

# Early medieval communities around the North Sea: a ‘maritime culture’?

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## Abstract

The close connections between 6th- to 8th-century communities around the North Sea have been the subject of research for a very long time. However, too often these interrelationships are placed in an ethnic and migrationist framework. Recent socio-geographical research demonstrates that another perspective is possible, that of a ‘maritime culture’ characterized by a large degree of overseas mobility and interaction, resulting in a seemingly hybrid material culture. This concept is explored through the examples of chaff-tempered pottery which persisted along the North Sea littoral for over two centuries, and house building traditions which exhibit a remarkable variability stemming from an intensive exchange of architectural features within the North Sea region.

## Keywords

Merovingian period, Carolingian period, North Sea, coastal Flanders, pottery, domestic architecture, maritime culture, group identity, culture definition

## 1 Introduction

There is no doubt that the early medieval populations around the Channel and North Sea were in close contact. However, the nature, mechanisms and significance of the interaction during the centuries following the Migration Period are still poorly understood. This is partly because our perspective on the period is defined by a frame of reference that may not be completely adequate for the geographical and socio-cultural context of the 6th- to 8th-century North Sea littoral.

In this contribution, an alternative perspective is explored which puts the North Sea at the centre of a ‘maritime culture’. Besides briefly explaining the theoretical basis for this approach, a few examples are presented, particularly focussing on the Flemish coastal plain. The emphasis is on the 6th to 8th centuries, although later developments are examined in order to explore the factors that contributed to what has been called a ‘North Sea culture’.

## 2 Culture, migration and ethnicity

The study of the typological, stylistic, technical and other similarities across early medieval Europe is often embedded in an explicitly ethnic discourse. Thus, from the perspective of the North Sea coasts of the mainland, we speak of Anglo-Saxon pottery, Frankish brooch types, Saxon burial ritual, etc. The emphasis on ethnicity and migration that prevails in the contemporary written sources and modern research on the Migration Period is tacitly assumed to apply to the period that follows it as well. At the basis of this view – despite decades of anthropological and archaeological theorising – is still the idea of ethnicities as homogeneous culture blocks that may be identified using type-artefacts or stylistic features. Thus, when for instance a button brooch appears on a cemetery on the mainland, it must immediately point to Anglo-Saxon affiliations, as this is supposed to be the geographic and ethnic origin of this type of artefact. Ethnicity is reduced to a typological attribute. This leads to a situation in which the cultural assemblage of a site is picked apart into various ethnic or geographic affiliations. Typological and stylistic studies obviously have their worth as analytical tools, but merely cataloguing the various assumed ethnic indicators on a site may be of limited relevance to understanding the socio-cultural dynamics of this period and region. This is particularly the case in the southern North Sea area, where objects are often considered to be out of place because they appear on the ‘wrong’ side of the North Sea, which is implicitly thought of as a cultural as well as a natural boundary between such culture blocks.

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An excellent example is so-called chaff-tempered pottery. It emerges in the 6th century as a distinct tradition from the great variety of tempers used in the 'Germanic' pottery of the Migration Period. It remains in use until approximately the mid-8th century as the predominant type of domestic pottery on sites in the Flemish coastal plain and south-eastern England and occurs on several sites further north along the Dutch and English coasts.<sup>3</sup>

Its distribution on the continent is clearly coastal and delimited by inland traditions of grog- and grit-tempered pottery. However, it would be a misrepresentation to describe this pottery as 'Anglo-Saxon' or 'Saxon', as is sometimes done.<sup>4</sup> Its persistence for more than two centuries cannot be explained through the preceding migrations alone. Rather, it is part of a social tradition centred on the North Sea, and its continual reproduction and eventual replacement by sandy wares in the 8th century must be first and foremost examined within this maritime context.

The notion of such a 'North Sea culture' is of course a long-standing concept, with differing spatial and temporal limits and various explanations.<sup>5</sup> However, the idea may be refined from the perspective of recent archaeological findings and theoretical insights.

