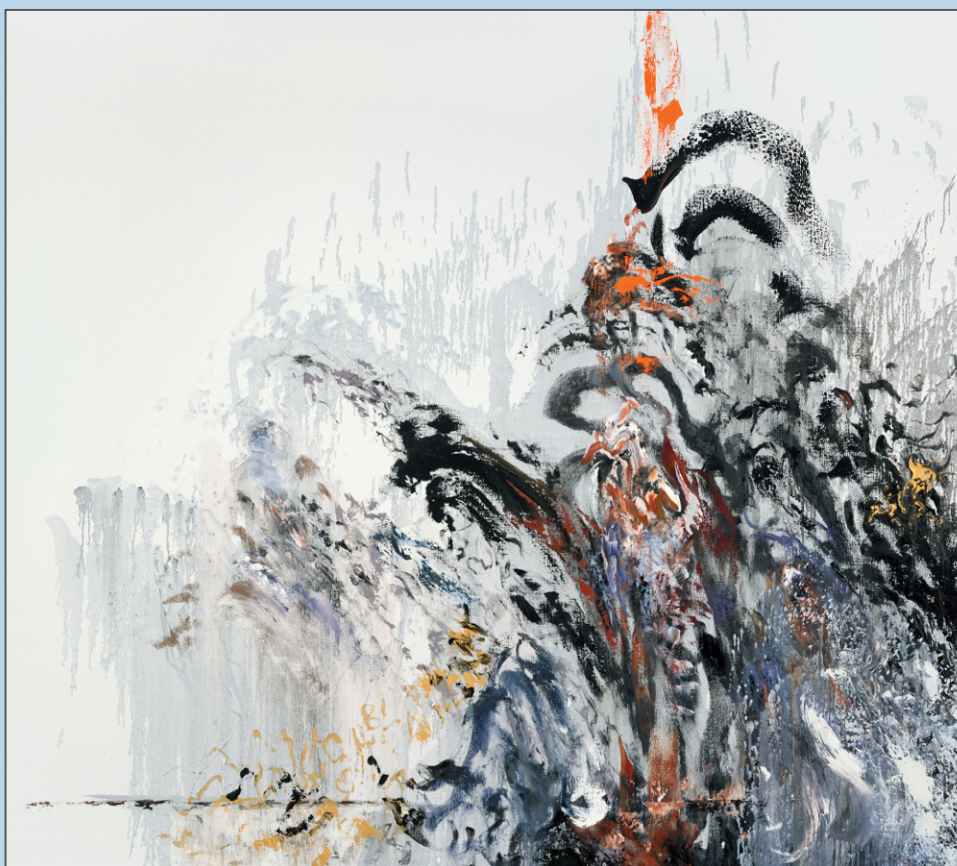


MARITIME SOCIETIES OF THE VIKING AND MEDIEVAL WORLD

Edited by
JAMES H BARRETT
and
SARAH JANE GIBBON



SOCIETY FOR MEDIEVAL ARCHAEOLOGY MONOGRAPH 37



THE SOCIETY FOR
MEDIEVAL ARCHAEOLOGY
MONOGRAPH 37

Series Editors

CHRISTOPHER GERRARD

and

GABOR THOMAS

MARITIME SOCIETIES OF THE
VIKING AND MEDIEVAL WORLD

THE SOCIETY FOR MEDIEVAL ARCHAEOLOGY MONOGRAPHS

- 1 G Bersu and D M Wilson (1966) *Three Viking Graves in the Isle of Man*
- 2 F W B Charles (1967) *Medieval Cruck-building and its Derivatives*
- 3 P A Rahtz (1969) *Excavations at King John's Hunting Lodge, Writtle, Essex, 1955–57*
- 4 A L Meany and S C Hawkes (1970) *Two Anglo-Saxon Cemeteries at Winnall, Winchester, Hampshire*
- 5 H E J Le Patourel (1973) *The Moated Sites of Yorkshire*
- 6 G T M Beresford (1975) *The Medieval Clay-land Village: Excavations at Goltho and Barton Blount*
- 7 H Clarke and A Carter (1977) *Excavations in King's Lynn, 1963–1970*
- 8 J G Hurst (general ed) Wharram. A Study of Settlement on the Yorkshire Wolds, vol I: D D Andrews and G Milne (eds) (1979) *Domestic Settlement I: Areas 10 and 6*
- 9 C M Mahany, A Burchard and G Simpson (1982) *Excavations at Stamford, Lincolnshire, 1963–69*
- 10 P Mayes and K Scott (1984) *Pottery Kilns at Chilvers Coton, Nuneaton*
- 11 J G Hurst and P A Rahtz (general eds) Wharram. A Study of Settlement on the Yorkshire Wolds, vol III: R D Bell, M W Beresford and others (1987) *The Church of St Martin*
- 12 D Austin (1989) *The Deserted Medieval Village of Thrislington, Co Durham: Excavations 1973–1974*
- 13 V L Yanin, E N Nosov, A S Khoroshev, A N Sorokin, E A Rybina, V L Povetkin and P G Gaidukov (1992) *The Archaeology of Novgorod, Russia*
- 14 K Parfitt and B Brugmann (1997) *The Anglo-Saxon Cemetery on Mill Hill, Deal, Kent*
- 15 D Gaimster and P Stamper (eds) (1997) *The Age of Transition: the Archaeology of English Culture 1400–1600*
- 16 D A Hinton (2000) *A Smith in Lindsey: the Anglo-Saxon Grave at Tattershall Thorpe, Lincolnshire*
- 17 S Lucy and A Reynolds (eds) (2002) *Burial in Early Medieval England and Wales*
- 18 S T Driscoll (2002) *Excavations at Glasgow Cathedral 1988–1997*
- 19 P Mayes (2003) *Excavations at a Templar Preceptory. South Witham, Lincolnshire 1965–67*
- 20 J Hines, A Lane and M Redknap (eds) (2004) *Land, Sea and Home*
- 21 W D Klemperer and N Boothroyd (2004) *Excavations at Hulton Abbey, Staffordshire 1987–1994*
- 22 K Giles and C Dyer (eds) (2005) *Town and Country in the Middle Ages: Contrasts, Contacts and Interconnections, 1100–1500*
- 23 S M Foster and M Cross (eds) (2005) *Able Minds and Practised Hands: Scotland's Early Medieval Sculpture in the 21st Century*
- 24 A Saunders (2006) *Excavations at Launceston Castle, Cornwall*
- 25 C Gerrard with M Aston (2007) *The Shapwick Project, Somerset. A Rural Landscape Explored*
- 26 C Caple (2007) *Excavations at Dryslwyn Castle 1980–95*
- 27 C Scull (2009) *Early Medieval (Late 5th–Early 8th Centuries AD) Cemeteries at Boss Hall and Buttermarket, Ipswich, Suffolk*
- 28 G Beresford (2009) *Caldecote. The Development and Desertion of a Hertfordshire Village*
- 29 N Edwards (2009) *The Archaeology of the Early Medieval Celtic Churches*
- 30 R Gilchrist and A Reynolds (eds) (2009) *Reflections: 50 Years of Medieval Archaeology, 1957–2007*
- 31 I H Goodall (2011) *Ironwork in Medieval Britain: an Archaeological Study*
- 32 R Barrowman (2011) *The Chapel and Burial Ground on St Ninian's Isle, Shetland: Excavations Past and Present*
- 33 J Hines and A Bayliss (eds) (2013) *Anglo-Saxon Graves and Grave Goods of the 6th and 7th Centuries AD: A Chronological Framework*
- 34 S Rátkai (2013) *Wigmore Castle, North Herefordshire: Excavations 1996 and 1998*
- 35 N Christie and O Creighton with M Edgeworth and H Hamerow (2013) *Transforming Townscapes. From Burh to Borough: The Archaeology of Wallingford, AD 800–1400*
- 36 Rosemary Cramp (2014) *The Hirsle Excavations*

The Society for Medieval Archaeology Monographs are available from
Oxbow Books, 10 Hythe Bridge Street, Oxford OX1 2EW, UK
or in North America from
Casemate Academic, 20 Main Street, Oakville CT 06779, USA

For further information, including prices, or to order online, visit
www.oxbowbooks.com

MARITIME SOCIETIES OF THE VIKING AND MEDIEVAL WORLD

Edited by
JAMES H BARRETT
and
SARAH JANE GIBBON

 **Routledge**
Taylor & Francis Group
LONDON AND NEW YORK

First published 2015 by Maney Publishing

Published 2016 by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN
711 Third Avenue, New York, NY 10017 USA

Routledge is an imprint of the Taylor & Francis Group, an informa business

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the written permission of the copyright holder.

© 2015 The Society for Medieval Archaeology and Authors

For users in the UK, the Copyright Licensing Agency, cla@cla.co.uk, is mandated to grant permission to make copies. For Australia, please see www.copyright.com.au or www.copyright.org.au for more information. For North America and the rest of the world permission is granted by the copyright holder for libraries and others registered with the Copyright Clearance Center (CCC), www.copyright.com

Statements in the volume reflect the views of the authors, and not necessarily those of the Society, editors or publisher.

ISBN 978-1-909662-79-7
ISSN 0583-9106

FRONT COVER

Maggi Hambling's *Wall of water XIII, war*, 2013, oil on canvas, 198.1 × 226.1 cm, first exhibited at *Maggi Hambling: Walls of Water* at the National Gallery, London (2014–2015) and then at *Maggi Hambling: War Requiem & Aftermath* at Somerset House, London (2015)

ISBN: 978-1-315-63075-5(eISBN)

CONTENTS

	PAGE
PREFACE AND ACKNOWLEDGEMENTS	ix
LIST OF CONTRIBUTORS	xi
CHAPTER 1	
Maritime Societies and the Transformation of the Viking Age and Medieval World	
By JAMES H BARRETT	1
CHAPTER 2	
Sails and the Cognitive Roles of Viking Age Ships	
By CHRISTER WESTERDAHL	14
CHAPTER 3	
Trade and Trust in the Baltic Sea Area During the Viking Age	
By INGRID GUSTIN	25
CHAPTER 4	
Bound for the Eastern Baltic: Trade and Centres AD 800–1200	
By MARIKA MÄGI	41
CHAPTER 5	
Between East and West: Economy and Society on the Island of Gotland	
By DAN CARLSSON	62
CHAPTER 6	
Viking Age Bornholm: An Island on the Crossways	
By MAGDALENA NAUM	69
CHAPTER 7	
Trading Hubs or Political Centres of Power? Maritime Focal Sites in Early Sweden	
By STEFAN BRINK	88
CHAPTER 8	
Accessibility and Vulnerability: Maritime Defence and Political Allegiance on the Vikbolandet Peninsula, Östergötland, Sweden	
By MARTIN RUNDKVIST	99
CHAPTER 9	
Dorestad as a Fluvial Society	
By ANNEMARIEKE WILLEMSSEN	108
CHAPTER 10	
Maritime Environment and Social Identities in Medieval Coastal Flanders: The Management of Water and Environment and its Consequences for the Local Community and the Landscape	
By DRIES TYS	122

CHAPTER 11

The Maritime Cultural Landscape of Early Medieval Northumbria: Small Landing Places and the Emergence of Coastal Urbanism

By PIETERJAN DECKERS 138

CHAPTER 12

Post-Substantivist Production and Trade: Specialized Sites for Trade and Craft Production in Scandinavia AD c700–1000

By DAGFINN SKRE 156

CHAPTER 13

Late Iron Age Boat Rituals and Ritual Boats in Norway

By SÆBJØRG WALAKER NORDEIDE 171

CHAPTER 14

Bergen AD 1020/30–1170: Between Plans and Reality

By GITTE HANSEN 182

CHAPTER 15

Steatite Vessels and the Viking Diaspora: Migrants, Travellers and Cultural Change in Early Medieval Britain and Ireland

By SØREN MICHAEL SINDBÆK 198

CHAPTER 16

Status and Identity in Norse Settlements: A Case Study from Orkney

By DAVID GRIFFITHS 219

CHAPTER 17

The Viking Occupation of the Hebrides: Evidence from the Excavations at Bornais, South Uist

By NIAL M SHARPLES, CLAIRE INGREM, PETER MARSHALL,
JACQUI MULVILLE, ADRIENNE POWELL and KELLY REED 237

CHAPTER 18

Disentangling Trade: Combs in the North and Irish Seas in the Long Viking Age

By STEVEN P ASHBY 259

CHAPTER 19

Dealing with Deer: Norse Responses to Scottish Isles Cervids

By JACQUI MULVILLE 279

CHAPTER 20

‘Warrior Graves’? The Weapon Burial Rite in Viking Age Britain and Ireland

By STEPHEN H HARRISON 299

CHAPTER 21

The Threatening Wave: Norse Poetry and the Scottish Isles

By JUDITH JESCH 320

CHAPTER 22

Sea Kings, Maritime Kingdoms and the Tides of Change: Man and the Isles and Medieval European Change, AD c1100–1265

By R ANDREW McDONALD 333

CHAPTER 23

The Sea Power of the Western Isles of Scotland in the Late Medieval Period

By DAVID H CALDWELL 350

CHAPTER 24

Coastal Communities and Diaspora Identities in Viking Age Ireland

By CLARE DOWNHAM 369

INDEX 384



Taylor & Francis

Taylor & Francis Group

<http://taylorandfrancis.com>

PREFACE AND ACKNOWLEDGEMENTS

The idea behind this volume emerged from a conference of the same name, jointly organized by the Orkney Heritage Society and the McDonald Institute for Archaeological Research, held in Kirkwall in May/June of 2008. The meeting initially aimed to set the semi-independent island polities of Viking Age and medieval Scotland (such as the Earldom of Orkney and the Lordship of the Isles) in a comparative context that went beyond the rural North Atlantic region to which they are often naturally ascribed. It was an opportunity to consider the intersections and separations of rural and urban worlds, of small islands and the coastal or riparian settlements of ‘mainlands’, around the Irish, North and Baltic Seas. We aimed to explore a pivotal time in the creation of the social, economic and political landscapes of Europe — when small-scale maritime polities had a disproportionate impact on the course of world history. The chronology of the project was set to include the Viking Age (AD c790–1050) and early Middle Ages (defined as AD c1050–1200), with a few later exceptions that were clearly relevant to earlier developments. The result was an illuminating experience, drawing attention to the complex relationship between long-range interconnections and distinct regional identities characteristic of maritime communities. The participants expressed enthusiasm for a resulting publication, and written contributions began to come in. The original line-up was then supplemented with invited papers that filled important missing niches (regarding, for example, the key Viking Age port of Dorestad and the island societies of the Baltic). To accommodate this broadened coverage within the publisher’s limits we have excluded our own contributions regarding Atlantic Scotland, but they are available elsewhere and were equally informed by the event. The book’s geographical range remains far from comprehensive. Nevertheless, we hope its audiences will find much of value as they seek to situate their own worlds of study in the context of numerous examples which were diverse and changing, yet exhibited significant resonances and often direct interconnections.

Many people and organizations have contributed to the volume’s completion. Acknowledgements for each chapter are provided in endnotes where relevant. Credits for the images used are on page iv and in the figure captions. Linda Fisher, Suzanne Needs-Howarth and Lembi Lõugas assisted with copy-editing. Funding for the initial conference was provided by the British Academy, Historic Scotland, the McDonald Institute for Archaeological Research, Orkney Islands Council and the Society of Antiquaries of Scotland. It was organized by the editors, in cooperation with Anne Brundle (Orkney Museum), Julie Gibson (Orkney College, University of the Highlands and Islands) and Kate Towsey. The Orkney Heritage Society, Orkney College and the then Friends of Orkney Archaeological Trust (now Orkney Archaeology Society) provided much logistical support during the event. Christopher Gerrard, the Society for Medieval Archaeology and Maney kindly welcomed its publication in the Society’s monograph series — and maintained the right balance of pressure and patience during its completion. Steady early progress was slowed by maternity,

teaching and administrative responsibilities, before the project received additional invaluable support from the McDonald Institute for Archaeological Research in 2013. This made it possible for Dora Kemp (devoted sailor and production editor) to begin to format the edited chapters into the publisher's house style. When she tragically fell ill and passed away in 2014, it was possible for us to maintain the momentum to completion (thanks to research leave supported by the Leverhulme Trust). This volume is thus in part a tribute to Dora, and to Anne Brundle who left us in 2011, while also being a contribution to an understanding of (often small-scale) communities that were brought into being by their relationships with water — and set waves in motion that altered distant shores.

James Barrett

McDonald Institute for Archaeological Research, University of Cambridge

Sarah Jane Gibbon

Archaeology Institute, University of the Highlands and Islands

LIST OF CONTRIBUTORS

STEVEN P ASHBY

Department of Archaeology, University of York, York, England, UK

JAMES H BARRETT

McDonald Institute for Archaeological Research, Department of Archaeology and Anthropology, University of Cambridge, England, UK

STEFAN BRINK

Centre for Scandinavian Studies, University of Aberdeen, Scotland, UK

DAVID H CALDWELL

Society of Antiquaries of Scotland, Edinburgh, Scotland, UK; previously National Museums Scotland, Edinburgh, Scotland, UK

DAN CARLSSON

Arendus Ltd, Visby, Gotland, Sweden

PIETERJAN DECKERS

Medieval Archaeology, Department of Archaeology and Art Studies, Vrije Universiteit Brussel, Belgium

CLARE DOWNHAM

Institute of Irish Studies, University of Liverpool, England, UK

SARAH JANE GIBBON

Archaeology Institute, University of the Highlands and Islands, Kirkwall, Orkney, Scotland, UK

DAVID GRIFFITHS

Oxford University Department for Continuing Education, University of Oxford, England, UK

INGRID GUSTIN

Department of Archaeology and Ancient History, Lund University, Sweden

GITTE HANSEN

Department of Cultural History, University Museum, University of Bergen, Norway

STEPHEN H HARRISON

Archaeology, School of Humanities, University of Glasgow, Scotland, UK

CLAIRE INGREM

Freelance zooarchaeologist, Lyme Regis, England, UK

JUDITH JESCH

Centre for the Study of the Viking Age, School of English, University of Nottingham, England, UK

R ANDREW McDONALD

Department of History, Brock University, St Catharines, Canada

MARIKA MÄGI

Centre of Medieval Studies, Tallinn University, Estonia

PETER MARSHALL

Chronologies, Sheffield, England, UK

JACQUI MULVILLE

School of History, Archaeology and Religion, Cardiff University, Wales, UK

MAGDALENA NAUM

Faculty of Humanities, Oulu University, Finland

ADRIENNE POWELL

School of History, Archaeology and Religion, Cardiff University, Wales, UK

SÆBJØRG WALAKER NORDEIDE

Department of Cultural History, University Museum of Bergen, University of Bergen, Norway

KELLY REED

Department of Engineering Science, University of Oxford, England, UK

MARTIN RUNDKVIST

Department of Historical, Philosophical and Religious Studies, Umeå University, Sweden

NIALL M SHARPLES

School of History, Archaeology and Religion, Cardiff University, Wales, UK

SØREN MICHAEL SINDBÆK

Section for Archaeology, Department of Culture and Society, Aarhus University, Denmark

DAGFINN SKRE

Museum of Cultural History, University of Oslo, Norway

DRIES TYS

Medieval Archaeology, Department of Archaeology and Art Studies, Vrije Universiteit Brussel, Belgium

CHRISTER WESTERDAHL

Institute of Historical Studies, Norwegian University of Science and Technology (NTNU), Trondheim, Norway

ANNEMARIEKE WILLEMSSEN

Medieval Department, National Museum of Antiquities, Leiden, The Netherlands

CHAPTER I

MARITIME SOCIETIES AND THE TRANSFORMATION OF THE VIKING AGE AND MEDIEVAL WORLD

By JAMES H BARRETT

INTRODUCTION

This book is about maritime societies, groups at scales ranging from a settlement to a polity, who drew their identity and livelihood from relations with water. It focuses on the Baltic, North and Irish Seas, and the waters that linked them, in the Viking Age (AD c790–1050) and, with a few later exceptions, the early Middle Ages (AD c1050–1200). Thus it explores long-range interaction in the northern European world prior to the era of the German Hansa, and provides a complement to past research on the Norse settlements of the North Atlantic (eg Arneborg *et al* 2009–10; Barrett 2003; Dugmore *et al* 2005; Vésteinsson *et al* 2011; Sigurdsson 2008; Zori and Byock 2014). The book crosscuts the traditional chronological boundary between the Viking Age and the Middle Ages, and provides a comparative context for maritime communities ranging from, for example, the Isle of Man in the Irish Sea to Gotland in the Baltic. Concurrently, it touches on the relationship between estate centres, landing places, towns and the sea in the more terrestrially oriented societies that surrounded northern Europe's main spheres of maritime interaction. Many studies of Viking Age and medieval maritime activity focus on warfare (eg Price 2002), trade (eg Sindbæk 2007) or identity (eg Abrams 2012) — recognizing that they are interdependent at various scales. A key purpose of the present book is to illuminate this interrelationship, exploring the dialectic between long-range interconnections and distinctive expressions of local identity.

To achieve the desired comparative perspective, the book includes contributions that draw on diverse academic traditions, ranging from the excavation-project approach of much research in Atlantic Scotland (Shetland, Orkney, the Hebrides and adjacent areas of the Scottish mainland) to the use of archaeological cultures as units of analysis in eastern Europe. It is predominately an archaeological project, but draws no arbitrary lines between studies of historical archaeology, history and literature, given that the methodological differences within each subject can be as great as those between them.

In introducing the volume, this chapter aims to explore key themes to which many of the contributors speak. To what degree were maritime societies isolated or interconnected? Did they emulate or reject the practices and identities of their neighbours? How and why did these choices change through time? To what degree did increasing urbanism, commercialization and trade impact on local cultures, economies and landscapes/seascapes? How did fluid maritime societies react to increasingly centralized power during the consolidation of medieval kingdoms and principalities? These themes are at the heart of our understanding of the transition from the Viking Age to the Middle Ages in Europe. They also run deeper, emerging from and contributing to wider debates regarding the dialectical nature of maritime societies and, more holistically still, the ebb and flow of globalization over the *longue durée*.

WORLDS WITHIN WORLDS

The use of ‘world’ in the title of the book is intended to convey three interrelated scales of analysis. Firstly, some of the maritime polities of the Viking Age and medieval north were microcosms unto themselves, marked out at times in their histories by distinctive suites of material culture, burial traditions, literature and/or social relations with external powers. Examples include the Islands of Gotland (Carlsson Chapter 5; Gustin Chapter 3) and Bornholm (Naum Chapter 6) in the Baltic Sea — and the Earldom of Orkney (Griffiths Chapter 16; Jesch Chapter 21), the Kingdom of Man (McDonald Chapter 22), the Kingdom of Dublin (Downham Chapter 24) and the Lordship of the (Hebridean) Isles (Caldwell Chapter 23) in the west. Secondly, these societies operated within a spatially attenuated world-system, a geographically discontinuous political economy that integrated parts of the Irish, North and Baltic Seas in exchanges of people, objects, wealth and organized violence. An 11th-century earl of Orkney (Rognvald Brusason) might spend time in exile in Novgorod (Crawford 2004), Baltic amber might be worked in 10th-century Dublin (Wallace 1987, 215–216) and Islamic silver might pass through Gotland or Bornholm to help pay an army of conquest at Torksey in 9th-century England (Blackburn 2011; Hadley and Richards 2013). Within Europe, the plunder-fuelled expansions and reorganizations of the Carolingian Empire provided a model of conquest, trade and redistribution of wealth that was emulated by this northern system (Hernæs 1997; Reuter 1985; Thomas 2012) — and connected to it, by centres like Dorestad and later Hedeby (Theuvs 2004; Willemsen Chapter 9). Lastly, efflorescences of mobility in the Viking Age and medieval north were also expressions of wider pan-Eurasian currents, Lieberman’s (2009, 135) ‘phase of demographic, agrarian, and commercial vitality’ and ‘supralocal contacts’ that unfolded on a hemispherical scale (cf Sindbæk and Trakadas 2014). Given the interrelationships between these scales, studies that begin with the small worlds of polities like Orkney, Man or Gotland are central to understanding the local dynamics that ultimately created much deeper and more widespread phenomena (which themselves were only ever experienced in specific places) (cf Barrett 2012).

The ebb and flow of these different worlds can be studied from the top down, drawing on overlapping corpora of theory that attempt to clarify facets of

globalization. In the last two decades, aspects of world-systems, post-colonial, social network, actor-network and diaspora theory have all played a role in research on the Viking Age and medieval north (eg Abrams 2012; Barrett 2012; Barrett *et al* 2000; Glørstad 2014; Mehler 2013; Sindbæk 2007; 2012a; 2012b; Svanberg 2003). Conversely, it can be understood from the bottom up, exploring the empirical evidence from particular case studies while avoiding naïve positivism. Both approaches have merit. Given that recent phenomena — such as electronic currency markets, instant communication and migration of wage labour to follow rapid flows of capital — ultimately underpin much relevant theory (eg Appadurai 1996; Ferguson and Mansbach 2012; Palla *et al* 2005), there is a legitimate argument for focused case studies built around bounded examination of primary sources. Many contributions to this volume put such an empirical approach to good effect — sometimes rejecting theoretically inspired conclusions that were once orthodoxies. Conversely, a method drawing predominantly on comparative models can be equally rewarding. It illuminates how the relationship between source material and meaning can be very complex — particularly in the context of creating and maintaining new identities. Thus Downham (Chapter 24) explores how Dublin's Hiberno-Scandinavian community might have emerged in the context of a trade diaspora, drawing on examples from eastern Africa and Malaysia. The two approaches meet in constructive ways. Skre (Chapter 12), for example, develops his argument for profit-based trade in the Viking Age from his knowledge of the archaeological parallels for Norway's first town at Kaupang — set within the context of an informed survey of the formalist-substantivist debate in economic anthropology. The book is thus a fusion of the traditional and topical. It reflects the hybridity of medieval archaeology itself, drawing on both the particularistic methods of history and archaeology's links to the social sciences where analogical reasoning is the norm.

MOBILITY, TRADE AND IDENTITY

It is no longer necessary to debate whether influential Viking Age Scandinavian migrations (to east, south and west) happened, as was the case in the second half of the 20th century (eg Sawyer 1962; Wormald 1982). Nor is it controversial that they were multicausal, culturally diverse and unfolded in multiple ways at very different scales. In terms of time, the 11th-century empire building of Cnut the Great (Bolton 2009) is hardly comparable with the two fleets of 60 ships said to have been operating in Ireland in 837 (MacAirt and MacNiocaill 1983, 295), nor with the three ships that landed at Portland in southern England at the very beginning of the Viking Age around the end of the 8th century (Campbell 1962, 26–27; Whitelock *et al* 1961, 35). In terms of space, royal Scandinavian exiles at the Carolingian court (Coupland 1998) did not represent the same phenomenon as conquest of Anglo-Saxon kingdoms (Brooks 1979) or rural settlement by farmer-fishermen who rubbed shoulders with local Pictish peasants in Orkney (Barrett 2004; 2012; Griffiths Chapter 16; Montgomery *et al* 2014). Moreover, all of these examples differed from the cultural exchanges between Scandinavian, Slavic and eastern Baltic communities that are evident from finds of distinctive metalwork and/or pottery in Gotland (Carlsson

Chapter 5; Gustin Chapters 3) and Bornholm (Naum Chapter 6). Even the latter islands had different political and social histories, with Gotland having maintained its distinctive role in inter-regional trade into the 12th century and beyond (Myrberg 2010).

Much that was once controversial is thus now commonplace. Yet the Viking Age and its medieval echoes do entail a paradox at the heart of ongoing debate. How can a phenomenon as widespread as the Scandinavian diaspora, with some elements of astounding homogeneity (in language, art styles and some artefact types, such as oval brooches), concurrently entail a diversity of extremely local expressions of distinctive, sometimes hybrid, identities (Abrams 2012; Sindbæk 2012a)? At different scales, this regionalism might be expressed with Gotlandic animal-head brooches (Carlsson Chapter 5), 'Dublin-type' shield bosses (Harrison Chapter 20) or Norwegian soapstone cooking pots (Sindbæk Chapter 15). One possibility is that mobility was limited and the wider Viking Age is at least in part a modern historiographical construct (Svanberg 2003). The alternative, drawing on comparative study of globalization processes more holistically, is that local reactions to enhanced interconnectedness are exactly what one should expect, so much so that they have inspired use of the neologism 'glocalization' among social scientists (Ferguson and Mansbach 2012, 138). Resolution of the paradox lies in the observation that historical efflorescences of mobility should be concurrently marked by elements of sweeping homogeneity and highly idiosyncratic local traditions. Moreover, the social tensions created by external influences can lead to the most connected places having the most distinctive regional reactions. Thus Dublin's hybrid Hiberno-Scandinavian mercantile community was still evident at the time of the Anglo-Norman invasions of the late 12th century (Downham Chapter 24) and Gotland's unique rural society of trade middlemen/women adopted its own vocabulary of material culture symbols — before, during and after the Viking Age (Carlsson Chapter 5; Gustin Chapter 3; Myrberg 2010).

This issue brings together two themes that have been central to studies of the Viking Age: trade and identity. The division of the north into (Christian-influenced) coin and (pagan-influenced) bullion economies has long been recognized as the result of an ideological rather than a trade boundary (Kilger 2008; Steuer 1987; Theuvs 2004). Towns like Dorestad existed to facilitate large-scale exchange of goods between these systems, and grew astonishingly wealthy in the process (Willemsen Chapter 9). Smaller ports like York or Kaupang, and a plethora of estate centres with their associated landing places, did the same on different scales (Deckers Chapter 11; Skre Chapter 12). In certain times at certain places even peasant settlements on the coastal fringe could benefit from the flow of goods between north and south, east and west (Loveluck 2013; Loveluck and Tys 2006; Tys Chapter 10). Within this interconnected world, different maritime communities made different choices at different times regarding which model to emulate. Thus silver as bullion was used in Kaupang while coinage was briefly minted at contemporary Hedeby, despite both towns probably being Danish royal foundations (Skre 2008; Chapter 12; Wiechmann 2007). Even late in the Viking Age, after coinage had been adopted in Dublin c995 (Blackburn 2008; Woods 2013) and (briefly) the Isle of Man c1025 (Bornholdt-Collins

1999), the Earldom of Orkney probably continued to employ an anachronistic form of weight-adjusted silver ring-money as a means of exchange (Graham-Campbell 1995; Critch forthcoming). This cannot have been an accident of remoteness. Orcadians were deeply involved in the politics of the Irish and North Seas, often as warriors for hire, in the 11th century — most notably at the Battle of Clontarf in Ireland (1014) and the Battle of Stamford Bridge in England (1066) (Barrett 2007).

As the Viking Age became the Middle Ages, growing political authority in many parts of the north led to the increasing restriction of long-range trade to centres that became medieval towns (eg Loveluck 2013, 302–303; see below). Whether this was after an economic downturn in the 9th and 10th centuries (attributable to the disruptions of Viking Age raiding, changing ship types, river silting and/or internal economic changes) is a matter of geographical perspective (eg Lebecq 2007; Sindbæk 2012b). New mercantile communities like Dublin prospered, while many older centres were abandoned (eg Dorestad, see Willemsen Chapter 9), relocated (eg Hedeby, see Radtke 2006) and/or temporarily much reduced (eg London and Ribe, see Fèveile 2010; Hodges 2012, 114). Around the end of the 1st millennium, the new medieval towns, like their less numerous Viking Age antecedents, became major nodes of interconnectedness, thus creating both widespread centrifugal homogenizing forces and centripetal foci for the coalescence of local and regional identities (cf Sindbæk 2012a; Williams 2013). Nevertheless, the emergence of this new way of living was not always embraced immediately, particularly in traditionally rural regions. For example, Bergen's transition from 11th-century royal aspiration to 12th-century metropolis was a protracted one (Hansen Chapter 14). Moreover, some material expressions of identity — such as soapstone cooking pots (Sindbæk Chapter 15) and hair combs of reindeer antler with copper-alloy rivets (Ashby Chapter 18) — circulated mainly within cultural provinces, despite frequent traffic between them.

ORGANIZED VIOLENCE

There have been diverse and shifting perspectives on the degree to which raiding and conquest were or were not dominant forms of mobility (*vis-à-vis* gift exchange, trade and/or rural settlement, for example) in particular contexts during and after the Viking Age (eg Barrett 2004). Nevertheless, the observation that organized violence was a defining feature of the age among all the peoples of Europe is both a cliché and an evidence-based statement (eg Reuter 1985; Winroth 2014, 41). To understand it from a 21st-century perspective, with a non-violent world among our greatest aspirations, it is helpful to attempt to separate archaeology as heritage from archaeology as study of the distant past (cf Carver 1995, 188–189). Although a critical distance cannot provide objectivity (McGuire 2002, 213–218), it may allow us a glimpse of how contemporaries viewed their actions.

Organized violence was clearly a successful socio-economic strategy for many in the Viking Age and after. Young people (often men) from disparate rural settlements (some newly founded in the east and west) made their fortunes and reputations if they did not lose their lives (Barrett 2010; Glørstad 2014). Military leaders could climb the social ladder to kingship (Kershaw 2000). Existing kings could aspire to an empire

(Bolton 2009). Fencing plunder and slaves made townspeople wealthy (Holm 1986), and the overlords who taxed them even wealthier (Loveluck 2013). Thus the worlds of raiding, trading and rural settlement were directly interrelated.

The misery of those on the opposite end of this success does not go unrecorded — and was very real despite exaggeration by ecclesiastical annalists with ideological axes to grind (Dumville 1997). Nor was it restricted to indigenous victims of Viking raiding. The reinforcement of local identity engendered by the tensions of external threat could be equally brutal. It is witnessed by examples as diverse as the St Brice's day massacre of 1002, when all Danes in England were to be slain by royal decree (Pollard *et al* 2012; Whitelock *et al* 1961, 86), the 10th-/11th-century mass grave of executed (probably) Scandinavian raiders at Weymouth Ridgeway in Dorset (Loe *et al* 2014) and the slaughter (probably by a scandalized Frankish aristocracy) of peasants from the area between the Seine and Loire who took up arms in self-defence against the 'Danes' in 859 (Nelson 1991, 89). Making a living and building community could be a dangerous business in the Viking Age.

The military- or plunder-economy of the Viking Age was continued into the Middle Ages by the hybrid creations of the Scandinavian diaspora. These were principalities such as the Kingdom of Dublin (Downham Chapter 24), the Kingdom of Man (McDonald Chapter 22), the Earldom of Orkney (Griffiths Chapter 16; Jesch Chapter 21; cf Barrett 2007) and the Lordship of the (western Scottish) Isles (Caldwell Chapter 23). Their strategies of piracy and mercenary service may also have applied to some Baltic islands (eg Naum 2012), although they were arguably different to those employed by the Gotlanders (for whom protecting trade was the secret to socio-economic success) (Carlsson Chapter 5). Organized violence was a ubiquitous feature of medieval and post-medieval Europe — where 'war made the state' and *vice versa* (Tilly 1975, 42; cf Munzinger 2006). Nevertheless, the distinctive maritime societies of the north were situated in liminal zones between larger kingdoms, providing unique niches for both large-scale mercenary service and piracy. Irish kings hired the fleet of Dublin (Holm 1986, 338) and, based on analogy with late medieval sources, the thinly populated Hebridean islands of western Scotland could field a professionally trained and equipped mercenary force of up to 6000 men (Caldwell Chapter 23). It is important to understand these medieval military societies in their own terms, as normalized outcomes of a long history of analogous activity *and* creations of a new *realpolitik*. They were polities of their age, fully engaged with contemporary ecclesiastical and secular European culture (eg McDonald Chapter 22) — rather than anachronistic survivals of a Viking Age past.

TRANSFORMATIONS

Whatever its complex causes (cf Barrett 2010; Sindbæk 2011), the Viking Age was characterized by the broadly contemporary emergence of long-range raiding, sailing ships, kingship and 'specialized sites of trade and craft' in Scandinavia (Skre Chapter 12; cf Nordeide Chapter 13; Westerdahl Chapter 2). The impact of these developments on neighbouring polities around the Baltic, North and Irish Seas was

not trivial. It is recognized that the Scandinavian diaspora contributed in complex ways to state formation and/or urbanism in what are now Ireland, Scotland, England, Russia and the Ukraine (Bradley 1988; Broun 1994; Downham 2007; Duczko 2004; Hadley and ten Harkel 2013; Woolf 2007), while also playing roles in the emergence of Normandy as an independent principality (Abrams 2013; Neveux 2002) and the internecine strife of the later Carolingian Empire (Coupland 1995). Moreover, the Northern and Western Isles of Scotland and parts of England and Ireland received significant (albeit complex and unquantifiable) immigration (Abrams and Parsons 2004; Barrett 2004; Bowden *et al* 2007; Brooks 1979; Downham Chapter 24; Harrison Chapter 20; Kershaw 2013; Macniven 2013; McLeod 2014; Sharples Chapter 17). An iconic innovation — the adoption of sailing between the construction of two rowing vessels at Karmøy in western Norway c770–780 and the building of the Oseberg ship c820 (Bonde and Stylegar 2009; Nordeide Chapter 13; Westerdahl Chapter 2) — provides a useful way to comprehend the underlying transformation of Scandinavian society itself. The motive and capacity to mobilize labour and materials on a large scale had changed fundamentally (Barrett and Anderson 2010, 311; Bill 2010; Westerdahl 2008).

The subsequent transition from the Viking Age to the Middle Ages in Scandinavia and parts of the Baltic Sea region was for many a shift to life in larger and more powerful kingdoms, administered by a network of new long-lived urban centres and ideologically underpinned by Christian institutions and royal coinage (eg Bagge 2010; Risvaag and Christophersen 2004; Thurston 2001). England shared a similar trajectory a little earlier. The rapidly urbanizing 9th–10th century Anglo-Scandinavian kingdoms of East Anglia and Northumbria were conquered by the kings of Wessex in the 10th century, creating a temptingly affluent target for renewed raids and ultimately conquest (from Scandinavia in the decades around the end of the 1st millennium, and from Scandinavia and Normandy in 1066) (Astill 1991; Sawyer 2013). Although long a Christian region, the 10th-century unification of England was not without its ideological dimension, a key example being royal sponsorship of the English Benedictine reform (Barrow 2008). In contrast, the Carolingian Empire fragmented in the 9th and 10th centuries, with much control in the west being devolved to autonomous regional magnates such as the Counts of Flanders (Tys Chapter 10). Yet power in these new smaller polities was also consolidated by encouraging urbanization and sponsoring ecclesiastical institutions (Loveluck 2013) — reducing inter-regional differences.

This new political landscape altered the lives of many maritime societies of the North, Baltic and Irish Seas. For some on the fringes of consolidating powers, opportunities emerged to reify what may previously have been opportunistic raiding. As discussed above, piracy and sea-borne mercenary activity were turned into economic strategies and cultural norms with considerable longevity in contexts such as the Earldom of Orkney, the Kingdom of Man and the Lordship of the Isles. Elsewhere the outcome was different. The economic flexibility previously open to peasants of coastal Flanders was slowly compromised (Tys Chapter 10). They were economically swamped as coastal wetlands were replaced with comital estates providing wool for

textile production, which itself became increasingly urban in its organization. Yet the distinction between ‘pirates’ and ‘sheep farmers’ can be drawn too sharply. It is likely that both Orcadians and Flemmings died as mercenaries at the Battle of Stamford Bridge, during Harald Hardrada of Norway’s failed invasion of England in 1066 (Whitelock *et al* 1961, 138–145).

In many areas, access to long-range trade via small landing places became a thing of the past as new permanent coastal and riverine settlements (often towns) attempted, with lordly support, to monopolize trade within their hinterlands (Deckers Chapter 11; cf Loveluck 2013). This was largely a phenomenon of the 11th to 12th centuries across the entire geography of present concern, from Riga (where a trading place and hillfort of 12th-century origin predates the later 13th-century town) in the eastern Baltic (Mägi Chapter 4) to Bristol in the Irish Sea region (where coins were first minted between 1017 and 1023) (Loveluck 2013, 352–353). Before this date, the north could be divided into zones in which coastal settlement was ubiquitous, albeit seldom urban (eg Norway and Scotland), and those where it was the exception (eg England and the eastern Baltic) (cf Deckers Chapter 11; Griffiths Chapter 16; Mägi Chapter 4; Nordeide Chapter 13; Sharples Chapter 17; Skre Chapter 12). The diversity of contexts in which this shift occurred belies political explanations such as the Norman Conquest, despite the empirical observation that many of England’s coastal towns and ports *were* initiated by Anglo-Norman magnates (Beresford 1967; Deckers Chapter 11). Moreover, the new towns of the 11th and 12th centuries could also be internal creations (eg Bergen, see Hansen Chapter 14), complicating their attribution to a more holistic western European colonial package (cf Bartlett 1994, 167–172).

The new medieval coastal towns are likely to have been partly a response to major increases in both regional and long-range exchanges of low-value staple goods — perhaps even more so than conventional wisdom allows (Barrett *et al* 2004, 630–631 and references therein), and contrary to theories emphasizing large-scale bulk trade earlier in the 1st millennium AD (eg Hodges 2012; Sawyer 2013). This is not to suggest that pre- and early Viking Age exchange was unimportant (see Skre Chapter 12), but the growing volume of goods involved during the Viking Age–medieval transition was both a contributor to and a symptom of major socio-economic transformation. The reality of change is shown by an order of magnitude increase in Scandinavian ship capacities between the 9th and 11th centuries — made possible in part by the adoption of the sail (Bill 2010; Crumlin-Pedersen 1999; Westerdahl Chapter 2). It is also supported by evidence ranging from more fish bones in middens (Barrett 2012; Barrett *et al* 2004) to shifting political priorities. Viking Age trade was often a corollary of warfare — a clear example being the growth of Dublin’s mercantile community around a military encampment turned mercenary base (Downham Chapter 24; cf Williams 2013). Later medieval military intervention in northern Europe was increasingly initiated by the need to promote trade (eg Munzinger 2006; Nedkvitne 2014, 50). These economic shifts must have been combined with a concurrent transformation in social perceptions of the sea, which had become a road to opportunity in areas where it had previously been a landscape of risk (Mägi Chapter 4; cf Loveluck 2013). During the Viking Age to medieval

transition there were thus quantitative *and* qualitative changes in the mosaic of socio-economic choices made by the peoples of the Baltic, North and Irish Seas. The island and coastal societies studied in this volume were both a cause and a consequence.¹

NOTE

¹ I thank the contributors to this volume for their inspiration and the Leverhulme Trust for funding

my present research. Aleks Pluskowski drew my attention to Munzinger (2006).

REFERENCES

- Abrams, L, 2012 'Diaspora and identity in the Viking Age', *Early Medieval Europe* 20, 17–38
- Abrams, L, 2013 'Early Normandy', *Anglo-Norman Studies* 35, 45–64
- Abrams, L and Parsons, D N, 2004 'Place-names and the history of Scandinavian settlement in England', in J Hines, A Lane and M Redknap (ed), *Land, Sea and Home: Proceedings of a Conference on Viking-period Settlement*, Maney/Society for Medieval Archaeology, Leeds, 379–431
- Appadurai, A, 1996 *Modernity at Large: Cultural Dimensions of Globalization*, University of Minnesota Press, Minneapolis
- Arneborg, J, Nyegaard, G and Vesteinsson, O (ed), 2009–10 *Norse Greenland: Selected Papers from the Hvalsey Conference 2008*, Journal of the North Atlantic Special Volume 2, Eagle Hill Institute, Steuben, Maine
- Astill, G, 1991 'Towns and town hierarchies in Saxon England', *Oxford Journal of Archaeology* 10, 95–117
- Bagge, S, 2010 *From Viking Stronghold to Christian Kingdom: State Formation in Norway, c.900–1350*, Museum Tusculanum Press, Copenhagen
- Barrett, J H (ed), 2003 *Contact, Continuity and Collapse: The Norse Colonization of the North Atlantic*, Brepols, Turnhout
- Barrett, J H, 2004 'Beyond war or peace: the study of culture contact in Viking-age Scotland', in J Hines, A Lane and M Redknap (ed), *Land, Sea and Home: Proceedings of a Conference on Viking-period Settlement*, Maney/Society for Medieval Archaeology, Leeds, 207–218
- Barrett, J H, 2007 'The pirate fishermen: the political economy of a medieval maritime society', in B B Smith, S Taylor and G Williams (ed), *West over Sea: Studies in Scandinavian Sea-borne Expansion and Settlement before 1300*, Brill, Leiden, 299–340
- Barrett, J H, 2010 'Rounding up the usual suspects: causation and the Viking Age diaspora', in A Anderson, J H Barrett and K V Boyle (ed), *The Global Origins and Development of Seafaring*, McDonald Institute for Archaeological Research, Cambridge, 289–302
- Barrett, J H (ed), 2012 *Being an Islander: Production and Identity at Quoygreu, Orkney, AD 900–1600*, McDonald Institute for Archaeological Research, Cambridge
- Barrett, J H and Anderson, A, 2010 'Histories of global seafaring: a discussion', in A Anderson, J H Barrett and K V Boyle (ed), *The Global Origins and Development of Seafaring*, McDonald Institute for Archaeological Research, Cambridge, 305–314
- Barrett, J, Beukens, R, Simpson, I, Ashmore, P, Poaps, S and Huntley, J, 2000 'What was the Viking Age and when did it happen? A view from Orkney', *Norwegian Archaeological Review* 33, 1–39
- Barrett, J H, Locker, A M and Roberts, C M, 2004 "'Dark Age Economics" revisited: the English fish bone evidence AD 600–1600', *Antiquity* 78, 618–636
- Barrow, J, 2008 'The chronology of the Benedictine "reform"', in D Scragg (ed), *Edgar, King of the English, 959–975: New Interpretations*, The Boydell Press, Woodbridge, 211–223

- Bartlett, R, 1994 *The Making of Europe: Conquest, Colonization and Culture Change 950–1350*, Penguin, London
- Beresford, M W, 1967 *New Towns of the Middle Ages: Town Plantation in England, Wales, and Gascony*, Praeger, New York
- Bill, J, 2010 'Viking Age ships and seafaring in the west', in I Skibsted Klæsøe (ed), *Viking Trade and Settlement in Continental Western Europe*, Museum Tusculanum Press, Copenhagen, 19–42
- Blackburn, M, 2008 'Currency under the Vikings part 4: the Dublin coinage c.995–c.1050', *British Numismatic Journal* 78, 111–137
- Blackburn, M, 2011 'The Viking winter camp at Torksey, 872–3', in M Blackburn (ed), *Viking Coinage and Currency in the British Isles*, Spink, London, 221–264
- Bolton, T, 2009 *The Empire of Cnut the Great: Conquest and the Consolidation of Power in Northern Europe in the Early Eleventh Century*, Brill, Leiden
- Bonde, N and Stylegar, F-A, 2009 'Fra Avaldsnes til Oseberg: dendrokronologiske undersøkelser av skipsgravene fra Storhaug og Grønhaug på Karmøy', *Viking* 72, 149–168
- Bornholdt-Collins, K A, 1999 'Myth or mint? The evidence for a Viking-age coinage in the Isle of Man', in P Davey (ed), *Recent Archaeological Research on the Isle of Man*, British Archaeological Reports British Series 278, Oxford, 199–220
- Bowden, G R, Balaresque, P, King, T E, Hansen, Z, Lee, A C, Pergl-Wilson, G, Hurley, E, Roberts, S J, Waite, P, Jesch, J, Jones, A L, Thomas, M G, Harding, S E and Jobling, M A, 2007 'Excavating past population structures by surname-based sampling: the genetic legacy of the Vikings in northwest England', *Molecular Biology and Evolution* 25, 301–309
- Bradley, J, 1988 'The interpretation of Scandinavian settlement in Ireland', in J Bradley (ed), *Settlement and Society in Medieval Ireland: Studies Presented to F.X. Martin*, O.S.A., Boethius, Kilkenny, 49–78
- Brooks, N P, 1979 'England in the ninth century: the crucible of defeat', *Transactions of the Royal Historical Society* 29, 1–20
- Broun, D, 1994 'The origin of Scottish identity in its European context', in B E Crawford (ed), *Scotland in Dark Age Europe*, The Committee for Dark Age Studies, University of St. Andrews, St. Andrews, 21–32
- Campbell, A (ed), 1962 *The Chronicle of Æthelweard*, Thomas Nelson and Sons Ltd, London
- Carver, M, 1995 'The North Sea highway: cultural arena or political barrier', in J M Fladmark (ed), *Sharing the Earth: Local Identity in Global Culture*, Donhead Publishing, London, 177–190
- Coupland, S, 1998 'From poachers to gamekeepers: Scandinavian warlords and Carolingian kings', *Early Medieval Europe* 7, 85–114
- Crawford, B E, 2004 'Thorfinn (II) Sigurdson (c.1009–c.1065)', in *Oxford Dictionary of National Biography*, Oxford University Press, Oxford, <http://www.oxforddnb.com/view/article/49271>
- Critch, A, forthcoming 'How are princely gifts repaid by your powerful friends?: ring-money and the appropriation of tradition in Insular Viking politics, AD 900–1065, Unpublished PhD thesis, University of Cambridge, Cambridge
- Crumlin-Pedersen, O, 1999 'Ships as indicators of trade in Northern Europe 600–1200', in J Bill and B L Clausen (ed), *Maritime Topography and the Medieval Town*, The National Museum of Denmark, Copenhagen, 11–20
- Downham, C, 2007 *Viking Kings of Britain and Ireland: The Dynasty of Ívarr to A.D. 1014*, Dunedin Academic Press, Edinburgh
- Duczko, W, 2004 *Viking Rus: Studies on the Presence of Scandinavians in Eastern Europe*, Brill, Leiden

- Dugmore, A J, Church, M J, Buckland, P C, Edwards, K J, Lawson, I, McGovern, T H, Panagiotakopulu, E, Simpson, I A, Skidmore, P and Sveinbjarnardóttir, G, 2005 'The Norse landnám on the North Atlantic islands: an environmental impact assessment', *Polar Record* 41, 21–37
- Dumville, D N, 1997 *The Churches of North Britain in the First Viking Age*, Whithorn Trust, Whithorn
- Ferguson, Y H and Mansbach, R W, 2012 *Globalization: The Return of Borders to a Borderless World?*, Routledge, London
- Feveile, C, 2010 'Ribe: continuity or discontinuity from the eighth to the twelfth century?', in J Sheehan and D Ó Corráin (ed), *The Viking Age: Ireland and the West*, Four Courts Press, Dublin, 97–106
- Glørstad, Z T, 2014 'Homeland — strange land — new land: material and theoretical aspects of defining Norse identity in the Viking Age', in J V Sigurdsson and T Bolton (ed), *Celtic-Norse Relationships in the Irish Sea in the Middle Ages 800–1200*, Brill, Leiden, 151–170
- Graham-Campbell, J, 1995 *The Viking-Age Gold and Silver of Scotland*, National Museums of Scotland, Edinburgh
- Hadley, D and Richards, J D, 2013 'Viking Torksey: inside the Great Army's winter camp', *Current Archaeology* 281, 12–19
- Hadley, D M and ten Harkel, L (ed), 2013 *Everyday Life in Viking-age Towns: Social Approaches to Towns in England and Ireland, c. 800–1100*, Oxbow Books, Oxford
- Hernæs, P, 1997 'Storpolitikk og vikingtog på slutten av 700-tallet', in I Fuglestad and B Myhre (ed), *Konflikt i Forhistorien*, Arkeologisk Museum i Stavanger, Stavanger, 57–67
- Hodges, R, 2012 *Dark Age Economics: A New Audit*, Bristol Classical Press, London
- Holm, P, 1986 'The slave trade of Dublin, ninth to twelfth centuries', *Peritia* 5, 317–345
- Kershaw, J F, 2013 *Viking Identities: Scandinavian Jewellery in England*, Oxford University Press, Oxford
- Kershaw, P, 2000 'The Alfred-Guthrum Treaty: scripting accommodation and interaction in Viking Age England', in D M Hadley and J D Richards (ed), *Cultures in Contact: Scandinavian Settlement in England in the Ninth and Tenth Centuries*, Brepols, Turnhout, 43–64
- Kilger, C, 2008 'Wholeness and holiness: counting, weighing and valuing silver in the early Viking period', in D Skre (ed), *Means of Exchange: Dealing with Silver in the Viking Age*, Aarhus University Press, Aarhus, 253–325
- Lebecqz, S, 2007 'Communication and exchange in northwest Europe', in J Bately and A Englert (ed), *Ohthere's Voyages: A Late 9th-century Account of Voyages Along the Coasts of Norway and Denmark and its Cultural Context*, The Viking Ships Museum, Roskilde, 170–179
- Lieberman, V, 2009 *Strange Parallels: Southeast Asia in Global Context, c. 800–1830, Volume 2: Mainland Mirrors: Europe, Japan, China, South Asia, and the Islands*, Cambridge University Press, Cambridge
- Loe, L, Boyle, A, Webb, H and Score, D, 2014 'Given to the Ground': A Viking Age Mass Grave on Ridgeway Hill, Weymouth, Oxford Archaeology, Oxford
- Loveluck, C, 2013 *Northwest Europe in the Early Middle Ages c. AD 600–1150*, Cambridge University Press, Cambridge
- Loveluck, C and 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
- MacAirt, S and MacNiocaill, G (ed), 1983 *The Annals of Ulster (to A.D. 1131)*, Dublin Institute for Advanced Studies, Dublin
- Macniven, A, 2013 'Modelling Viking Migration to the Inner Hebrides', in A Jennings and A Sanmark (ed), *Across the Sólundarhaf: Connections between Scotland and the Nordic*

- World*, Journal of the North Atlantic Special Volume 4, Eagle Hill Institute, Steuben, Maine, 3–18
- McLeod, S, 2014 *Beginning of Scandinavian Settlement in England: The Viking Great Army and Early Settlers, c. 865–900*, Brepols, Turnhout
- McGuire, R H, 1992 *A Marxist Archaeology*, Academic Press, London
- Mehler, N, 2013 ‘Globalization, immigration, and transformation: thoughts from a European perspective’, *Historical Archaeology* 47, 38–49
- Munzinger, M R, 2006 ‘The profits of the Cross: merchant involvement in the Baltic Crusade (c.1180–1230)’, *Journal of Medieval History* 32, 163–185
- Montgomery, J, Grimes, V, Buckberry, J, Evans, J A, Richards, M P and Barrett, J H, 2014 ‘Finding Vikings with isotope analysis: The view from wet and windy islands’, *Journal of the North Atlantic* 7, 54–70
- Myrberg, N, 2010 ‘A worth of their own: on Gotland in the Baltic Sea, and its 12th-century coinage’, *Medieval Archaeology* 54, 157–181
- Naum, M, 2012 ‘Difficult middles, hybridity and ambivalence of a medieval frontier: the cultural landscape of Lolland and Falster (Denmark)’, *Journal of Medieval History* 38, 56–75
- Nedkvitne, A, 2014 *The German Hansa and Bergen 1100–1600*, Böhlau Verlag, Köln
- Nelson, J L, 1991 *The Annals of St-Bertin*, Manchester University Press, Manchester
- Neveux, F, 2002 ‘L’héritage des Vikings dans la Normandie ducale’, in É Ridel (ed), *L’héritage maritime des Vikings en Europe de l’Ouest*, Presses universitaires de Caen, Caen, 101–118
- Palla, G, Barabási, A-L and Vicsek, T, 2007 ‘Quantifying social group evolution’, *Nature* 446, 664–667
- Pollard, A M, Ditchfield, P, Piva, E, Wallis, S, Falys, C and Ford, S, 2012 ‘“Sprouting like cockle amongst the wheat”: the St Brice’s Day massacre and the isotopic analysis of human bones from St John’s College, Oxford’, *Oxford Journal of Archaeology* 31, 83–102
- Price, N, 2002 *The Viking Way: Religion and War in Late Iron Age Scandinavia*, Uppsala University Press, Uppsala
- Radtke, C, 2006 ‘Money, port and ships from a Schleswig point of view’, in L Blue, F Hocker and A Englert (ed), *Connected by the Sea: Proceedings of the Tenth International Symposium on Boat and Ship Archaeology Roskilde 2003*, Oxbow Books, Oxford, 147–151
- Risvaag, J A and Christophersen, A, 2004 ‘Early medieval coinage and urban development: a Norwegian experience’, in J Hines, A Lane and M Redknap (ed), *Land, Sea and Home: Proceedings of a Conference on Viking-period Settlement*, Maney/Society for Medieval Archaeology, Leeds, 75–91
- Reuter, T, 1985 ‘Plunder and tribute in the Carolingian Empire’, *Transactions of the Royal Historical Society* 35, 75–94
- Sawyer, P H, 1962 *The Age of the Vikings*, Edward Arnold, London
- Sawyer, P, 2013 *The Wealth of Anglo-Saxon England*, Oxford University Press, Oxford
- Sigurdsson, J V, 2008 *Det Norrøne Samfunnet: Vikingen, Kongen, Erkebiskopen og Bonden*, Pax Forlag A/S, Oslo
- Sindbæk, S M, 2007 ‘The Small World of the Vikings: networks in early medieval communication and exchange’, *Norwegian Archaeological Review* 40, 59–74
- Sindbæk, S M, 2011 ‘Silver economies and social ties: long-distance interaction, long-term investments — and why the Viking Age happened’, in J Graham-Campbell, S M Sindbæk and G Williams (ed), *Silver Economies, Monetisation and Society in Scandinavia, AD 800–1100*, Aarhus University Press, Aarhus, 41–66
- Sindbæk, S M, 2012a ‘Enter the gripping beast: innovations and actor-networks in Viking Age towns’, in R Berge, M E Jasinski and K Sognnes (ed), *N-TAG Ten: Proceedings of the*

- 10th Nordic TAG Conference at Stiklestad, Norway, 2009, British Archaeological Reports International Series S2399, Archaeopress, Oxford, 129–135
- Sindbæk, S M, 2012b 'Viking disruptions or growing integration? Contextualising communication networks in the 10th century North Sea', in S Kleingärtner and G Zeilinger (ed), *Raumbildung durch Netzwerke? Der Ostseeraum zwischen Wikingerzeit und Spätmittelalter aus archäologischer und geschichtswissenschaftlicher Perspektive*, Dr. Rudolf Habelt, Bonn, 19–38
- Sindbæk, S M and Trakadas, A (ed), 2014 *The World in the Viking Age*, The Viking Ship Museum, Roskilde
- Skre, D (ed), 2008 *Means of Exchange: Dealing with Silver in the Viking Age*, Aarhus University Press, Aarhus
- Steuer, H, 1987 'Gewichtsgeldwirtschaften im frühgeschichtlichen Europa — Feinwaagen und Gewichte als Quellen zur Währungsgeschichte', in K Düwel, H Jahnkuhn, H Siems and D Timpe (ed), *Untersuchungen zu Handel und Verkehr der vor- und frühgeschichtlichen Zeit in Mittel- und Nordeuropa: Teil IV: Der Handel der Karolinger- und Wikingerzeit*, Vandenhoeck & Ruprecht, Göttingen, 405–527
- Svanberg, F, 2003 *Decolonizing the Viking Age 1*, Almqvist & Wiksell International, Stockholm
- Theuvs, F, 2004 'Exchange, religion, identity and central places in the early Middle Ages', *Archaeological Dialogues* 10, 121–138
- Thomas, G, 2012 'Carolingian culture in the North Sea world: rethinking the cultural dynamics of personal adornment in Viking age England', *European Journal of Archaeology* 15, 486–518
- Thurstun, T L, 2001 *Landscapes of Power, Landscapes of Conflict: State Formation in the South Scandinavian Iron Age*, Springer Scientific, New York
- Tilly, C, 1975 *The Formation of National States in Western Europe*, Princeton University Press, Princeton
- Vésteinsson, O, Lucas, G, Þórsdóttir, K and Gylfadóttir, R (ed), 2011 *Upp á Yfirborðið: Nýjar Rannsóknir í Íslenskri Fornleifafræði*, Fornleifastofnun Íslands, Reykjavík
- Wallace, P F, 1987 'The economy and commerce of Viking Age Dublin', in K Düwel, H Jahnkuhn, H Siems and D Timpe (ed), *Untersuchungen zu Handel und Verkehr der vor- und frühgeschichtlichen Zeit in Mittel- und Nordeuropa: Teil IV: Der Handel der Karolinger- und Wikingerzeit*, Vandenhoeck & Ruprecht, Göttingen, 200–245
- Westerdahl, C, 2008 'Boats apart: building and equipping an Iron-Age and early-medieval ship in Northern Europe', *The International Journal of Nautical Archaeology* 37, 17–31
- Whitelock, D, Douglas, D C and Tucker, S I (ed), 1961 *The Anglo-Saxon Chronicle*, Eyre & Spottiswoode, London
- Wiechmann, R, 2007 'Hedeby and its hinterland: a local numismatic region', in J Graham-Campbell and G Williams (ed), *Silver Economy in the Viking Age*, Left Coast Press, Walnut Creek, California, 29–48
- Williams, G, 2013 'Towns and identities in Viking England', in D M Hadley and L ten Harkel (ed), *Everyday Life in Viking-age Towns: Social Approaches to Towns in England and Ireland, c. 800–1100*, Oxbow Books, Oxford, 14–34
- Winroth, A, 2014 *The Age of the Vikings*, Princeton University Press, Princeton
- Woods, A, 2013 'The coinage and economy of Hiberno-Scandinavian Dublin', in S Duffy (ed), *Medieval Dublin XIII*, Four Courts Press, Dublin, 43–69
- Woolf, A, 2007 *From Pictland to Alba: 789–1070*, Edinburgh University Press, Edinburgh
- Wormald, C P, 1982 'Viking Studies: whence and whither?', in R T Farrell (ed), *The Vikings*, Phillimore & Co., London, 128–153
- Zori, D and Byock, J (ed), 2014 *Viking Archaeology in Iceland: Mosfell Archaeological Project*, Brepols, Turnhout

CHAPTER 2

SAILS AND THE COGNITIVE ROLES OF VIKING AGE SHIPS

By CHRISTER WESTERDAHL

INTRODUCTION

The Viking Age is part of the European Middle Ages, but in its context it represents the final centuries of the Iron Age. It is interesting as a transitional period, in certain important dimensions, most connected with power and all interconnected with each other, such as Christianization and the all-pervading appearance of kings. Two decades ago I argued that ships were more important in the Viking Age than before or after (Westerdahl 1993). However, I have changed my mind to some extent — not in the sense of the ship shaping the post-mortem picture of the Viking Age, but regarding the significance of the boat to ordinary people. Judith Jesch (2001, 275) put it in so many words:

Although the words ‘viking’ and ‘ship’ so often seem to go together, ships were not necessarily more important to the Scandinavians in the Viking Age than in any other time in their history. The Viking Age may just have been when other nations became more keenly aware of Scandinavian nautical prowess.

The Viking Age was not the only period when ships had a particular social and symbolic significance in Northern Europe. Nor was only that small section of society that we call the Vikings (those with the resources to equip expeditions) the only part of a repressive and highly hierarchical world that was dependant on ships and boats. Waterways were the main networks of communication and transport, in addition to providing fish, sea mammals, seabirds and other resources. Moreover, one might question the historiographical exaltation of the Viking Age as nationalistic, romanticist and ethnocentric (eg Svanberg 2003; Westerdahl 2004). As more or less a contemporary of the Swedish historian Erik Lönnroth, I empathize with the sentiment of his 1947 review of the iconic novel *Röde Orm* by F G Bengtsson:

It is a magnificent testimony that the scalds offer on the spirit of the Viking Age. But it is monotonous and its meaning is terrible. Behind the gorgeous imagery is a sea and a world as desolate as the empty eyes of the dragon heads, where the long ships rested as little as wind, waves and the rapaciousness of men. (Lönnroth 1961; my translation)

That said, it must be admitted that ships are a special case, partly because the culture of the north in general was maritime and partly because there was something especially significant about ships within Nordic society, particularly if not exclusively in the Viking Age. The ship-formed stone settings (multi-period, but common during the Viking Age), the numerous bog finds of vessels or parts of vessels, the ships carved on picture and rune stones and the inclusion of ships in graves (burnt or unburnt) all point to this conclusion. There is plenty of information from history and archaeology regarding the importance of sea-going vessels in the Viking Age. A handy introduction by one of the principal actors is offered by Crumlin-Pedersen (2010). Moreover, one must ultimately explain why the sail was adopted between approximately AD 750 and 820. It is this last issue that I wish to focus on in the present chapter, revisiting a topic I first considered many years ago (cf Westerdahl 1995).

THE SAIL IN THE NORTH

The present state of archaeological research tells us that the sail was adopted first during the Viking Age in Scandinavia. Particularly interesting is the question why the sail was adopted so late and seemingly hesitantly by all the peoples of the north (not only Germanic groups). The technical advantages of sail over oar appear so obvious to our time and our context, and northerners knew well the existence of the sail, even its technicalities, from close contact with the Roman world (Figure 2.1). In 1995 I suggested three explanations. Two were functional and made mainly military sense. The first maintained that pre-Viking Age society was very much a martial one, but with an emphasis on surprise raids where you did not want to be seen in advance. Sails would spoil stealth. The second functional explanation was the need for coordination in such raids, which relied on multiple vessels. One could not rely on a fleet driven by fickle winds (Figure 2.2). Rowing time could nearly always be computed, especially with a high degree of technical sophistication in the process of rowing, something which can be assumed with confidence for this period. My third explanation was a strong social and cognitive conservatism which involved being

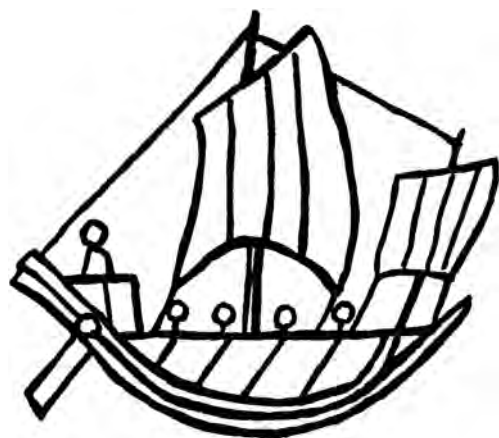


FIGURE 2.1 The Roman ship carved on a cattle bone thrown in the River Weser, Germany, dated to the 5th century AD. Legible runes of the 24-type variety tell us (probably) that ‘we are coaxing them (the Romans?) here’ (after Pieper 1989)

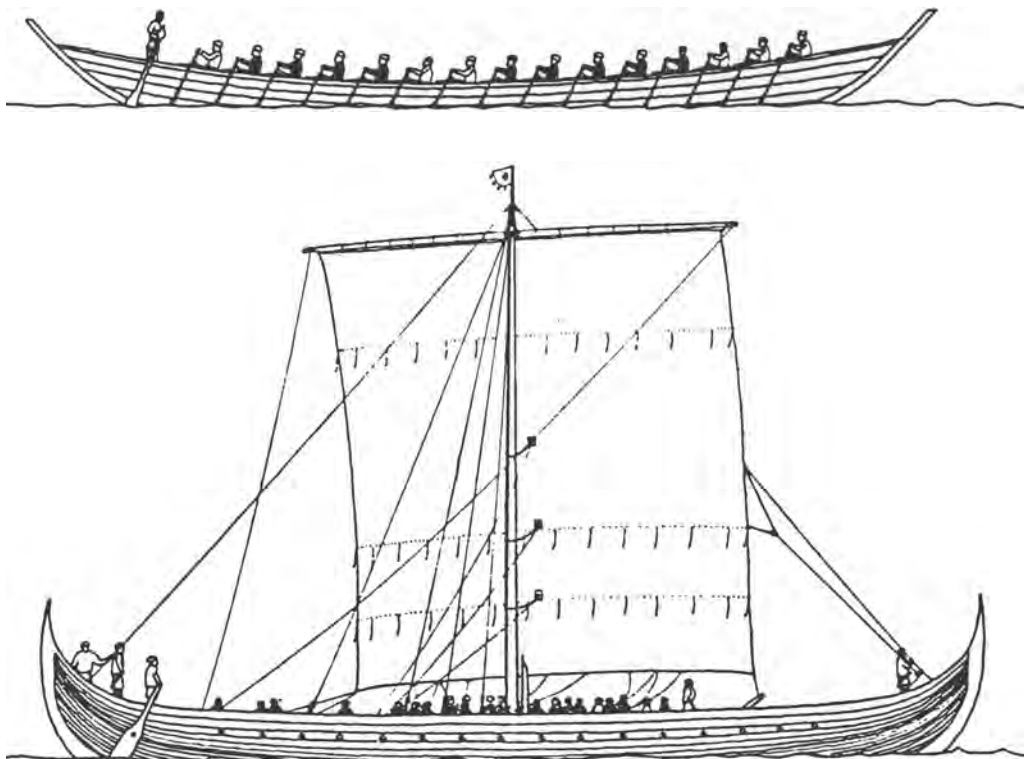
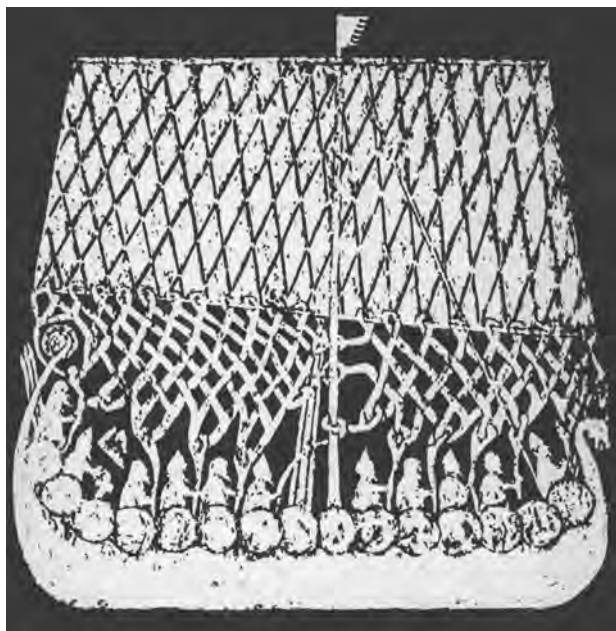


FIGURE 2.2 Contrasting rowing (Nydam) and sailing (Gokstad) ships (Sune Villum-Nielsen, after Westerdahl 1995)

part of a particular rowing crew, a *comitatus*-type segment of a fundamentally rowing society owing allegiance to a chieftain: one man, one oar, one rowlock. In the Nydam ships of AD c400 it appears that all rowlocks (and perhaps even the oars) were individually made (Rieck 1995). Perhaps the depiction of the first sails on some Gotlandic picture stones of a *hanfot* system of braces (Figure 2.3) in the hands of almost all the members of the crew is a nostalgic remembrance of rowing as a social act? I argue further, then and now, that during the Viking Age the sought-after legitimacy of the new royal rulers paved the way for a new ideology *where leaders wanted to be seen*. The display of large fleets was a prerequisite for intimidation and enforced domination of a totally different kind from that achieved by earlier hit-and-run tactics. In a sailing ship the crew is inactive. Sails propel the vessel. The winds are governed by powers superior to men. Only kings would thrive in such a system. And in fact they do, according to the imagery of royal court poetry. Only they would depend on chance and a direct lead from the Gods. Or on Grace from the Lord himself.

The metaphor of rowing must, however, have been strong even in the days of sail. In much later medieval provincial laws (which include incipient attempts to impose efficient taxation) a metaphorical rowing society is conjured up, very probably



(a)



(b)

FIGURE 2.3 (a) The *hanfot* bracing system of the ship depicted on a picture stone from Smiss I in Stenkyrka parish, Gotland. The deceased person to whom the stone is raised is probably sitting at the stern. It seems that all crew members are holding the ends of the braces (after Nylén and Lamm); (b) Gotlandic picture stone Ardre VIII with horse and ship (C Westerdahl)

petrified and archaized, but still functional. We know that basically rowing ships were still used as *ledung/leidang* (obligatory ship-levy) vessels into the 14th and 15th centuries in some cases. Arable lands in the Nordic kingdoms of the Middle Ages were divided into units corresponding to the archaic principle of one man, one oar, one bench. *Hålhamna* (and equivalents), which literally meant rowlock and fastening for the oar, were used in the ship levies of the medieval provincial laws to denote the smallest unit of taxation, a couple of farmsteads or sometimes a hamlet. However, this metaphor need not hark back entirely to the period before the Viking Age. Crumlin-Pedersen (1997, 189) has pointed out that the drastic widening of ship beams that provided stability in the first period of the sail was followed by a return to pre-Viking long and slender warships (in combination with sails) precisely ‘to maximize the effect of rowing’ in the last period of the Viking Age (the 10th and 11th centuries).

The last major ship finds without any arrangements for a mast include the sacrificial *Kvalsund* boats of west Norway, which date to the 7th or 8th century AD (see Chapter 13), and the Storhaug and Grønhaug burials from Karmøy, dated to approximately AD 770 and AD 780 respectively (Bonde and Stylegar 2009; Opedal 1998). The first find with a mast-step, although rather a weak one, is the famous burial ship from *Oseberg* in Vestfold, dated by dendrochronology to approximately AD 820, but deposited in AD 834 (Bonde and Christensen 1993). The time for sails may have been ripe. The *Kvalsund* finds had developed a Nordic T-formed keel, considered an important step towards reducing leeway (Shetelig and Johannessen 1929; Figure 2.4).

All agree that the oldest *depictions* of sailing ships in the north are those of the Gotlandic picture stones (a late group of them: see Figure 2.3). Less known internationally is the redating of Lindquist’s (1941–42) chronological scheme by Varenius (1992), which moves the relevant images forward in time. Moreover, this revision has been confirmed and made even younger by the research of Imer (2004). It is now thought that the Gotlandic picture stones with sail *all belong to the Viking Age*, although whether it started around AD 750 or AD 800 is still an open question. Thus it is no longer appropriate to argue that these depictions of sailing ships and boats bring us back to the 6th and 7th centuries AD as was once believed (eg Thier 2003, 184).

Thus an early Viking Age date remains the generally accepted opinion despite efforts to put the innovation back in time among the north Germanic peoples. My explanations discussed above therefore remain plausible. However, other of my previous ideas (Westerdahl 1995, 47) have faded. I am no longer convinced that sails were important as media for symbols and heraldic figures, although this does still apply in the case of the cross on the sail of the *Sparlösa* stone AD c800 (Figure 2.5; Westerdahl 1996; 2011). Nevertheless, it is obvious that the Gotlandic depictions of sails (Figure 2.3) contain information of a symbolic character from the very beginning. If they connote the divine ship — parallel in this context to the divine horse *Sleipnir* — that ship may be thought of as *Skiðblaðnir*, always provided with a fair wind (Westerdahl 1995, 46).

Critics have approached the dating of the first Nordic sail by archaeology in different ways. Sailing enthusiasts of modern times cannot believe in it. The *Sutton Hoo* ship in the 7th century, they claim, could have been sailed (Gifford and Gifford

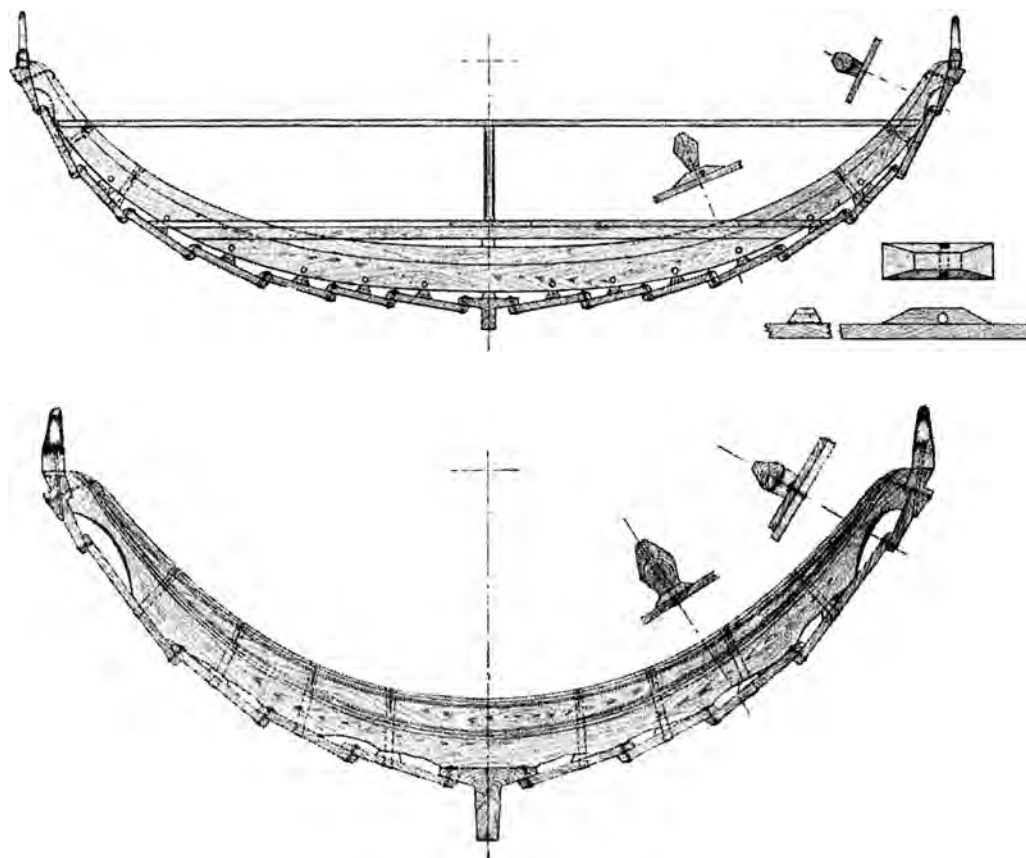


FIGURE 2.4 Cross-sections of two sacrificial boats from Kvalsund, Nerlandsøy, western Norway, which have the oldest known T-formed keels, normally considered a prerequisite for sailing vessels (after Shetelig and Johannessen 1929)

1996). Timm Weski (1998) thinks that the journeys of the Saxon invaders of Britain could not have been made only by rowing, despite the testimony of Procopius (writing in AD 550; albeit spatially removed from the events described). Weski points to a very early find: a holed rib in the stem part of the 2nd-century AD Lecker Au log boat from Dithmarschen in northern Germany, which is of long (c13.5m) and slender construction (Weski 1998, 68). However, the overall character of the boat makes interpretation of this rib as a mast-step rather improbable. A mounting point for a hauling pole seems more likely.

Others point to alleged Saxon sailing mentioned during the 5th and 6th centuries AD (Haywood 1999; cf Thier 2003). However, these details are found only in a few (three) texts, and only one seems at all convincing. The others are ambiguous in meaning, possibly using sailing as a general term for travelling at sea or using a boat.

A seemingly early rune stone, the Eggja monument, has been dated by Ottar Grønvik (1985) to the end of the 7th century AD. He believes that a mast-detail is



FIGURE 2.5 The Sparlösa picture stone, which dates to AD c800, bears a ship and rider scene with a house on top that resembles the figural arrangement of several Gotlandic stones. Note the cross on the sail (C Westerdahl)

mentioned and that the inscription may refer to a shipwreck. Both dating and interpretation are difficult and may reasonably be problematic.

Another approach is to date the appearance of mast stones in the middle of stone settings. Such cases are known, but appear to be at least Late Iron Age or rather Viking Age in date (Capelle 1986). Moreover, the objection weighs heavily that a symbolic ship in the ground might have had cosmological connotations where the centre of the vessel space would be marked for other reasons. An informed philological discussion on the introduction of the Germanic word sail has been provided

by Katrin Thier (2003) where she points to a transfer from Celtic along the Rhine. However, nothing new on the dating of the sail in the north has come out of this. Early Irish boats, perhaps currachs of animal hide, may in fact have been the first to use sail in the north based, for example, on the poorly dated Broighter model (see Marcus 1980).

In sum, the Nordic conception of ships must have been heavily influenced by the introduction of the sail in the period AD 750 to 820. It may be informative to look at the reaction of by-standers to this rapid development. In the far north, recently discovered rock art in the inland mountains of Arctic Sweden record Sami perceptions of Nordic ships (Mulk and Bayliss Smith 2006). These motifs (Figure 2.6) are so far unique in their setting, and may belong to an early part of the Viking Age (cf the ship on the Sparlösa rune stone of Västergötland dated AD c800 (Figure 2.5; Westerdahl 1996; 2011). Perhaps the first sailing ships were thought remarkable by the Sami, although they were experienced in boat culture long before that. The magic use of ship depictions may have had a background in the Sami cultural world, but provided a means of expression in the context of change.

Most or all Viking Age sails were made of wool (Andersson 2007; Bender Jørgensen 2012; Möller-Wiering 2007). It is obvious that a prerequisite for sailing was the large-scale surplus production of this raw material. Moreover, the technology for the production and refinement of sailcloth was not created overnight. It is probable that the original coastal heather landscapes of western Scandinavia and other parts of the Atlantic coasts of Europe – sheep-grazing lands – are an effect of this. Some dates of the creation of coastal heaths in west Norway point to the middle of the 8th century AD (Bender Jørgensen 2005; 2012 and references therein). The adoption of the sail had non-trivial implications for the costs of producing a vessel, creating a demand on resources and labour commensurate with that of a hull



FIGURE 2.6 Sailing ships illustrated on a rock in Sami mountain territory in Padjelanta, northern Sweden. Compare with Figure 2.5 (after Mulk and Bayliss-Smith 2006)

(Andersen 1995, 250). It is in this context too, that sailing is broadly correlated with the growth of kingship in Scandinavia (cf Westerdahl 2008; Barrett and Anderson 2010).

The immediate candidates for introducing the sail as an innovation from the outside are the Frisian sailing merchants (Lebecq 1983). Their appearance on the historical stage coincides with the rise of the first proto-urban sites in the north — initially Ribe around AD 710–720, followed rapidly by Birka, Hedeby and Kaupang. On the other hand, the sailing arrangements (keelson with mast-step) and terminology of Scandinavia were adopted elsewhere in western Europe. Thus the idea may have been received from Frisians, but the actual shaping of it was at least partly a native one. It is less likely that sails of the river boats of the east were adopted by Scandinavians, although the possibility exists of multiple influences. Larsson (2000; 2007, 97), for example, has noted possible Byzantine mushroom-shape sail forms on early Gotlandic picture stones and discussed Russian parallels.

In practice the square sail on one mast was adopted, and would reign supreme into the late Middle Ages. To give a comparative perspective, in the (eastern) Mediterranean the square sail was in use from at least the 3rd millennium BC until the lateen sail was adopted in Egypt during the 7th century AD (Basch 1997). It then took at least another 600 years before the Mediterranean maritime cultures reintroduced square sails in earnest, this time together with innovations from the northern cog, such as the stern rudder. Looking back further, there was a millennium or two between the introduction of sea-going sailing vessels in the eastern Mediterranean in the 3rd millennium AD and their local adoption in the western Mediterranean, despite documented interregional contact (Broodbank 2010). The explanation of this curious disjunction and the later example of northern Europe may have meaningful resonances, both being in part the result of differences in political organization between regions, with concomitant implications for ideology, warfare and access to resources (cf Barrett and Anderson 2010).

CONCLUSIONS

In concluding, it appears that the Viking Age (and its posthumous reputation) would be inconceivable without ships with sails. In fact the introduction of the sail seems contemporary with the Viking Age in Scandinavia, at least for ship types crossing the North Sea and the Baltic. Concomitantly, the cognitive role of the one-masted longship and its symbolic connotations are inextricable parts of the social changes of the age: the growth of larger realms subordinated to warrior kings instead of petty chieftains. The fleet and its ships, or a *pars pro toto* like a towering stempost and sail, could stand as a metaphor for social life, including pagan religion, on-board fellowship in a rowing crew structure (that may even have had implications for inland social structure and territorial divisions) and a spirit of mercantile adventurism among the magnates following their sea kings. There were certainly other symbolic factors pertaining to the Viking Age coast, its routes and their landscapes, but they were also bound up with the vessels and their constituent parts.

REFERENCES

- Andersen, E, 1995 'Square sails of wool', in O Olsen, J Skamby Madsen and F Riek (ed), *Shipshape: Essays for Ole Crumlin-Pedersen*, The Viking Ship Museum, Roskilde, 249–270
- Andersson, E, 2007 'Textile tools and production during the Viking Age', in C Gillis and M-L B Nosch (ed), *Ancient Textiles: Production, Craft and Society*, Oxbow, Oxford, 17–25
- Barrett, J H and Anderson, A, 2010 'Histories of global seafaring: A discussion', in A Anderson, J H Barrett and K V Boyle (ed), *The Global Origins and Development of Seafaring*, McDonald Institute for Archaeological Research, Cambridge, 305–314
- Basch, L, 1997 'L'apparition de la voile latine en Méditerranée', in D Meeks and D Garcia (ed), *Techniques et économie antiques et médiévales : le temps de l'innovation*, Éditions Errance, Paris, 214–223
- Bender Jørgensen, L, 2005 'Textiles of seafaring: An introduction to an interdisciplinary research project', in F Pritchard and J P Wild (ed), *Northern Archaeological Textiles*, Oxbow, Oxford, 65–69
- Bender Jørgensen, L, 2012 'The introduction of sails to Scandinavia: Raw materials, labour and land', in R Berge, M E Jasinski and K Sognnes (ed), *N-TAG Ten: Proceedings of the 10th Nordic TAG Conference at Stiklestad, Norway 2009*, