêt de La Londe, prés de Rouen (Seine Maritime). État de la recherche. In: Piton D (ed) Travaux du Groupe de Recherches et D'Etudes sur la Céramique dans le Nord—Pas-de-Calais. Actes du Colloque d'Outreau (10–12 Avril 1992). Berck-sur-Mer, Nord-Ouest Archéologie Hors-Serie, pp 341–55
- Ryckaert M (1999) Du 1er au XIIe siècle—L'histoire des débuts, De l'époque romaine au meutre de Charles le Bon. In: Ryckaert M, Vandewalle A (eds) Bruges—l'histoire d'une ville européene. Lannoo, Tielt, pp 3–27
- Samson R (1999) Illusory emporia and mad economic theories. In: Anderton M (eds) Anglo-Saxon trading centres: beyond the Emporia. Cruithne Press, Glasgow, pp 76–90
- Scheers S (1991) Numismatiek en Archeologie in West-Vlaanderen. Westvlaamse Archaeolog 7:31–42
- Schmid P (1988) Die Mittelalterliche Neubesiedlung der Niedersächsischen Marsch. In: Bierma M, Harsema OH, Van Zeist W (eds) Archeologie en Landschap, 133–164, Bijdragen aan het gelijknamige symposium gehouden op 19 en 20 Oktober 1987, ter gelegenheid van het afscheid van H.T. Waterbolk. Groningen: Rijksuniversiteit Groningen
- Schmid P (1991) Mittelalterliche Besiedlung, Deich- und Landesausbau im niedersächsichen Marschgebiet. In: Böhme HW (ed) Siedlungen und Landesausbau zur Salierzeit I: in der Nördlichen Landschaften des Reiches. Sigmarinen, pp 9–36
- Scull C (1997) Urban centres in pre-Viking England?. In: Hines J (eds) The Anglo-Saxons from the migration period to the eighth century. An ethnographic perspective. Boydell Press, Woodbridge, pp 269–310
- Scull C (1999) Social Archaeology and Anglo-Saxon Kingdom Origins. In: Dickinson T, Griffiths D (eds) The Making of Kingdoms, Anglo-Saxon Studies in Archaeology and History 10:17–24
- Silvester RJ (1981) An excavation on the post-Roman site at Bantham, south Devon. Proce Devon Archaeolog Soc 39:89–118
- Stocker D (1993) The Early Church in Lincolnshire: A study of the sites and their significance. In: Vince A (ed) Pre-Viking Lindsey. Lincoln Archaeological Studies 1, CLAU, Lincoln, pp 101–122 Story J (2003) Carolingian connections—Anglo-Saxon England and carolingian Francia, c. Ashgate,
 - Aldershot, Burlington, pp 750–870
- Swanton MJ, trans. (1996) The Anglo-Saxon Chronicle. Dent, London
- Teasdill G (1965) The Finds, in C., E. Grantham, 'An Earthwork and Anglian Cemetery at Garton-on-the-Wolds, East Riding, Yorkshire'. Yorkshire Archaeolog J 41:355–359
- Termote J (1992) Wonen op het duin: De bewoningsgeschiedenis van het duingebied tot aan de Franse Revolutie. In: Termote J (ed) Tussen land en zee: het duinengebied van Nieuwpoort tot De Panne. Lannoo, Tielt, pp 46–85
- Theuws F (1999) Changing settlement patterns, burial grounds and the symbolic construction of ancestors and communities in the late Merovingian southern Netherlands. In: Fabech C, Ringtved J (eds) Settlement and landscape. Åarhus University Press, Jutland Archaeological Society, Åarhus, pp 337–349
- Thomas C (1958) Gwithian, Ten Years' Work (1949-1958). West Cornwall Field Club, Gwithian
- Thomas C (1981) A Provisional List of Imported Pottery in Post-Roman Western Britain and Ireland, Institute of Cornish Studies Special Report, No. 7. Redruth, ICS
- Tilley C (1994) A Phenomenology of landscape. Berg, Oxford and Providence



- Trimpe Burger JA (1973) The islands of Zeeland and South Holland in Roman times. Berichten ROB 23:135–148
- Tulp C (2003) Tijtsma, Wijnaldum: An Early Medieval Production Site in the Netherlands. In: Pestell T, Ulmschneider K (eds) Markets in early medieval Europe-trading and 'Productive' Sites, vol 650-850. Windgather Press, Macclesfield, pp 221–233
- Tys D (2001) De verwerping van het zgn. Duinkerke-transgressiemodel en nieuwe inzichten in de vroegste bedijking van de kustvlakte. In: Huys E, Vandermaesen M (eds) Polders en wateringen in maritiem Vlaanderen, Miscellanea Archivistica Studia 123:17–53
- Tys D (2003) Een Middeleeuws Landschap als Materiële Cultuur: De Interactie tussen Macht en Ruimte in een Kustgebied en de Wording van een Laatmiddeleeuws tot Vroegmodern Landschap – Kamerlings Ambacht, 500–1200/1600, unpublished Doctoral thesis in History, Free University of Brussels (VUB), 5 volumes
- Tys D (2004) Middeleeuwse wegen en transport, in Vlaanderen 53, No.300, April 2004