### 3 Language development as a cultural analogy

Language is a most interesting aspect of culture in this light, as it is a function both of self-defined identity and social interaction. The early languages around the North Sea form part of the West Germanic linguistic family. Several languages of this group share so-called Ingvaenic features. During the Migration period, these features spread from northwest Germany to England. By the 8th century, Frisian<sup>6</sup> and several Old English dialects<sup>7</sup> emerged as more or less distinct languages and Ingvaenic features had also spread to the Flemish and Dutch coasts.<sup>8</sup> What happened in the intervening centuries remains open to debate. It has long been acknowledged that linguistic innovations may spread across bodies of water.<sup>9</sup> However, most studies since have tended to emphasise the pre-Migration continental origins of the North Sea Germanic languages.<sup>10</sup> It is generally accepted that there was no common language in the North Sea area after the Migration Period. It has even been argued that English and Frisian developed in isolation following the migrations, and that their close relationship is merely the result of the loss of Ingvaenic features in the other West Germanic languages.<sup>11</sup>

Many linguists, however, ignore the active usage of languages in building and reproducing identities. In this view, common innovations as well as the common retaining of archaic elements may be significant. The most interesting perspective on the matter is that offered by John Hines<sup>12</sup>, although it has received little attention in later linguistic studies.<sup>13</sup> Hines discards the principle of phylogenetic linguistic development and portrays language as a normative system allowing a certain variance. According to this model, the North Sea Germanic

languages developed from a dialect continuum emerging from the Migration Period. Linguistic innovations spread throughout this continuum, mostly from England back to the continent, implying intense interaction across the North Sea. In the 8th century, the appearance of distinct languages can be related to the formation of kingdoms and of more exclusive regional identities.

### 4 Towards an alternative model?

A comparable view of fluid social and cultural links within a maritime context is offered in studies of historical and present-day communities in harbour towns.<sup>14</sup> Here, the harbour town is presented as a hybrid mix of cultural influences. Mobility and variability, rather than static continuity, are seen as constituting elements of identity. Hines' linguistic continuum may serve as an analogy: culture is not to be captured in phylogenetic structures through which elements are inherited, but as a constantly changing set of influences from which some elements are adopted and others are not. From this viewpoint, it is informative only to a certain degree to dissect a cultural assemblage into the ethnic and geographic origins of its constituent elements. Rather, this seemingly hybrid mix had its own intrinsic logic and coherence as a cultural system.

A particularly relevant case is offered by A. Leontis in his study of 19th-century Greek communities around the eastern Mediterranean.<sup>15</sup> For this phenomenon, he introduces the term 'emporion' to describe the way identity is construed outside the monolithic cultures of hegemonic entities – notably the empires around the Mediterranean. 'Emporion', characterised by continual movement within a given geographic space, is also contrasted with 'diaspora': unidirectional migration in which identity remains based on common origins in a particular place.

Leontis' ideas were quickly adopted in sociology and social geography, as they form a broad metaphor for a current paradigm shift in these disciplines.<sup>16</sup> Simply put, the dichotomy is that between routes and roots. Cultural identity is not necessarily 'a territorialised union of people and place'<sup>17</sup>, but is now defined by mobility and interaction.

Both Leontis and the sociologists who borrowed his ideas<sup>18</sup> stress that the sea forms an ideal medium for this type of interaction. As such we may distinguish between 'maritime' and 'terrestrial' culture types, characterised by varying degrees of fluidity and variation, a greater or lesser 'groundedness' in a certain place or region<sup>19</sup>, and a stronger or weaker integration into a political hierarchy.

In the literature, the emphasis is usually on the cosmopolitan port cities that form the hubs of this socio-cultural network. However, we argue that the characteristics associated with the communities that form 'emporion' may be expanded towards larger regions of rural settlement along the North Sea littoral during the early Middle Ages.

3 Hamerow *et al.* 1994.

4 *E.g. ibid.* 1994, 16; Soulat 2009, 110–111.

5 *E.g. Hallewas et al.* 1975.

6 Miedema 1971, 100; Bremmer Jr. 2001, 602.

7 Toon 1992, 422–3.

8 *E.g. Taeldeman* 1982.

9 First pointed out by Kuhn (1955, 16–7, 23–44).

10 *E.g. Århammar* 1990, 10.

11 Stiles 1995.

12 Hines 1995.

13 But see Boss 1997, 236–238.

14 *E.g. Falck* 2003.

15 Leontis 1997.

16 Crang *et al.* 2003.

17 *Idem*, 438–439.

18 *E.g. Borovnik* 2004; 2005.

19 *Cf. Escobar* 2001.

## 5 Case studies

In examining the links evident in the material culture of the North Sea region, context and meaning are all-important. For instance, chaff-tempered pottery and the great Anglo-Saxon and Frisian brooches belong to very different social spheres. Whereas the stylistic similarities between the latter form an expression of diplomatic links between elite groups, the distribution of the former reflects shared technological traditions reproduced through continual contact on a much lower social level. It is the latter exchanges that constitute a maritime culture, as they are indicative of the capability of low-status individuals and communities to engage in overseas interaction.

## 6 Domestic architecture

Like domestically produced pottery, domestic architecture is an expression of what might be labelled socio-technological praxis – technological skills transferred within the household or local community, and as such indicative of group identity.<sup>20</sup>

As in the interior, certain regional trends may be discerned in the early medieval house architecture of the coastal area, although these are rarely the only type used. In the northern Netherlands, three-aisled buildings continued to be in use.<sup>21</sup> Two-aisled constructions often occur in the Dutch river area, mostly as secondary buildings to one-aisled houses. Despite certain similarities with two-aisled buildings inland,<sup>22</sup> this is at least partly a local tradition, as excavations at Katwijk show its development from a three-aisled building type.<sup>23</sup> At another coastal site near the Rhine mouth, Valkenburg, a distinct form of two-aisled buildings are the only attested type and probably served as houses.<sup>24</sup> In the Flemish coastal area a recurring type is the single-aisled building with post-in-trench walls, heavy corner and door posts, and no external supports.<sup>25</sup>

In addition, several constructional features point to interaction along the coast. For instance, buildings in Noord-Holland and in northwest Germany combine a byre in the three-aisled tradition with a one-aisled living section. In a few cases<sup>26</sup> the three-aisled part features turf walls as in Frisia, demonstrating how structural layout and construction technique were exchanged together, as a template.

Other traces of the long-distance exchange of such architectural templates can be found in several oft-cited examples of highly similar layouts. Thus, houses at Roksem<sup>27</sup> (Flanders) and Uitgeest<sup>28</sup> (Noord-Holland) are similar in their proportions, use of annexes and the location of the entrances, although the wall construction differs. A further building with the same configuration of entrances and therefore a comparable internal organisation can be found at Katwijk (Zuid-Holland).<sup>29</sup> Short houses are another recurring template in England and on the mainland coasts.<sup>30</sup> In Flanders these often belong to the house type with post-in-trench walls and without external supports. More generally, these houses often have a small subdivision at one or both of the short sides.

Other features were reproduced independently of building technique. Annexes<sup>31</sup> and certain types of wall construction<sup>32</sup>, for instance, occur both on the North Sea coasts and in England in the 7th and 8th centuries, but have not been attested further inland.

These architectural idiosyncrasies and the exchange of templates and techniques within the North Sea area appear to have declined from the 8th century onwards. For instance, the Frisian three-aisled tradition disappeared in favour of one-aisled buildings, annexes fell out of use, and in coastal Flanders the Merovingian building types were replaced by very different three-aisled constructions on heavy posts, which prefigure later medieval farm buildings.

The introduction and spread of curved walls may be seen in a similar light of the changing nature of interaction, local resistance and ultimately realignment with inland developments. First introduced in the Rhine mouth area in the late 7th century,<sup>33</sup> curved walls quickly spread along the river Rhine towards the interior, for instance appearing at Dorestad.<sup>34</sup> However, the practice is only adopted in Flanders<sup>35</sup> and Noord-Holland in the 9th century<sup>36</sup>, and never in England.<sup>37</sup>

This wide range of house-building traditions along the North Sea coast has been explained in terms of a greater social and economic diversity, ultimately a result of the greater ecological diversity of the coastal landscape.<sup>38</sup> However plausible, this explanation does not account for the origins of these traditions, which were passed on between communities along the North Sea shores.

