

Making Places, Making Lives Landscape and Settlement in Coastal Wetlands



Neue Studien zur Sachsenforschung 14

Making Places, Making Lives.
Landscape and Settlement in Coastal Wetlands

Proceedings of the 72nd Sachsensymposium,
9-12 October 2021 Castricum-Alkmaar

Neue Studien zur Sachsenforschung Band 14

Herausgegeben vom Braunschweigischen Landesmuseum

in Verbindung mit dem Internationalen Sachsensymposium

durch
Babette Ludowici

Making Places, Making Lives.
Landscape and Settlement in Coastal Wetlands

Proceedings of the 72nd Sachsensymposium,
9-12 October 2021 Castricum-Alkmaar

Edited by Annet Nieuwhof, Egge Knol and Henk van der Velde

Sponsored by



BRAUNSCHWEIGISCHES
LANDESMUSEUM



Alle Beiträge wurden einem Verfahren zur Qualitätssicherung
(peer review) unterzogen.

Umschlaggestaltung: Annet Nieuwhof
Satz und Layout: Annet Nieuwhof

Redaktion: Annet Nieuwhof, Egge Knol, Henk van der Velde

Bibliografische Information
der Deutschen Nationalbibliothek:
Die Deutsche Nationalbibliothek verzeichnet diese Publikation
in der Deutschen Nationalbibliografie;
detaillierte bibliografische Daten sind im Internet über
<http://dnb.d-nb.de> abrufbar.

© 2024 Braunschweigisches Landesmuseum
Alle Rechte vorbehalten

Abbildungsnachweise liegen in der Verantwortung der
Autoren

Verlag Uwe Krebs, 38176 Wendeburg
Druck: oeding print GmbH, Braunschweig

ISBN 978-3-910570-04-7
ISSN 2193-4185

Preface

This 14th volume of the series *Neue Studien zur Sachsenforschung* contains 15 papers that were presented at two meetings of the Internationales Sachsensymposium, the 71st and the 72nd, which both took place during the years of the Covid-19 Pandemic. The 71st meeting was initially planned as a normal physical meeting, but had to be postponed due to a resurgence of the pandemic. The 71st meeting therefore was a short online meeting, held in the evening of the 16th September 2020. It was a joyous gathering with several presentations, attended by about 80 members who were happy to see each other again after a long period of isolation, even if only on their computer screens.

The 71st meeting had been planned to take place in the province of North-Holland, the Netherlands, in Alkmaar and especially in Castricum in the Provincial Archaeological Centre and museum *Huis van Hilde* (House of Hilde). We could finally meet at this location during the 72nd meeting, which took place between the 9th and 12th of October 2021, in an interval between two lockdowns. As the pandemic was not yet over, a relatively small number of 54 first-millennium researchers were able to attend physically, while another 30 followed the programme via livestream. Participants were not only members, but also PhD students and recent graduates who presented their research.

North-Holland is the northwestern-most province of the Netherlands; it is a coastal region with wetlands that largely formed during the late Holocene. Castricum, at the foot of the coastal dunes and near the former Oer-IJ estuary, was an appropriate location for a symposium on the theme of landscape and settlement in coastal wetlands, under the title *Making places, making lives*. The choice of this theme and location was inspired by the "North-Holland-in-the-First-Millennium" project, initiated by Rob van Eerden, provincial archaeologist of North-Holland. He and Johan Nicolay (University of Groningen) together made this into a comprehensive project in which many researchers from various disciplines participated, together writing a new history of this region during the first millennium AD. The project concluded in 2023 with the publication of *Noord-Holland in het 1e Millennium*, edited by Nicolay and Van Eerden. The project was nearing completion at the time of the conference. The keynote lecture by Johan Nicolay and several papers during the conference presented the results of this project.

Geographically, the contributions to the conference covered a much wider area, from the Celtic Sea to the Baltic Sea. Contacts and connections along the coast and across the

North Sea, connections and exchange with inland regions that were under Roman or Frankish influence, discontinuity and resettlement, and the subsequent formation of new groups and creation of new identities were themes that kept recurring during the conference and also in this volume. The Introduction that opens the book elaborates on these themes and explains how the book is structured.

The conference organising and scientific committee consisted of Rob van Eerden (Province of North-Holland), Peter Bitter and Nancy de Jong-Lambregts (City of Alkmaar, Archaeological Centre), Arno Verhoeven and Menno Dijkstra (University of Amsterdam), Annet Nieuwhof (University of Groningen,y), Egge Knol (Groninger Museum) and Henk van der Velde (ADC, Amersfoort). The practical organisation was in the hands of Menno Dijkstra, Egge Knol, Henk van der Velde and Carla Jansen (Marbles Events).

This volume is edited by Annet Nieuwhof, Egge Knol and Henk van der Velde. We want to thank the authors for their willingness to publish their contributions in this volume. It was quite a time-consuming process, not least because all contributions were double peer-reviewed. We also want to thank all reviewers, and our British colleagues who were willing to correct the English texts: Diana Briscoe (London), Helena Hamerow (Oxford), Catherine Hills and Sam Lucy (Cambridge) and John Hines (Cardiff). We have enjoyed working on this book, even though it took three eventful years to complete.

Financially, the conference was made possible by the *Provincie Noord-Holland*, the *Gemeente Alkmaar*, the North-Holland Archaeological Centre *Huis van Hilde*, the University of Amsterdam, Leiden University and the *Stichting Roel Brandt* (ADC-ArcheoProjecten). Publication costs were covered by generous contributions from the *Provincie Noord-Holland* and *ADC-ArcheoProjecten*, Amersfoort.

Finally, we dedicate this volume to our dear colleague Babette Ludowici, thanking her for her great commitment and achievement as editor of the NSSF series in the past years.

Annet Nieuwhof

Groninger Institute of Archaeology, University of Groningen

Egge Knol

Groninger Museum

Henk van der Velde

ADC ArcheoProjecten

Contents

<i>Annet Nieuwhof</i> Introduction: Making places, making lives	9
Part one: Coastal Communities and Connectivity	
North-Holland	
<i>Peter C. Vos and Rob A. van Eerden</i> Millennia of coastal dynamics and human interference: landscape development in the province of North-Holland during the Late Holocene	13
<i>Johan A.W. Nicolay</i> Making places, making lives. North-Holland in the 1 st Millennium	28
<i>Annet Nieuwhof</i> Pottery development and habitation history during the Roman Period in the province of North-Holland	47
<i>Jan de Koning</i> Occupation in North-West Frisia (North-Holland) between AD 400 and 900 from a pottery perspective	62
<i>Menno Dijkstra</i> Early medieval house building traditions in the western Netherlands: an update and a search for its origin	76
From the Celtic Sea to the Baltic Sea	
<i>Egge Knol</i> The early medieval cemetery at Hogebeintum, the Netherlands (AD 400-730)	95
<i>John Hines</i> The Fenland and the early medieval transformation of the East Anglian Fen edge: evidence from RAF Lakenheath, Suffolk	121
<i>Nelleke IJssennagger – van der Pluijm</i> Intercoastal cultural zones in early medieval Europe. Long-term making of places along North Sea and Celtic Sea coasts	133
<i>Bente Sven Majchczack, Ruth Blankenfeldt, Dirk Bienen-Scholt, Hanna Hadler, Fritz Jürgens, Stefanie Klooß, Antonia Reiß, Dennis Wilken, Claus von Carnap-Bornheim, Wolfgang Rabbel, and Andreas Vött</i> Living on the Halligen tidal islands of North Frisia: land-use and exploitation of a unique salt-marsh landscape in the Middle Ages	143
<i>Aleksandr Chochlov, Konstantin Skvorcov, Jaroslaw A. Prassolow</i> On the contacts of the inhabitants of the unfortified settlement Privol'noe-1 on the Kaliningrad Peninsula at the end of the 11 th -13 th centuries AD	161

Part two: Mobility, Economy and Exchange

<i>Henk M. van der Velde and Lisette M. Kootker</i> Looking for a place to stay: tracing human mobility in the Lower Rhine frontier zone during the Roman Period	171
<i>Roeland Emaus</i> On byre-houses and husbandry: post-Roman settlement and landscape transformations in the Central Netherlands	185
<i>Karen Høilund Nielsen</i> The tale-telling glass beads	203
<i>Mette B. Langbroek</i> Journeys through time and space: beads travelling from distant shores and back again	217
<i>A.W.A. (Wim) Kemme</i> Variety is the spice of life. Towards a pluralistic understanding of the Carolingian economy	229

The Fenland and the Early Medieval Transformation of the East Anglian Fen Edge: Evidence from RAF Lakenheath, Suffolk

John Hines

Geology and Geography

A present-day map of England can easily give the impression that East Anglia is firmly attached to the rest of the country and quite centrally placed on the north–south axis. In early medieval times, however, it was rather an isolated peninsula: as that term etymologically implies, in practical terms virtually an island (Fig 1). This area of land, comprising the shire counties of Suffolk and Norfolk, had the North Sea to the north and east and the extensive Fens to the west. To the south, most of the landscape was covered by heavy Pleistocene (glacial) clay on a band of raised ground running through Essex from the London basin south of the Chilterns well up into the peninsula. This is especially broad south of the Lark–Gipping watershed in central Suffolk. The soil-types around East Anglia vary considerably (www1), although a broad and reliable characterization is the range from sandy soil, partly over chalk, in the west and on the fen edge, and a series of loams incorporating sand and alluvial silt, along with higher levels of humus, along the eastern coast. The clay band between these extends to the north coast of Norfolk, albeit gradually narrowing. Thus the west and east of East Anglia are markedly different in terms of the land conditions, and also in terms of the principal routes available there for longer-distance contact and exchange. Such variance obviously can offer complementary opportunities for an integrated territory, but to begin with it may seem far from given that East Anglia would emerge as a unit in political, economic and cultural terms at all.

East Anglia, The Wash and The Fens are directly opposite the more northerly Netherlands across the North Sea. There are regions called Holland in both areas too, although the derivation of those names appears to be different: *holt-land*, ‘forest land’, in the Netherlands and *hōh-land*, ‘ridge land’, in Lincolnshire. It is nevertheless unsurprising that the upper soil geology is similar in the two areas: primarily with extensive Pleistocene clay deposited by the last glaciations that was particularly difficult for any sort of farming, but also extensive areas of both sand and peat. There are tidal wetlands on both sides of the East Anglian peninsula, but on the whole these are considerably narrower on the eastern, North

Sea side. Tidal wetlands were highly dynamic and unstable environments all round northern Europe, with ground levels varying substantially as a result of drier and warmer climatic conditions at the beginning of the Christian era, but above all because of the impact of economic exploitation and drainage – with falls in ground-level that would then make the extreme low-lying areas especially susceptible to marine



Figure 1. Upper: Sketch map of the principal soil types in East Anglia and the Fenland, showing the silt and peat fens and the fen islands, plus the Lark-Gipping watershed (double blue line) and with the historic shire county boundaries marked. Below: Schematic cross-section of the post-Glacial deposits in the silt fens, based on the Norfolk ‘Marshland’ region, after SILVESTER 1988, fig 5. Key: (1) pre-Flandrian rock; (2) and (4) peat; (3) clay; (5)–(7) silt layers. The star marks the location of RAF Lakenheath. Drawn by the author.



Figure 2. The NW Suffolk Fen Edge between Mildenhall (S) and the Little Ouse (N) showing the position of the major Early Anglo-Saxon cemetery sites in relation to the 5m OD (Ordnance Datum) contour and Lakenheath Old Lode. Drawn by the author.

transgression when the climatic conditions also cause a rise in sea-level. A variety of processes in the Netherlands caused a marked expansion of the coastal wetlands and salt-marsh and retreat of the peatlands between c. 500 BC and AD 800 (KNOL and IJSENAGGER 2017, 5–9). Climatic factors were particularly powerful around the 5th and 6th centuries AD, just after the end of the Roman Period, when a marked layer of post-Roman alluvial silt was deposited in the East Anglian fens (Fig 1, below). It appears impossible to determine, however, if that deposit was the product of a small number of short-term inundations or of a more enduring return of open-water conditions, however shallow the water might have been (HALL and COLES 1994, esp. 122–31; WALLER 1994; SILVESTER 1988, esp. 5–7).

The Settlement and Use of the Fenland in the Anglo-Saxon Period

The area of the Fens itself ('Fenland') consists primarily of two distinct zones. The north of the area, bordering on the shallow open sea in The Wash, is a band of silt fen: alluvial deposits formed by the opposing motions of the many rivers that reach the North Sea here and the marine tides. Behind the silt fen is a broadly commensurate area of peat fen, the growth of which was catalysed by the slow running or standing water and the saturation of the low-lying areas to the south. There are, however, a considerable number of 'Fen islands' too: usually created by outcrops of more ancient bedrock capped with loams. The most substantial and historically most important of these was the Isle of Ely.

In the Late Iron Age and into the 1st century AD, East Anglia was famously the territory of the people and kingdom of the Icenii. From Tacitus' *Annals* and Dio Cassius' *Roman History* we can piece together a story of this group's reaction to and accommodation with the Roman imperial forces in the years following the Claudian invasion of AD 43, before extreme provocations led to the Boudican revolt in the year 60 or 61. North of the Via Devana which ran between Colchester in northern Essex and the legionary fortress of Chester via Cambridge and Godmanchester in Huntingdonshire, romanization of the settlement infrastructure remained surprisingly light after that uprising was quashed. There are Roman villas in Suffolk and Norfolk, but relatively few in relation to other classes of known agrarian settlement of the period (SMITH et al. 2016, 141–241). The only town is the *civitas* capital at Caistor St Edmund (Caistor-by-Norwich), *Venta Icenorum*. Nonetheless, Alexander SMITH does note relatively high proportion of nucleated, roadside settlements or *vici* in the region (SMITH et al. 2016, 220–5), while the coastal forts at Brancaster, Caister-on-Sea (Caister by Yarmouth) and Burgh Castle reflect the incorporation of the peninsula into the Saxon Shore defensive system during the 3rd century. The spectacular Mildenhall and Hoxne hoards of the later 4th and early 5th centuries respectively display the wealth of a fully typical Late Roman material culture, even in the heart of East Anglia, then.

A combination of favourable environmental circumstances with Roman engineering skills and ambitions to invest in the development of resources led to a major transformation and high levels of new settlement in the Fenland itself in the Roman Period. This included canals for drainage and transport, and the Fen Causeway road across the silt fen from Roman *Durobrivae* (Water Newton near Peterborough: yet another site at which a major 4th-century hoard was buried), which presumably connected with the Peddars Way road along the East Anglian Fen Edge. Sheppard FRERE suggested that the Fenland could have supported a population of some 50,000 people at its peak in the Roman Period, but continuing topographical and climatic challenges can also be detected. It

would appear that this population and its economic basis and role could not be sustained beyond the 4th century (FRERE 1974, 275–7; HALL and COLES 1994, 105–21; EVANS et al. 2011, 10, for a relevant radiocarbon date). Around the Fen Edge itself, fieldwork at a series of major Roman-period settlement sites can trace extensive activity up the end of the 4th or beginning of the 5th century, but then major reductions in the quality and level of occupation (Colne Fen and Fen Drayton, Cambs: EVANS et al. 2013; ZEKI 2016; Castor, Hunts: LUCAS 1998). Likewise at Caudle Head Mere (see Fig 2), no activity can be identified in a 20-hectare Roman-period settlement zone after the beginning of the 5th century, and a hiatus before settlement of a completely new material character commences there later in the century (CARUTH and HINES 2024, 1–7).

It has long been accepted that the Fenland did not support much human population for most of the Anglo-Saxon Period (DARBY 1934; 1936; 1977, *passim*; WILLIAMSON 2013, 15; cf. RIPPON 2010, 54–7). A recent monograph by Susan OOSTHUIZEN (2017) has sought to make the converse case, that the habitable areas of the silt fen and the fen islands were in fact exceptionally densely occupied, with inhabitants who were mainly the descendants of the earlier Romano-British population. Her arguments do not stand up to critical evaluation. A population settled on limited islands exploiting extensive surrounding wetlands may indeed locally have lived at as great a density on those sites as people anywhere else. It is also true that the Domesday Survey of AD 1086–7 tends to undercount populations (MAITLAND 1897, 40–4; DARBY 1977, 57–94), but that holds everywhere; undercounting might be magnified where the population figures were in reality relatively low, but that does not suggest that where the recorded figures are extremely low the reality may contrariwise have been distinctly high.

In relation to the Domesday records, the essence of Oosthuizen's case is that in the fiscal records of major religious houses from the mid-13th century additional groups of tax- or rent-payers appear in settlements around the Fens (OOSTHUIZEN 2017, 16–30; cf. ROFFE 2005 for a prior and stronger presentation of this case). She avers that these must represent tenures of deep antiquity, probably going back as far as the 5th or 6th centuries AD, which simply were not included in the Domesday survey. Across the board, though, the terms referred to which represent these tenants and their dues (i.e. *hundredor* [cf. Latin *centenarius*]; the charges of *sexthepen* [miscited as *sexthepen* and *sextiethpen*] and *wardpen*; *warland* and the *ferthyng*) are unattested before the 11th century at the earliest, and linguistically show no archaic features while some crucial elements of morphology and semantic development clearly reflect post-Conquest, Anglo-Norman origins. Even allowing for the fact that the institutional relationships involved must have evolved from practices over several centuries preceding, in the case of the Fenland it is every bit as likely that this evidence in the round does indeed represent growth and new developments from the 10th and 11th centuries onwards, and

an increase in tenancies of around 52% (miscalculated by Oosthuizen as 34%) between 1086 and 1248–9.

Oosthuizen's chapter on cultural identity in the early medieval Fenland similarly misinterprets linguistic evidence and historical sources with a determination to impose a single interpretation and populate the area with long-settled Brythonic-speaking communities (OOSTHUIZEN 2017, 31–49; cf. Fox 1923, 282–3 for some of the same arguments). A cluster of *Wal-* place-names in Walsoken just north-east of Wisbech is intriguing, but there are in fact no secure sources for the forms of these names pre-dating the Domesday survey. The solitary place-name which might incorporate the genitive plural *Weala* ('of Welshmen'), namely *Walepol* for Walpole, has the form *Walpola* in its earliest appearance, in the Norfolk Domesday, which is to be interpreted rather as 'wall pool'. Guthlac of Crowland's visionary encounter with Brythonic-speaking demons in the Fens has become 'the presence of British-speaking communities' and an 'attack... by a British army' (OOSTHUIZEN 2017, 38). This is one episode in a string of spiritual, not physical, challenges the hermit had to grapple with, and the 8th-century Life of Guthlac by Felix explicitly states that Guthlac could recognize the language *nam ille aliorum temporum praeteritis voluminibus inter illos exulabat*, 'for in previous cycles of other times he was living in exile amongst them' — presumably when serving the King of Mercia on the Welsh border, and not because Brythonic was familiar in his home area (FELIX VG, 34; BRADY 2017, 53–81; HARTMANN 2019).

It is equally clear that the Cambridge Thegns' Guild regulations of c. AD 1000 use the term *wylisc* (which literally = 'Welsh') solely to denote a social rank in that context. It labels the least valued class of individuals (men) in respect of whom contributions to compensation payments are specified should a guild-member kill such an individual (THORPE ed. 1865, 610–13; WHITELOCK 1968, 557–8). OOSTHUIZEN (2017, 39) erroneously identifies the *wylisc* as a group of members of the guild. The compensation tariffs compare a thegn with a 1,200-shilling wergild to the freeman (*ceorl*) and then the unfree (*wylisc*). Lexically this usage is of great interest, but it cannot bear the ethnic and linguistic interpretation put upon it. Finally, the stories of fierce Britons in the 12th-century Ramsey Chronicle are out and out fables (OOSTHUIZEN 2017, 39). The attribution of 11th-century disorder in Huntingdonshire to such a force might have been inspired in part by the episode in Felix's Life of Guthlac just referred to. However, although not an especially common or familiar *topos* in medieval literature, wild and indeed unnatural forces of Britons can be identified as a stock motif of legendary narratives of this date. In *De nugis curialium* (Dist. I, 11: ed. JAMES, BROOKE and MYNORS 1983, 26–31; cf. also 371–2), for instance, WALTER MAP converted the powerful folkloristic legend of Harlequin's Wild Hunt into just such a troop led by a king of the 'most ancient Britons', Herla.

Much of the Fenland appears to have had to remain uninhabited for most of the Anglo-Saxon Period. It was clearly possible to re-settle parts of the silt fen region to the north, at least from the 8th century onwards, but the markedly low population density overall as late as 1087 implied by the Domesday records is unlikely to be seriously misleading. However a Fenland that was subject, normally, to regular and limited seasonal flooding would be ideal for transhumance pasture, and even limited cultivation. The early post-Norman Conquest records of pasturage customs and rights point unmistakably to the purely pragmatic exploitation of these opportunities — as climatic amelioration and the water/land equilibrium allowed it. The Domesday Book image of the Fenland is dominated by substantial fisheries and important salterns, and considerable areas valued as pasture and meadow, and overall was a productive region (DARBY 1977, *passim* but esp. 229–31). There is a curious, and unremarked, unevenness between the evidence assembled so far for dominance in the control of these resources from the north, west and southern sides rather than from Suffolk and Norfolk to the east, and there is more research to be done to evaluate how real that pattern is and how the differing fortunes and histories of monastic foundations all around the area might be a factor in the pattern (see OOSTHUIZEN 2017, esp. 51–3; PESTELL 2004, 101–51). The contrast is intriguingly congruent with the much greater degree of romanization apparent to the north, west and south of the Fenland compared with East Anglia itself (GOSDEN, GREEN et al. 2021, 314–20).

The Archaeological Evidence from RAF Lakenheath

Liber Eliensis is a monastic history of the Isle of Ely and its great religious centre that must have been compiled in the last quarter of the 12th century, around 500 years after the foundation of the first monastery there headed by the local royal princess Æthelthryth. While it is true that copied and inherited materials were carefully interwoven to make up the text (see especially the edition of BLAKE 1962, xxviii–xlii), there is nevertheless much independent and local evidence here that continues to represent the Fenland first and foremost as a landscape of open water, lakes, meres and marshes, navigated by boat, not on foot, human or animal, let alone with any other form of vehicle; a waterscape, punctuated by islands, promontories or isthmuses well into the Norman Period (e.g., FELIX VG, 24–5; GESTA HERWARDI, 20–21; LIBER ELIENSIS, *passim* but esp. *De situ Elyensis insulae* [Preface] and I.40; cf. CHISHOLM 2020, and also BROOKS 2020 and KILPATRICK 2020 on the influence of literary models).

To focus in on the site from which evidence of important and regular contacts will be discussed in the rest of this paper, Lakenheath is a name derived from an original *Lacinga-hƿ̆ð*. Old English *hƿ̆ð*, ‘hithe’ in modern English, means a landing place for boats. This was the hithe of a group of people known

as the *Lacingas*, a name that itself can be parsed as ‘the people of the *lacu*’, in which *lacu* refers quite precisely to a sheltered and usually navigable side-channel on the edge of a river or lake (GELLING and COLE 2000, 19–20). The term would be entirely suitable for the channel that would appear with the correct water level between the mainland fen edge (i.e. the 5m Ordnance Datum contour: see Fig 2) at Eriswell and Lakenheath and the fen island of Undley (where the famous Undley bracteate was reportedly found: WEST 1998, 74, 79; HINES 2006). There are many examples of *hƿ̆ð* embedded in English place-names, albeit interestingly clustered around the major waterways of the Trent and Humber and the Thames, as well as in the Fenland (GELLING and COLE 2000, 83–9, Fig 14). It is evident that *hƿ̆ð*-names could become habitational names by the 8th and 9th centuries, although the great majority of them are inevitably first recorded only in post-Conquest sources, and the term probably remained current and productive over several centuries. The first record of the name, written *Lacingahið*, is in a charter dated AD 1015–16.¹

Briefly to summarize the archaeological evidence we have of a community and population here from the middle of the 5th century through into the 8th century, the burials of the dead of that population excavated and examined over the past 25 years within the perimeter of RAF Lakenheath airbase represent a burying population of over a hundred people up to some time in the second quarter of the 6th century (CARUTH and HINES 2024, esp. 467–9). After that, the frequency of burial drops to a level that implies a fall of some 80% in the burying population which continued to use the site — which then came to an end around the 660s, around the time that a maybe even smaller cemetery came into use over a Bronze-age barrow some 300 m further south. Isotopic and aDNA evidence now point with real solidity to the immigrant origins of a very high proportion of the population burying here from the 5th century onwards, having moved into the east of Britain across the North Sea from what is now Niedersachsen and the Jutlandic peninsula (cf. GRETZINGER et al. 2022). Their material culture is overwhelmingly what we would traditionally label ‘Anglian’, both in terms of its Continental Anglian formal ancestry and in terms of conformity with the evolving Anglian English zone in eastern Britain.

Up until very recently, we would confidently and categorically have said that such regionally specific and ostensibly ethnically significant differences in displayed material culture were really only apparent in adult female dress. In fact, research results of just the past few years would now encourage us to be more confident that there were also some systematic regional differences within the common items of weaponry — that is the shield bosses and spearhead-types — that are the primary characteristics of male equipment. This question is regrettably too complex to try to summarize or discuss here, although attention can be drawn to a published discussion of what looks like the late survival of spearheads with markedly concave edges and chronological disjunctions in the introduction of distinctive forms of shield boss of Class

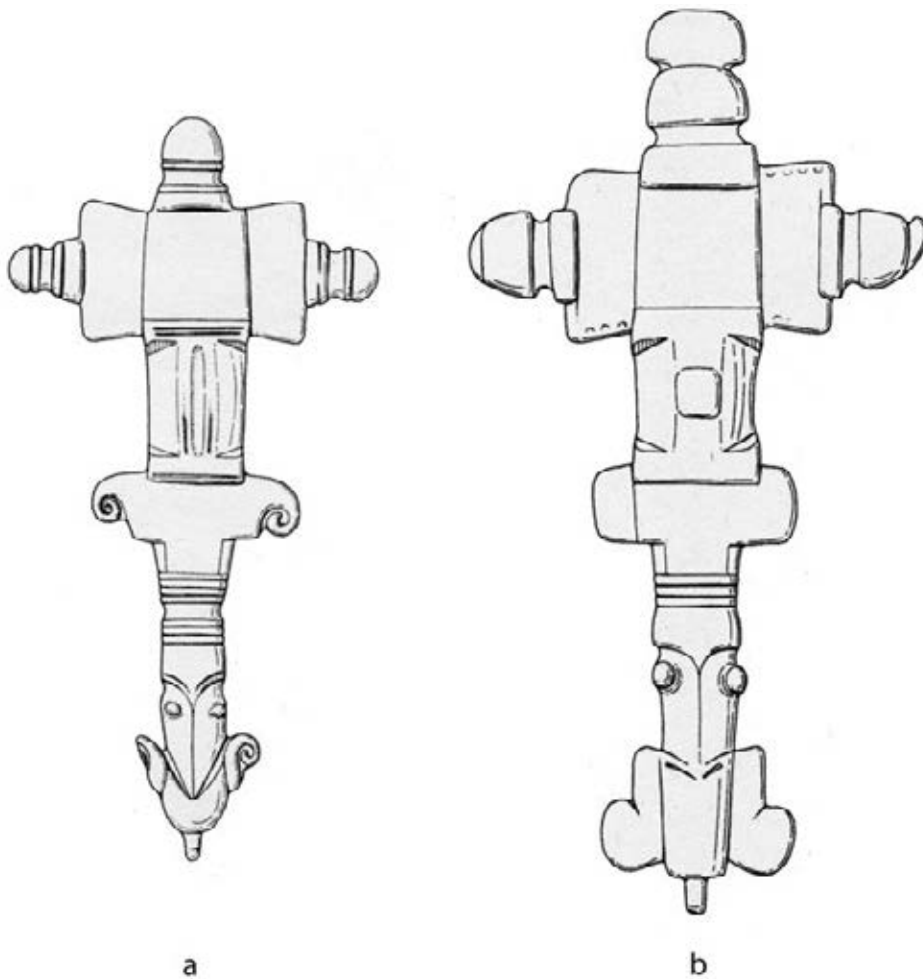


Figure 3. Copper-alloy cruciform brooches from the West burial ground at RAF Lakenheath. a: grave 364, Martin Type 3.4.3; b: grave 358, Martin Type 3.2.5. Scale 1:1. Drawn by Donna Weatherall © Cotswold Archaeology.

SB4 in mid- to later 6th-century East Anglia compared with elsewhere (HINES 2021). Interestingly, as well, we can also see around this region a distinctive feature of children's costume which actually makes use of a Romano-British dress-accessory, the slip-knot bracelet, perhaps more often worn on the leg at the ankle than on an arm towards the wrist (cf. HINES 2000).

Nevertheless, it is through the ornamental aspects of women's dress-accessories that we can most clearly demonstrate both a dominant local or regional style which makes this group 'Anglian' and embeds it as part of an extensive Anglian zone in England. There are then special cases amongst the most highly conspicuous dress-accessories which allow us further to identify specific relationships by linkage with close parallels found at other sites, in some cases nearby and in other cases quite far away. From those more special cases we can observe both interesting and consistent patterns of what we then may think of as regular and carefully maintained middle-distance links of this community.

Typical of Anglian English female dress are brooch-suites dominated by annular (ring) brooches; cruciform and what we call 'small long' brooches; and also certain types or

'Groups' of great square-headed brooches (WALTON ROGERS 2007, 116–20). All of these except the annular brooches are of course also familiar types in much of the northern and western Continent and in Scandinavia; there are a few annular brooches from Denmark, but interestingly this brooch-type is considerably more common in the Frisian zone of the northern Netherlands (KNOL 1993, 67–8, 196–201; HINES 2017, 34–5). Disc and saucer brooches, conversely, are rare in East Anglia, unlike the situation in the regions immediately to the south and west in England (cf. WEST 1998: see his index, p 369, for examples). There are also certain types of glass bead that are specific to East Anglia, as indeed there are in practically every region of Early Anglo-Saxon England, even though on the whole glass bead-types allow for extremely helpful comparability of female grave-assemblages throughout Early Anglo-Saxon England (BRUGMANN 2004, 34–7). As discussed at the Sachsensymposium in Warsaw in 2014, miniature brass bucket pendants, conversely, are not only a markedly Anglian but indeed a distinctly easterly phenomenon (HINES 2019). As has also long been known, the wearing of wrist- or sleeve-clasps by adult women is an originally Scandinavian costume

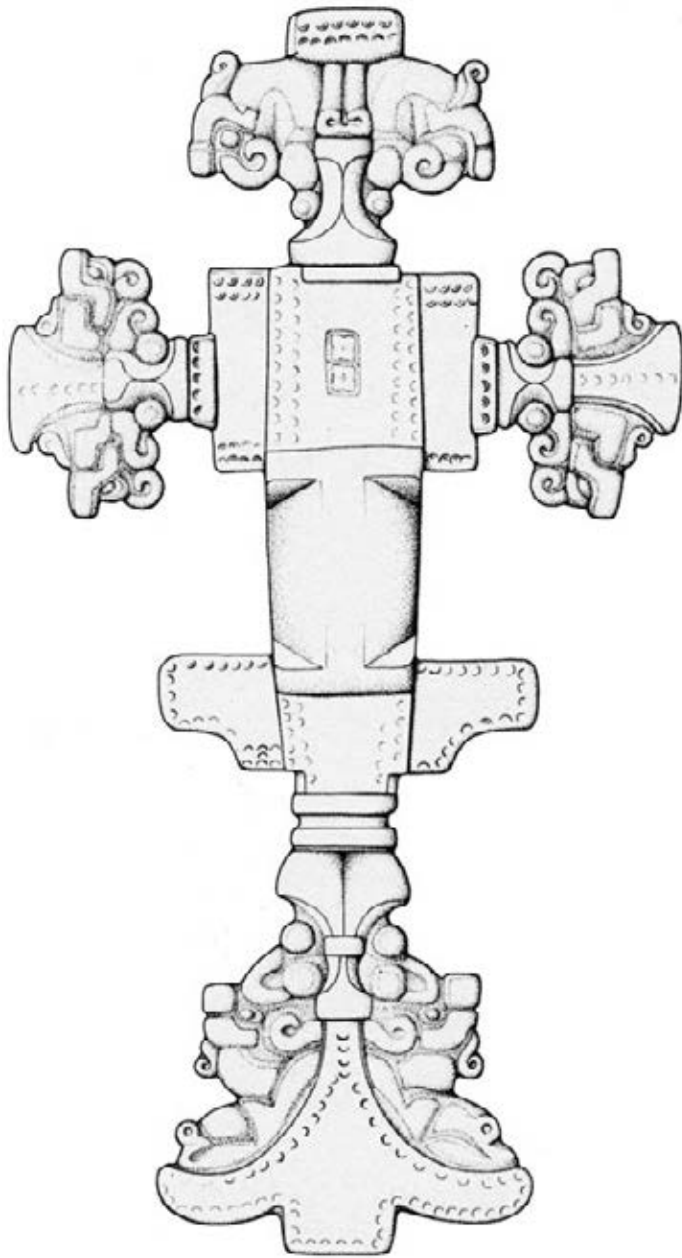


Figure 4. Gilt copper-alloy cruciform brooch from grave 008 in the Central burial ground at RAF Lakenheath, Martin Type 4.1.3. Scale 1:1. Drawn by Donna Weatherall. © Cotswold Archaeology.

feature which also becomes common in Anglian England from the late 5th century onwards, but nowhere else in Britain (HINES 1984; 1993).

Let us start a more detailed examination of artefacts with the cruciform brooches. This is the second most numerous class of brooch represented at RAF Lakenheath, with forty finds altogether. It is a brooch-type that would be considered definitively Anglian in character in England, and especially with something like one in seven of the adult women from the

later 5th or earlier 6th century at RAF Lakenheath having been dressed in one of these brooches. We can now make use of Toby Martin's meticulous classification and mapping of the hundreds of specimens known from England (MARTIN 2015, esp. figs. 1-2).

The cruciform brooch is a particularly representative class for us to begin with, not least because it illustrates well the subtlety of patterning to be discerned: few of the connexions of real interest are in any sense extreme or truly startling. We may start with a pair of cruciform brooches of Martin's Type 3.4.3 from grave 364 – a type Martin calls the 'Lakenheath Type', not from this grave-assemblage but because of a 19th-century find from close by (Fig 3a; MARTIN 2015, 60–2). This adult woman had a striking costume overall: 70 amber beads; two pairs of silver Class A clasps; a rather large knife for a woman's grave; two silver finger rings on her left hand; and quite unusually a five-spiral applied saucer brooch. There are not many examples of Type 3.4.3 brooches, and they immediately look very local to the area around RAF Lakenheath. Indeed the closest formal parallel to the grave 364 brooch is from only 10 km away down the Lark Valley at West Stow (WEST 1985, fig 257.4; MARTIN 2015, fig 27.1). But apart from the Lark Valley, the distribution of this distinctive brooch-type actually shows a group spreading around the Fens to the south and west, across, in fact, as far as Leicestershire (MARTIN 2015, fig. 27 map).

Martin saw his Lakenheath Type 3.4.3 as a derivative of a more numerous group, Type 3.2.5 (MARTIN 2015, 53). This type is also represented at RAF Lakenheath, in grave 358 (Fig 3b). Type 3.2.5 also has essentially the same centre of gravity in its distribution as Type 3.4.3, albeit with single examples from further into the interior of East Anglia at Spong Hill and Morningthorpe in Norfolk (MARTIN 2015, fig. 22 map).

A rarer and much more ostentatious form of cruciform brooch is Type 4.1.3 (MARTIN 2015, 71–2), found in grave 008 (Fig 4): the burial of a girl of no more than 9 or 10 years of age but dressed in full adult style, with a pair of annular brooches as well, and 70 beads again, most of them glass, and the remainder amber. Here the formal counterparts to the cruciform brooch, except for one metal-detected fragment from Great Bealings on the North Sea coast of Suffolk, lie across the Fens but to the north, in Lincolnshire (www2: SF-OAC768; MARTIN 2015, fig. 32 map). The most similar parallel and thus closest relative to the grave 008 brooch, however, is from the Cambridgeshire Fen Edge cemetery at Soham (MARTIN 2015, fig. 32.1).

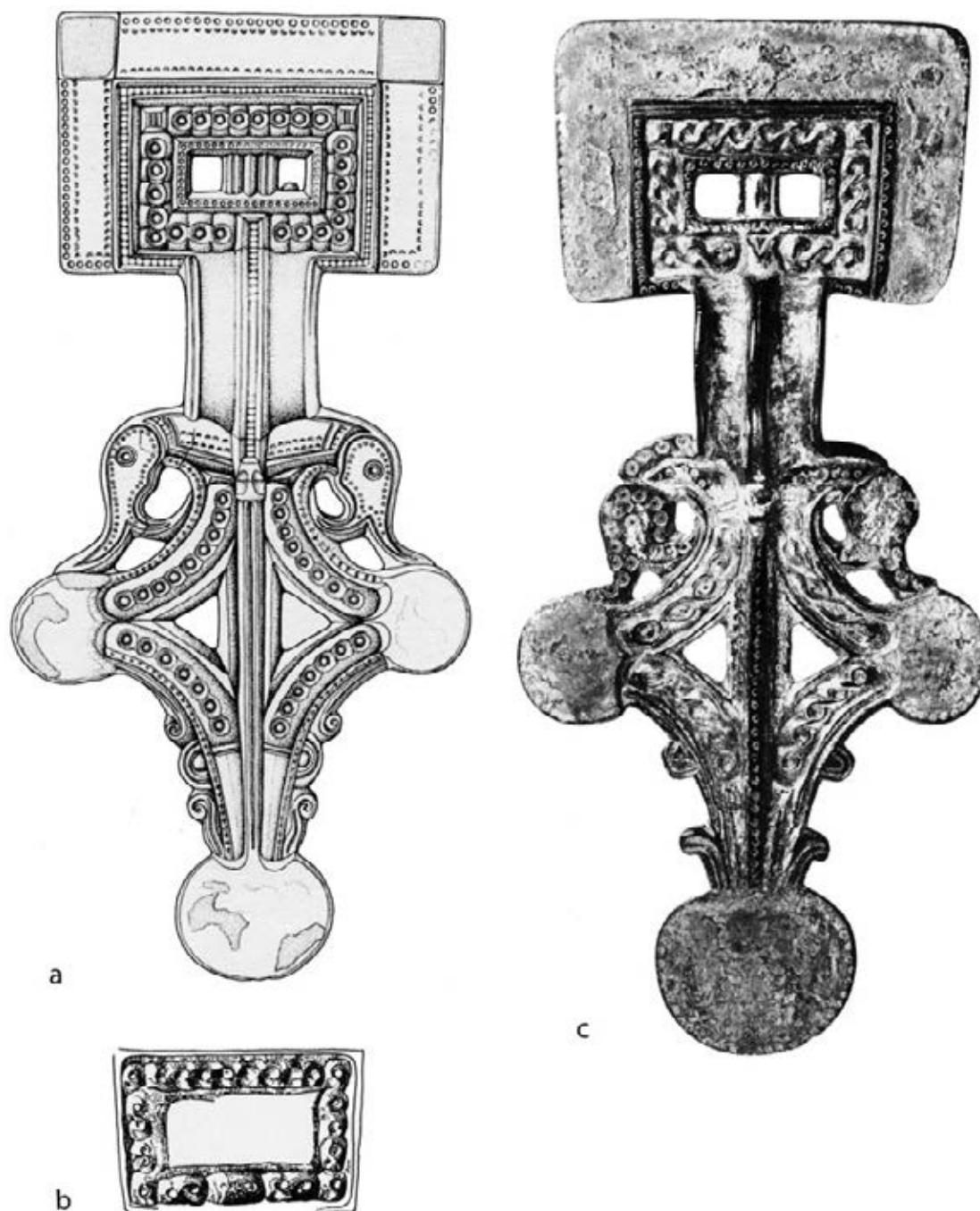


Figure 5. a: Gilt copper-alloy great square-headed brooch with silver foil appliqué from RAF Lakenheath grave 003, Central burial ground, Hines Group XVI; b: headplate second panel on brooches of this group from Lakenheath (Rearing Field), Billesdon, Leicestershire, and Holme Pierrepont, Nottinghamshire; c: gilt copper-alloy great square-headed brooch of Group XVI from Holywell Row, Suffolk, grave 14. Scale 1:1. a: Drawn by Donna Weatherall. © Cotswold Archaeology; b: drawn by Howard Mason; c: photograph, the author.

Grave 008 is from the Central burial ground at RAF Lakenheath [HER site code ERL 046] – a burial ground that stands out amongst the three contemporary and adjacent burial areas here for having more richly furnished female burials, and a higher concentration of silver and gilded objects amongst the artefacts. There are two graves in this burial ground

which contained what we would usually regard as the most distinctive and prestigious brooch-class for an adult female: the great square-headed brooch. In grave 003, a young adult woman was buried with a Group XVI great square-headed brooch (Fig 5a) and two annular brooches; again she had two pairs of silver Class A clasps; and in this case more than a

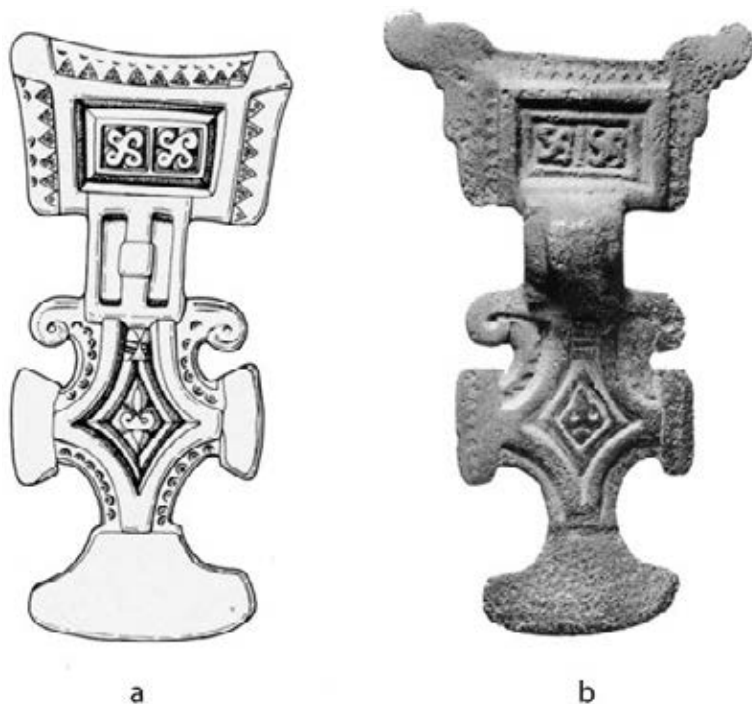


Figure 6. Copper-alloy great square-headed brooches of Hines Group XIX from a: RAF Lakenheath grave 018, Central burial ground; b: Broughton Lodge, Willoughby-on-the-Wolds, Nottinghamshire, grave 57. Scale 1:1. a: Drawn by Donna Weatherall. © Cotswold Archaeology; b: photograph, the author.

hundred beads, most of them amber (97) but 13 of glass and two of quartz crystal. Group XVI brooches are very numerous, and would also almost automatically be considered *the* East Anglian type of the second quarter or mid-6th century (HINES 1997, 118–33). In this case, though, details of design of the headplate second panel of the brooch link it both with another extremely local 19th-century find from Lakenheath and also across the Fens again to Billesdon in Leicestershire and Holme Pierrepont in Nottinghamshire. Meanwhile, the openwork in the design, and the frames of the headplate and footplate inner panels of the grave 003 brooch are closely paralleled on another very local find, from grave 14 at Holywell Row only 4 km away (Fig 5; HINES 1997, plates 52, 60b)

Again in the Central site, we have grave 018, where another young adult female was buried with one of the smaller Group XIX great square-headed brooches — in fact only the fifth such specimen yet known (Fig 6a; HINES 1997, 145–9, pls. 76–7). One of the other members of this Group is from the 19th-century Lakenheath site and another from West Stow: these, then, are extremely local. Otherwise, we cross the Fens once more, to Broughton Lodge in Nottinghamshire and Sleaford on the Lincolnshire Fen Edge. Formally the nearest known relative to the grave 018 brooch is not either of its closest neighbours but rather the brooch from further west, in Broughton Lodge grave 57 (Fig 6; KINSLEY 1993, fig. 67).

Also worn by the woman buried in grave 018 was a fine pair of wrist-clasps of form B18 g, which could be labelled a very distinctive ‘Midlands Type’ (Fig 7a). The distribution of these clasps spreads as far west as Baginton and Churchover in the Avon Valley in Warwickshire, but we can still see the same pattern of dispersal around the south and west of the Fens in Cambridgeshire and Bedfordshire (HINES 1993, 61–2 and 123 [catalogue], fig. 119). Remarkably, yet another grave from this burial ground at RAF Lakenheath, grave 005, has a pair of gilt copper-alloy Class C1 wrist-clasps that belong to what was called the Central Midlands Type, previously represented by three finds just west of the Fens in Northamptonshire and Rutland (Fig 7b; HINES 1993, 69 and 125). Grave 005 is very richly furnished, including a pair of the rare but typically East Anglian copper-alloy bracteates, D-bracteates in this case.

Overall, in fact, the evidence of the wrist-clasps itself reveals another dimension of patterning in the evidence, and in particular the changing currents created by chronological layering. A

rather unspectacular but genuinely important single clasp-half from the disturbed grave 286 in the West site is of the generally early form B12, but with Style I animal heads at the terminals (Fig 7c; HINES 1993, 46–9, fig. 92). The most significant parallel to this specimen is a metal-detector find from just 10 km further north, at Felthwell on the South-West Norfolk Fen Edge (Fig 7d). That bar, however, has projecting lugs on the underside, showing that it is of the ancestral and transitional B4 clasp-form, which is one of the types that represent the stage of development reached by wrist-clasps when they were introduced from Norway into Anglian England in the second half of the 5th century; the slotted plates of this pair of clasps have also been found (HINES 1993, 37–8; www2: NMS-187CD6). Even in the early 1980s, it was clear that the East Anglian fen edge was a key landing area for the introduction of Scandinavian *hektespenner* or clasps to Britain (HINES 1984, 100–5). Several later metal-detector finds have only confirmed this. This zone was thus receiving and developing long-distance influence, and probably also accommodating incoming settlers with a use for these otherwise unusual dress-accessories. This region then developed those customs in its own way — RAF Lakenheath and its neighbour Holywell Row stand out for having the largest numbers of graves with silver Class A clasps anywhere in England (cf. HINES 1993, 4–11, 110). Subsequently, as more elaborate forms came to be developed, it appears that some members of this community were looking across the Fens, south, west and north but

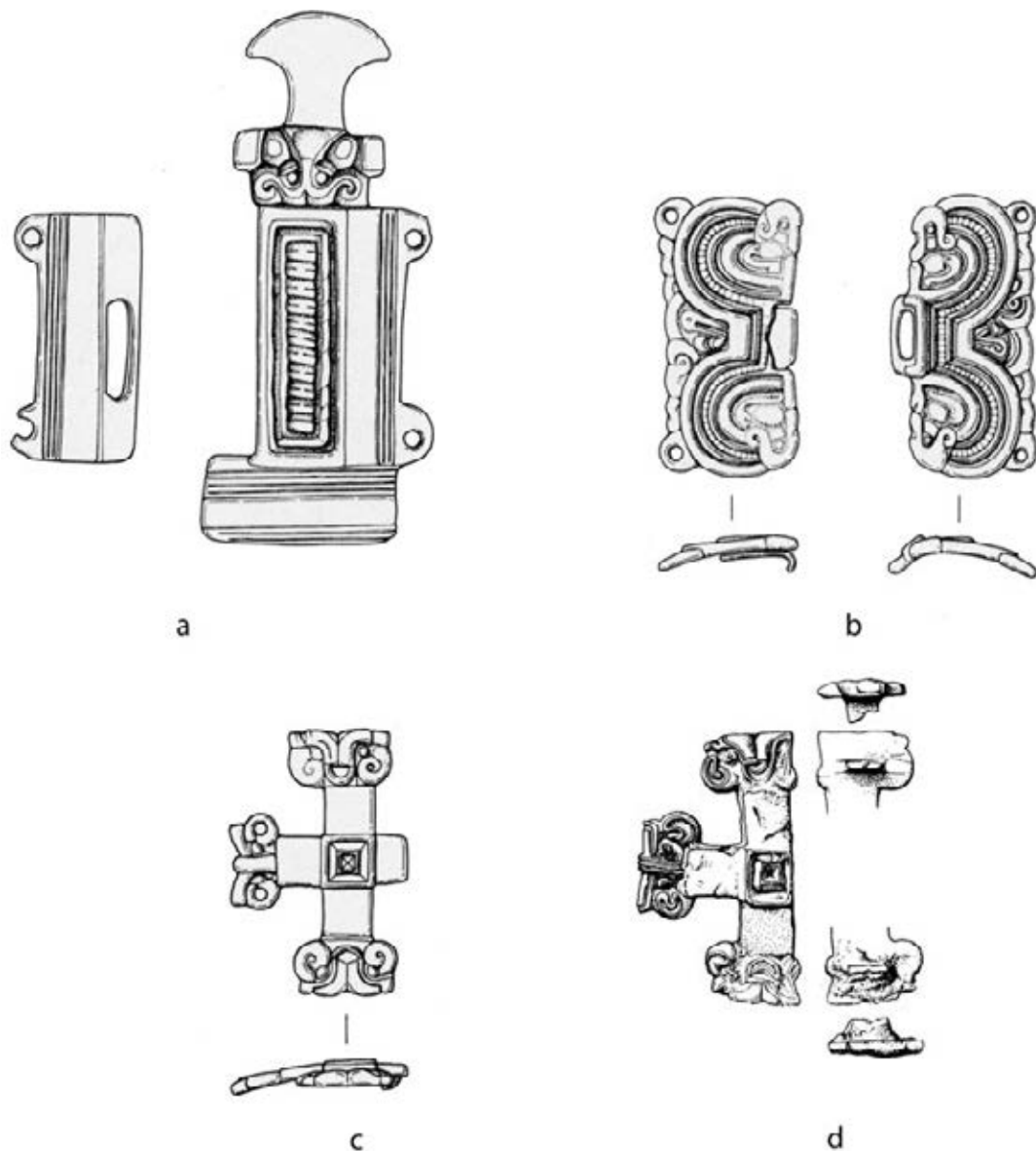


Figure 7. Wrist-clasps. a: Form B18 g, from RAF Lakenheath grave 018; b: form C1, Central Midlands Type, from RAF Lakenheath grave 005; c: form B12, from RAF Lakenheath grave 286; d: metal-detector find from Feltwell, Norfolk. Scale 1:1. a–c: Drawn by Donna Weatherall. © Cotswold Archaeology; d: drawing supplied by Norfolk Archaeological Unit.

especially to the west, for higher and more significant levels of exchange — which are highly likely to have involved social connexions and marriage alliances, of course.

Without in any way being selective with the evidence, this review demonstrates that particularly important links for contacts and exchange for the community burying at RAF Lakenheath lay across and around Fenland — very much more so, perhaps surprisingly, than their connexions to the east, inwards across East Anglia (Fig 8). These links seem to have grown particularly in the first half of the 6th century. At present we do not have aDNA data from those sites west and north of the Fenland from which we might explore the longer-term

relationships between these communities in more detail, but it may be hoped, and indeed expected, that such insights will eventually be possible. Chronologically, the second half of the 6th century is a phase at which female costume becomes unhelpfully more uniform and more modest over nearly all of England. As briefly noted above, that may conversely have been a phase in which male regional variation at least temporarily became more visible.

In respect of the physical state of the Fens, and how, as a result, those contacts could be made and maintained, it is not impossible for such middle-distance links to have been based seasonally on transhumance movement and contact. It would

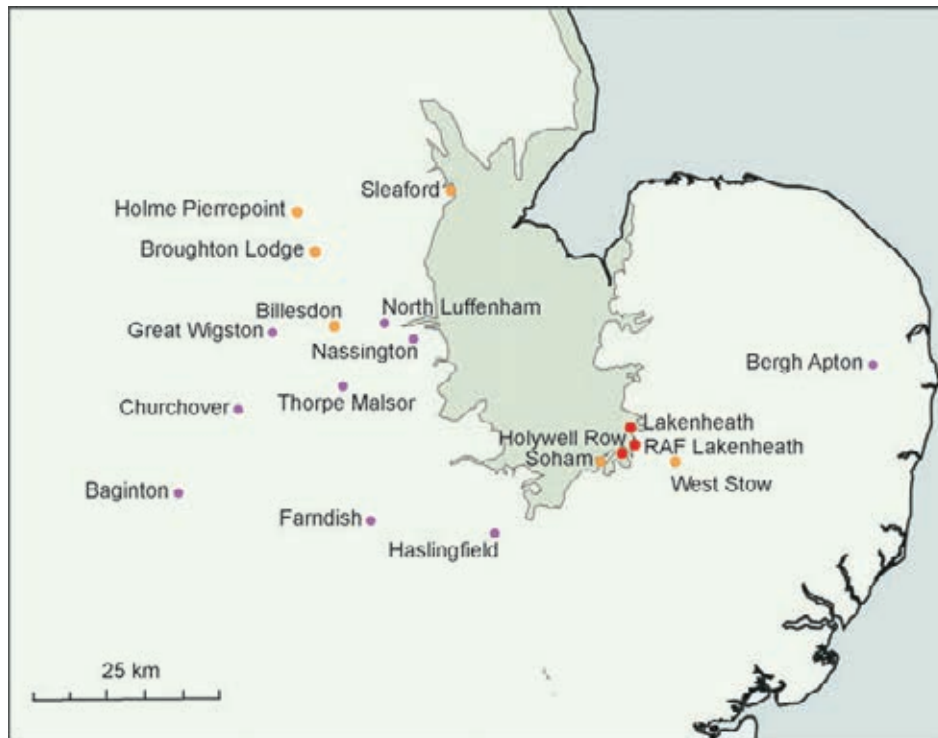


Figure 8. The distribution of shared material culture and plotted by parallels in the high-quality dress-accessories discussed in this paper. Drawn by the author.

be interesting, therefore, to know if there is any good evidence for just such an economic substructure to social interaction in other places, and indeed at other times. Conversely there is a case for arguing that the use of waterways as thoroughfares is more plausible: there is certainly also evidence of coastal links up to and across the Humber Estuary, for instance. These observations strongly suggest that, in seeking to assess the background to and development of an East Anglian kingdom, we have to incorporate evidence for quite a marked division in orientation, engagement and interaction, contrastively involving the quite separate and edge-areas of East Anglia at the Fen Edge, in the south-east around Rendlesham, Sutton Hoo, Coddenham and the River Gipping, and on the Norfolk North Sea coasts and their hinterland. Even if this whole region had been a single Late Iron-age ‘tribal’ area and a Roman *civitas* of the Iceni, its unified emergence as one of the most powerful Anglo-Saxon kingdoms in the early 7th century seems by no means to have been a foregone conclusion.

Notes

- OOSTHUIZEN (2017, 122–8, esp. at p. 126) proposes that the hithe recorded in the name of Lakenheath was at the end of a lode, or canal, known as Lakenheath Old Lode dug to connect the site with the River Little Ouse to the north (see Fig 2). That is possible, although topographically it is not a necessary inference (cf. GELLING and COLE 2000, 85–7, fig. 15). Place-names in ‘hithe’ in the Fenland

are consistently associated with settlements at or around the 5m OD [OSL] contour, the regular position of historical settlements in and around Fenland, which, even allowing for the complexities of past hydrology, is clearly consistent with a modern high spring tide mean of 3.15m OD in the Wash. The names do not of themselves identify exactly where the landing places may have been. It is also appropriate to note here a shared error common to Ann COLE (2007, 68), A. David MILLS (www3, 2011, s.n. LAKENHEATH) and OOSTHUIZEN (loc. cit.) attributing the earliest record of the name Lakenheath to a charter of AD 945. That confuses a charter of Eadmund King of the English (r. AD 939–946) granting lands to the predecessor of St Edmundsbury Abbey (Bury St Edmunds) in Suffolk (S 507) with one of Eadmund Ironside/Æþeling, designated Eadmund *basilei filius*, ‘son of the king’ [Æthelræd the Unready], giving land at Lakenheath (*æt Lacingahide*) to Thorney Abbey, now in Cambridgeshire, some 70 years later (S 948). The source of the error was presumably the earliest of those publications, but its repetition is an object lesson in the need to verify references to primary sources from secondary literature. Oosthuizen adds to the references to COLE and MILLS one page from David DUMVILLE’s (1993, 35–43) discussion of the evidence for the foundation of the religious house at Bury St Edmunds, which examines both the AD 945 charter and a disputed charter of c. AD 1021 supposedly granted by Cnut that also refers to Lakenheath (S 980) but does not refer to the source in question, S 948.

Sources

- FELIX VG
 Felix, Vita Sancti Guthlaci Confessoris. B. Colgrave (ed. and trans.) Felix’s Life of Saint Guthlac (Cambridge repr. 1985).

GESTA HERWARDI

Gesta Herewardi. T. D. Hardy and C. T. Martin (eds), *Lestoire des Engles solum la translacion maistre Geffrei Gaimar*, 2 vols (London 1888) vol 2, 339–404.

LIBER ELIENSIS

Liber Eliensis. E. O. Blake (ed.) (London 1962).

Liber Eliensis. A History of the Isle of Ely from the Seventh Century to the Twelfth. Janet Fairweather (trans) (Woodbridge 2005).

S = Sawyer charters

P.H. Sawyer, *Anglo-Saxon Charters, An Annotated List and Bibliography. For texts*, see *The Electronic Sawyer*. <https://sawyer.lib.cam.ac.uk> (last accessed 31 March 2022).

THORPE 1865

B. Thorpe (ed. and trans.), *Diplomatarium Anglicum Ævi Saxonici* (London 1865).

WALTER MAP

Walter Map, *De nugis curialium*. M.R. James (ed. and trans.), rev. C.N.L. Brooke and R.A. B. Mynors, *Walter Map De Nugis Curialium: Courtiers' Trifles* (Oxford 1983).

WHITELOCK 1968

D.M. Whitelock (ed.), *English historical documents. Vol. I: c.500–1042* (London 1968).

Bibliography

BRADY 2017

L. Brady, *Writing the Welsh borderlands in Anglo-Saxon England* (Manchester 2017).

BROOKS 2020

B. Brooks, Felix's construction of the English Fenlands: landscape, authorizing allusion, and lexical echo. In: J. Roberts and A. Thacker (eds), *Guthlac: Crowland's Saint* (Donington 2020) 55–71.

BRUGMANN 2004

B. Brugmann, *Glass beads from Early Anglo-Saxon graves* (Oxford 2004).

CARUTH and HINES 2024

J. Caruth and J. Hines, *The Anglo-Saxon cemeteries at RAF Lakenheath, Eriswell Parish, Suffolk: Excavations 1998–2007* (East Anglian Archaeology, 182) (2 volumes).

CHISHOLM 2020

M. Chisholm, *Crowland in St Guthlac's time*. In: J. Roberts and A. Thacker (eds), *Guthlac: Crowland's Saint* (Donington 2020) 316–25.

COLE 2007

A. Cole, *The place-name evidence for water transport in early medieval England*. In: J. Blair (ed.), *Waterways and canal-building in medieval England* (Oxford 2007) 55–84.

DARBY 1934

H.C. Darby, *The fenland frontier in Anglo-Saxon England*. *Antiquity* 8, 1934, 185–201.

DARBY 1936

H.C. Darby, *The Domesday geography of Cambridgeshire*. *Proceedings of the Cambridge Antiquarian Society* 36, 1936, 35–57.

DARBY 1977

H.C. Darby, *Domesday England* (Cambridge 1977).

DUMVILLE 1993

D.N. Dumville, *English Caroline script and monastic history: Studies in Benedictinism AD 950–1030* (Woodbridge 1993).

EVANS et al. 2011

C. Evans, S. Boreham, H. Roberts, R. Standing and J. Tabor, *Willingham Mere: 'Digging Environment' Project (31st May–10th June)* (Cambridge 2011).

EVANS et al. 2013

C. Evans, G. Appleby, S. Lucy and R. Regan, *Process and history. Communities at Colne Fen, Earith: An inland port and supply farm. CAU Landscape Archives: The Archaeology of the lower Ouse Valley 2* (Cambridge 2013).

FOX 1923

C. Fox, *The archaeology of the Cambridge region* (Cambridge 1923).

FRERE 1974

S. Frere, *Britannia: A history of Roman Britain* (repr. London 1974).

GELLING and COLE 2000

M. Gelling and A. Cole, *The landscape of place-names* (Stamford 2000).

GOSDEN, GREEN et al. 2021

C. Gosden, C. Green and the EngLId Team, *English landscapes and identities: Investigating landscape change from 1500 BC to AD 1086* (Oxford 2021).

GRETZINGER et al. 2022

J. Gretzinger, J.D. Sayer, P. Justeau et al., *The Anglo-Saxon migration and the formation of the early English gene pool*. *Nature* 610, 2022, 112–119.

HALL and COLES 1994

D. Hall and J. Coles, *Fenland survey: An essay in landscape and persistence* (London 1994).

HARTMANN 2019

J.-P. Hartmann, *Monument reuse in Felix's Vita Sancti Guthlaci*. *Medium Ævum* 88, 2019, 230–64.

HINES 1984

J. Hines, *The Scandinavian character of Anglian England in the pre-Viking Period*. *BAR British Series* 121 (Oxford 1984).

HINES 1993

J. Hines, *Clasps–Hektespenner–Agraffen: Anglo-Saxon Scandinavian clasps of the third to sixth centuries AD. Typology, diffusion and function* (Stockholm 1993).

HINES 1997

J. Hines, *A new corpus of Anglo-Saxon great square-headed brooches* (Woodbridge 1997).

HINES 2000

J. Hines, *Welsh and English: mutual origins in post-Roman Britain*. *Studia Celtica* 34, 2000, 81–104.

HINES 2006

J. Hines, *Undley §1: Archaeological*. *Reallexikon der germanischen Altertumskunde* 31 2006, 434–5.

HINES 2017

J. Hines, The Anglo-Frisian question. In: J. Hines and N. IJssennagger (eds), *Frisians and their North Sea neighbours from the fifth century to the Viking Age* (Woodbridge 2017) 25–42.

HINES 2019

J. Hines, From East to West: miniature bucket pendants in Anglian England. In: A. Cieśliński and B. Kontny (eds), *Interacting barbarians: Contacts, exchange and migration in the first Millennium AD*. *Neue Studien zur Sachsforschung* 9, 2019, 81–90.

HINES 2021

J. Hines, The chronological framework of Early Anglo-Saxon graves and grave goods: new radiocarbon data from RAF Lakenheath, Eriswell, Suffolk, and a new calibration curve (IntCal20). *The Antiquaries Journal* 101, 2021, 106–42.

KILPATRICK 2020

K. Kilpatrick, Places, landscapes and borders in the *Vita S. Guthlaci*. In: J. Roberts and A. Thacker (eds), *Guthlac: Crowland's Saint* (Donington 2020) 97–115.

KINSLEY 1993

A.G. Kinsley, Broughton Lodge: Excavations on the Romano-British settlement and Anglo-Saxon cemetery at Broughton Lodge, Willoughby-on-the-Wolds, Nottinghamshire 1964–8 (Nottingham 1993).

KNOL 1993

E. Knol, *De Noordnederlandse kustlanden in de Vroege Middeleeuwen* (Groningen 1993).

KNOL and IJSENSNAGGER 2017

E. Knol and N. IJssennagger, Palaeogeography. In: J. Hines and N. IJssennagger (eds), *Frisians and their North Sea Neighbours from the Fifth Century to the Viking Age* (Woodbridge 2017) 5–24.

LUCAS 1998

G. Lucas, From Roman villa to Saxo-Norman village: An archaeological evaluation at the Cedars, Castor. Cambridge Archaeological Unit, Report no. 260 (Cambridge 1998).

MAITLAND 1897

F.W. Maitland, *Domesday Book and beyond: Three essays on the early history of England* (repr. London 1960).

MARTIN 2015

T. Martin, *The cruciform brooch and Anglo-Saxon England* (Woodbridge 2015).

OOSTHUIZEN 2017

S. Oosthuizen, *The Anglo-Saxon Fenland* (Oxford 2017).

PESTELL 2004

T. Pestell, Landscapes of monastic foundation: The establishment of religious houses in East Anglia c.650–1200 (Woodbridge 2004).

RIPPON 2010

S. Rippon, Landscape change during the 'long eighth century' in southern England. In: N.J. Higham and M.J. Ryan (eds), *The landscape archaeology of Anglo-Saxon England* (Woodbridge 2010) 39–64.

ROFFE 2005

D. Roffe, The historical context. In: A. Crowson, T. Lane, K. Penn and D. Trimble (eds), *Anglo-Saxon settlement on the siltland of Eastern England* (Lincoln 2005) 264–88.

SILVESTER 1988

R.J. Silvester, *The Fenland Project No. 3: Marshland and the Nar Valley, Norfolk*. *East Anglian Archaeology* 45, 1988.

SMITH et al. 2016

A. Smith, M. Allen, T. Brindle and M. Fulford, *The rural settlement of Roman Britain. New visions of the countryside of Roman Britain 1* (London 2016).

WALLER 1994

M. Waller, *The Fenland Project No.9: Flandrian environmental change in Fenland*. *East Anglian Archaeology* 70, 1994.

WALTON ROGERS 2007

P. Walton Rogers, *Cloth and clothing in Early Anglo-Saxon England AD 450–700* (York 2007).

WEST 1985

S.E. West, *West Stow: The Anglo-Saxon village*, 2 vols. *East Anglian Archaeology* 24, 1985.

WEST 1998

S.E. West, *A corpus of Anglo-Saxon material from Suffolk*. *East Anglian Archaeology* 84, 1998.

WILLIAMSON 2013

T. Williamson, *Environment, society and landscape in Early Medieval England: Time and topography* (Woodbridge 2013).

ZEKI 2016

L.R. Zeki, *Fen Drayton villa investigations*. *Ouse Washland Archaeology Excavation Report 2* (Cambridge 2016).

Web sources

WWW1

www1 Cranfield Soil and Agrifood Institute Soilscales, <http://www.landis.org.uk/soilscales/> (last accessed 4 April 2022).

WWW2

www2 Portable Antiquities Scheme database, <https://finds.org.uk> (last accessed 4 April 2002).

WWW3

www3 A.D. MILLS (2011) *A Dictionary of British Place-Names*, <https://www.oxfordreference.com/view/10.1093/acref/9780199609086.001.0001/acref-9780199609086> (last accessed 4 April 2022).

John Hines,
Professor emeritus,
Cardiff University,
Wales, UK
hines@cardiff.ac.uk