- Tys D (2005) De inrichting van een getijdenlandschap. De problematiek van de vroegmiddeleeuwse nederzettingsstructuur en de aanwezigheid van terpen in de kustvlakte: het voorbeeld van Leffinge (gemeente Middelkerke, provincie West-Vlaanderen). Archeologie in Vlaanderen 8:257–279
- Tys D (in press). Domeinvorming in de 'wildernis' en de ontwikkeling van vorstelijke macht: het voorbeeld van het bezit van de graven van Vlaanderen in het IJzerestuarium tussen 900 en 1200, Jaarboek voor Middeleeuwse Geschiedenis 7
- Ulmschneider K (1999) Archaeology, History, and the Isle of Wight in the Middle Saxon Period. Med Archaeol 43:19–44
- Ulmschneider K (2000) Settlement, economy and the 'Productive' site: middle Anglo-Saxon Lincolnshire AD, 650–780. Med Archaeol 44:53–79
- Ulmschneider K (2003) Markets around the Solent: Unravelling a 'Productive' Site on the Isle of Wight. In: Pestell T, Ulmschneider K (eds) Markets in early medieval Europe—trading and 'Productive' sites, vol 650–850. Macclesfield, Windgather Press, pp 73–83
- Van De Walle ALJ (1961) Excavations in the ancient centre of Antwerp. Med Archaeol 5:123–136 Van Es WA, Verwers WJH (1980). Excavations at Dorestad 1. The Harbour: Hoogstraat I, Nederlandse Oudheden 9, Amersfoot: ROB
- Van Heeringen RM (1995) De resultaten van het archeologisch onderzoek van de Zeeuwse ringwalburgen. In: van Heeringen RM, Henderikx PA, Mars A (eds) Vroeg-Middeleeuwse ringwalburchten in Zeeland. ROB, Amersfoort/Goes, pp 16–69
- Vanhoutte S, Pieters M (2003) Archeologisch noodonderzoek op het toekomstige bedrijventerrein Plassendale III (Zandvoorde, stad Oostende, prov. West-Vlaanderen). Interimverslag 2000–2001, Archeologie in Vlaanderen, 7 1999/2000: 95–110
- Verhaeghe F (1977) De middeleeuwse landelijke bewoningssites in een deel van Veurne-Ambacht, Bijdrage tot de middeleeuwse archeologie, Onuitgegeven Doctoraatsverhandeling Rijksuniversiteit Gent
- Verhaeghe F (1992) Ceramiekverspreiding en handel in de middeleeuwen: interpretatie en problemen. In: Carmiggelt A (ed) Rotterdam Papers, A contribution to medieval archaeology, Teksten van lezingen gehouden tijdens het symposium 'Handel, handelsplaatsen en handelswaar vanaf de vroege middeleeuwen in de vroege middeleeuwen in de lage Landen' te Rotterdam van 2–3 november 1990, 85–116, Rotterdam: Stad Rotterdam
- Verhaeghe F (1999) Trade in ceramics in the North Sea region, 12th to 15th centuries: a methodological problem and a few pointers. In: Gläser M (ed) Lübecker Kolloqium zur Stadtarchäologie im Hanseraum II: Der Handel. Verlag Schmidt-Römhild, Lübeck, pp 139–167
- Verhulst A (1977) An aspect of continuity between antiquity and middle ages: the origin of Flemish cities. J Med Hist 3:175–206
- Verhulst A (1995) Economic organisation. In: McKitterick R (ed) The New Cambridge Medieval History II c.700-c.900. Cambridge, Cambridge University Press, pp 481–509
- Verhulst A (1998) Sheep-breeding and wool production in pre-thirteenth century Flanders and their contribution tot the rise of Ypres, Ghent and Bruges as centres of the textile industry. In: Dewilde M, Ervynck A, Wielemans A (eds) Ypres and the medieval cloth industry in Flanders, archaeological and historical contributions. IAP, Zellik, pp 33–42
- Verhulst A (2002) The Carolingian economy, Cambridge medieval textbooks series. Cambridge University Press, Cambridge
- Verwers WJH (1986) Archeologische kroniek van Noord-Brabant 1981–1982. provincie Noord-Brabant, Waalre
- Vince A (1990) Saxon London—an archaeological investigation. Seaby, London



- Vos PC, van Heeringen RM (1997) Holocene geology and occupation history of the Province of Zeeland (SW Netherlands). In: Fischer MM (ed) Holocene evolution of Zeeland (SW Netherlands). Nederlands Instituut voor Toegepaste Geowetenschappen TNO, Haarlem, pp 5–110
- Wade K (1988) Ipswich. In: Hodges R, Hobley B (eds) The rebirth of towns in the west AD 700–1050, CBA Research Report 68: 93–100. London, Council for British Archaeology
- Williams A, Martin GH (eds) (2002) Domesday book, a complete translation. Alecto/Penguin, London
- Wyss M (2001) Un établissement Carolingien mis au jour à proximité de l'abbaye de Saint-Denis: la question du palais du Charlemagne. In: Renoux A (ed) 'Aux Marches du Palais'. Qu' est-ce-qu' un palais médiéval? Actes du VIIe Congrès international d'Archéologie Médiévale Le Mans—Mayenne, 9–11 septembre 1999: 191–200. Le Mans, Université de Maine