As far as domestic architecture is concerned, then, these communities are best characterised culturally through their heterogeneity and pragmatism in adopting architectural practices. Here, diversity does not denote boundaries but the range of social interaction. Although inland architectural traditions seem to have been more regionally consistent, this maritime culture is not fundamentally different, let alone detached from the interior. Rather, the proximity of the sea renders longer-distance contacts possible, which is reflected in the application of what appear to be 'exotic' solutions in architectural practices that are also partly rooted in local and regional traditions.

## 7 A regional perspective: the Flemish coastal plain in the early middle ages

In exploring the factors that determined the degree to which communities could become involved in this North Sea culture, it is instructive to zoom in to a more regional level, namely the Flemish coastal plain.

The central and eastern parts of this area feature permanent settlement from the 7th century onwards.<sup>39</sup> The predominant economic activity of the inhabitants of these salt marshes was sheep pastoralism, and they were well connected to overseas trading networks. Until the 8th century, the ceramic assemblages of sites both in the coastal plain and on its Pleistocene

20 Cf. Gosselain 2000.

21 Waterbolk 2009, 90.

22 Theuvs 1996, 758.

23 Van der Velde & Dijkstra 2008, 437.

24 Bult & Hallewas (eds) 1990, 155–161.

25 Notably Hillewaert & Hollevoet 2006.

26 E.g. Woltering 1975, 28.

27 Hollevoet 1991.

28 Besteman 1990.

29 Van der Velde & Dijkstra 2008, 438.

30 Theuvs 1996, 756; Dijkstra 2004, 399.

31 Marshall & Marshall 1993, 379; Hollevoet 2002, 173.

32 Dijkstra & van der Velde 2008, 162.

33 *Idem*, 140, 168.

34 Van Es & Verwers 1995.

35 Hollevoet 1991, 189.

36 Dijkstra *et al.* 2006, 65–67.

37 Hamerow 1999, 125–126.

38 Besteman 1990, 103; Theuvs 1996, 759.

39 Eryvynck *et al.* 1999; Loveluck & Tys 2006.

edge are dominated by chaff-tempered pottery, thus displaying their close social and cultural ties with other areas of the North Sea coasts. High-status estate centres are only to be found on the Pleistocene edge of the coastal plain.

Despite a comparable physical environment, the situation in the west differs greatly. In the dunes near De Panne, numerous stray finds show the probable location of a Merovingian cemetery and demonstrate the intense occupation of the now mostly eroded dune barrier. The metalwork and other finds, partly of Frankish, partly of Anglo-Saxon type, point to the site's wide range of contacts.<sup>40</sup>

In the 8th century, the first signs of activity in the salt marshes behind the dune barrier appear. At these early sites, chaff-tempered pottery and Rhenish imports are completely absent. Instead, northern French imports dominate. Clearly this was an area belonging to a different sphere of influence, economically and perhaps culturally. Written evidence suggests the development of property of the abbey of St Bertin in this area by the mid-9th century, mostly corresponding closely with areas of archaeologically attested activity in the 8th – 9th centuries. Not coincidentally, the abbey also held a settlement, probably with administrative and logistic functions, at Veurne. As such, this area may be contrasted with the central and eastern parts of the coastal plain: early permanent settlement by free landholders, embedded into the social networks of the North Sea culture in the east, as opposed to settlement connected with, or possibly on the initiative of, the monks of St Bertin, who exploited these areas for wool and other products, in the west.<sup>41</sup>

From this, it is clear that structures of power influenced the economic and social identities of coastal communities. In other words, the regional social, economic and political environment is as important as implied geographic or ethnic affiliations in understanding an apparently foreign or hybrid cultural assemblage.

## 8 Beyond the 8th century

From this point of view, developments from the 8th century onwards are enlightening. As mentioned before, this period sees the disappearance of chaff-tempered pottery, the realignment to a certain extent of domestic architecture with inland traditions, and the emergence of regional languages around the North Sea. This is obviously not because overseas contact ceased. Rather, an explanation must be sought in the socio-political context. It may be that the emerging elites not only had a direct influence on certain aspects of culture but also exerted a strict control on maritime activity, thus limiting the overseas exchange of linguistic and cultural features. The integration, or lack thereof, of regions into the North Sea culture is therefore mainly a function of the degree to which political elites controlled coastal landscapes and were able to tie them into the economic and social networks of the interior.<sup>42</sup>

Therefore, in addition to the formation of regional kingdoms, we may point to the greater interest of the elites of the Carolingian period in overseas trade. Access to overseas networks was centralised at certain locations where tolls could be collected, notably the wic-sites.<sup>43</sup> From the later 9th century onwards, political actors such as the Counts of Flanders tightened their grip on the coastal landscape by draining and embanking great expanses of wetland.<sup>44</sup> In this way, the landscape was literally closed off to overseas interaction, except at certain locations under the control of those in power. This gradual imposition of political power over maritime activity appears to have reached its peak in the course of the 12th century. From this point onwards, the only communities still involved in a North Sea culture and displaying close links with each other were the harbour towns and fishing villages.<sup>45</sup>

## 9 Conclusion

The characteristics of the 6th- to 8th-century North Sea culture partly have their origins in the preceding Migration period. However, these features, together with innovations that appeared only after the Migrations, were reproduced within a particular dynamic that may be explained through the specific geographic circumstances. The sea allowed far-reaching contacts between low-status communities, while the coastal wetlands were difficult to control directly by the political elite groups of the interior. Only from the 8th, and certainly from the 10th century onwards, the increasing hold of centralised power over these coastal areas resulted in a growing integration into terrestrial networks and a decline of close overseas interaction and mobility.

From a more theoretical perspective, this maritime culture was not fundamentally different in nature from that found inland. Nonetheless, it has certain peculiar characteristics, notably its hybrid, mobile, fluid nature and the central role it affords to interaction between low-status communities. This in turn raises questions about the meaning of archaeological spatial and temporal variability and regionality, and the influence of factors such as physical geography and political organisation on early medieval social interaction and group identity.

<sup>40</sup> Deckers 2010.

<sup>41</sup> Deckers forthcoming.

<sup>42</sup> A similar explanation for the disappearance of chaff-tempered wares has been suggested by Blinkhorn (1997, 120).

<sup>43</sup> E.g. Middleton 2005.

<sup>44</sup> Tys 2004.

<sup>45</sup> E.g. Walravensijde (Tys & Pieters 2009).

## Bibliography

- ÅRHAMMAR N. 1990: Friesisch und Sächsisch. Zur Problematik ihrer gegenseitigen Abgrenzung im Früh- und Hochmittelalter. In: BREMMER JR. R.H., VAN DER MEER G. & VRIES O. (eds), *Aspects of Old Frisian Philology*, Amsterdamer Beiträge zur älteren Germanistik 31-32, Amsterdam, 1-25.
- BESTEMAN J.C. 1990: North Holland AD 400-1200: turning tide or tide turned? In: BESTEMAN J.C., BOS J.M. & HEIDINGA H.A. (eds), *Medieval Archaeology in the Netherlands. Studies Presented to H.H. van Regteren Altena*, Studies in prae- en protohistorie 4, Assen, 91-120.
- BLINKHORN P. 1997: Habitus, social identity and Anglo-Saxon pottery. In: CUMBERPATCH C.G. & BLINKHORN P.W. (eds), *Not So Much a Pot, More a Way of Life. Current Approaches to Artefact Analysis in Archaeology*, Oxbow Monographs 83, 113-124.
- BOROVNIK M. 2004: Are seafarers migrants? Situating seafarers in the framework of mobility and transnationalism, *New Zealand Geographer* 60, 36-43.
- BOROVNIK M. 2005: Seafarers' "maritime culture" and the "I-Kiribati way of life": the formation of flexible identities? *Singapore Journal of Tropical Geography* 26, 132-150.
- BOSS M. 1997: Social networks and kinds of speech-community event. In: BLENCH R. & SPRIGGS M. (eds), *Archaeology and Language I. Theoretical and Methodological Orientations*, One World Archaeology, London-New York, 209-261.
- BREMMER JR. R.H. 2001: The geographical division and periodization of Old Frisian. In: MUNSKE H.H. (ed.), *Handbuch des Friesischen/Handbook of Frisian Studies*, Tübingen, 602-606.
- BULT E.J. & HALLEWAS D.P. (eds) 1990: *Graven bij Valkenburg III. Het archeologisch onderzoek in 1987 en 1988*, Delft.
- CRANG P., DWYER C. & JACKSON P. 2003: Transnationalism and the spaces of commodity culture, *Progress in Human Geography* 27, 438-456.
- DECKERS P. 2010: An illusory emporium? Small trading places around the southern North Sea. In: WILLEMSSEN A. & KIK H. (eds), *Dorestad in an International Framework. New Research into Centres of Trade and Coinage in Carolingian Times*, Turnhout, 159-168.
- DECKERS P. forthcoming: Economy, identity and power. The Yser estuary in the early middle ages, *Revue du Nord*.
- DIJKSTRA M.F.P. 2004: Between Britannia and Francia. The nature of external socio-economic exchange at the Rhine and Meuse estuaries in the Early Middle Ages. *Bodendenkmalpflege in Mecklenburg-Vorpommern* 51 (Jahrbuch 2003), 397-408.
- DIJKSTRA M.F.P., DE KONING J. & LANGE S. 2006: *Limmen "De Krocht". De opgraving van een middeleeuwse plattelandsnederzetting in Kennemerland*, Amsterdam.
- DIJKSTRA M.F.P. & VAN DER VELDE H.M. 2008: Sporen en structuren behorend tot de vroeg middeleeuwse bewoning in het noordelijke deel. In: VAN DER VELDE H.M. (ed.), *Cananefaten en Friezen aan de monding van de Rijn. Tien jaar archeologisch onderzoek op de Zanderij Westerbaan te Katwijk (1996-2006)*, ADC Monografie 5, Amersfoort, 127-166.
- ERVYNCKA., BAETEMAN C., DEMIDDELE H., HOLLEVOET Y., PIETERS M., SCHELVIS J., TYS D., VAN STRYDONC M. & 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.
- ESCOBAR A. 2001: Culture sits in places: reflections on globalism and subaltern strategies of localization, *Political Geography* 20, 139-174.

FALCK T. 2003: Polluted Places: Harbours and Hybridity in Archaeology, *Norwegian Archaeological Review* 36, 105-118.

GOSSELAIN O.P. 2000: Materializing identities: an African perspective, *Journal of Archaeological Method and Theory* 7, 187-217.

HALLEWAS D.P., HEIDINGA H.A., VAN REGTEREN ALTENA H.H. & IJZEREER G. (eds) 1975: *De "Noordzeecultuur". Een onderzoek naar de culturele relaties van de landen rond de Noordzee in de vroege middeleeuwen. Project middeleeuwse archeologie, 1972-1974*, Amsterdam.

HAMEROW H. 1999: Anglo-Saxon timber buildings: The continental connection. In: SARFATIJ H., VERWERS W.J.H. & WOLTERING P.J. (eds), *In Discussion with the Past. Archaeological Studies presented to W.A. van Es*, Zwolle-Amersfoort, 119-128.

HAMEROW H., HOLLEVOET Y. & VINCE A. 1994: Migration Period settlements and "Anglo-Saxon" pottery from Flanders, *Medieval Archaeology* 38, 1-18.

HILLEWAERT B. & HOLLEVOET Y. 2006: Andermaal Romeins en vroegmiddeleeuws langs de Zandstraat te Sint-Andries/Brugge (prov. West-Vlaanderen), *Relicta* 1, 121-140.

HINES J. 1995: Focus and boundary in linguistic varieties in the North-West Germanic continuum. In: FALTINGS V.F., WALKER A.G.H. & WILTS O. (eds), *Friesische Studien II. Beiträge des Föhrer Symposiums zur Friesischen Philologie vom 7.-8. April 1994*, North-Western European Language Evolution Supplement, Odense, 35-62.

HOLLEVOET Y. 1991: Een vroeg-middeleeuwse nederzetting aan de Hoge Dijken te Roksem (gem. Oudenburg), *Archeologie in Vlaanderen* 1, 181-196.

HOLLEVOET Y. 2002: d'Hooghe Noene van midden Bronstijd tot volle Middeleeuwen. Archeologisch onderzoek in een verkaveling langs de Zandstraat te Varsenare (gem. Jabbeke, prov. West-Vlaanderen), *Archeologie in Vlaanderen* 6 (1997/1998), 161-189.

KUHN H. 1955: Zur Gliederung der Germanischen Sprache, *Zeitschrift für Deutsches Altertum und deutsche Literatur* 86, 1-47.

LEONTIS A. 1997: Mediterranean topographies before balkanization: On Greek diaspora, emporion, and revolution, *Diaspora* 6, 179-194.

LOVELUCK C. & TYS D. 2006: Coastal societies, exchange and identity along the Channel and southern North Sea shores of Europe, AD 600-1000, *Journal of Maritime Archaeology* 1, 140-169.

MARSHALL A. & MARSHALL G. 1993: Differentiation, change and continuity in Anglo-Saxon buildings, *Archaeological Journal* 150, 366-402.

MIDDLETON N. 2005: Early medieval port customs, tolls and controls on foreign trade, *Early Medieval Europe* 13, 313-358.

MIEDEMA H.J.T. 1971: Noordzeegermaans en Vroegoudfries, *Leuvense Bijdragen* 60, 99-104.

SOULAT J. 2009: *Le matériel archéologique de type saxon et anglo-saxon en Gaule mérovingienne*, Mémoires publiés par l'Association française d'Archéologie mérovingienne 20, Saint-Germain-en-Laye.

STILES P.V. 1995: Remarks on the "Anglo-Frisian" thesis. In: FALTINGS V.F., WALKER A.G.H. & WILTS O. (eds), *Friesische Studien II. Beiträge des Föhrer Symposiums zur Friesischen Philologie vom 7.-8. April 1994*, North-Western European Language Evolution Supplement, Odense, 177-220.

TAELEMAN J. 1982: "Ingwäonismen" in Flandern. In: STURE URELAND P. (ed.), *Die Leistung der Strataforschung und der Kreolistik. Typologische Aspekte der Sprachkontakte. Akten des. 5. Symposions über Sprachkontakt in Europa*, Mannheim, 277-296.

THEUWS F. 1996: Haus, Hof und Siedlung im nördlichen Frankenreich (6.-8. Jahrhundert). In: WIECZOREK A., PÉRIN P., VON WELCK K. & MENGHIN W. (eds), *Die Franken. Wegbereiter Europas. Vor 1500 Jahren: König Chlodwig und seine Erben, vol. 2: Alltagskultur im Frankenreich*, Mainz, 754-768.

TOON T.E. 1992: Old English dialects. In: HOGG R.E. (ed.), *The Cambridge History of the English Language. Volume I: The Beginnings to 1066*, Cambridge, 414-451.

TYS D. 2004: Domeinvorming in de "wildernis" en de ontwikkeling van de vorstelijke macht – Het voorbeeld van het bezit van de graven van Vlaanderen in het IJzerestuariuntussen 900 en 1100, *Jaarboek voor Middeleeuwse Geschiedenis* 7, 31-83.

TYS D. & PIETERS M. 2009: Understanding a medieval fishing settlement along the southern North Sea. In: SICKING L. & ABREU-FERREIRA D. (eds), *Beyond the Catch. Fisheries of the North Atlantic, the North Sea and the Baltic, 900-1850*, The Northern World 41, Leiden, 91-121.

VAN DER VELDE H.M. & DIJKSTRA M.F.P. 2008: The Rhine estuary in the Roman period and the Early Middle Ages. In: VAN DER VELDE H.M. (ed.), *Cananefaten en Friezen aan de monding van de Rijn. Tien jaar archeologisch onderzoek op de Zanderij-Westerbaan te Katwijk (1996-2006)*. ADC Monografie 5. Amersfoort, 413-446.

VAN ES W.A. & VERWERS W.J.H. 1995: House Plans from Dorestad, *Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek* 41, 173-186.

WATERBOLK H.T. 2009: *Getimmerd Verleden. Sporen van Voor- en Vroeghistorische Houtbouw op de Zand- en Kleigronden tussen Eems en IJssel*, Groningen.

WOLTERING P.J. 1975: Occupation history of Texel I: The excavations at Den Burg. Preliminary report, *Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek* 25, 7-36.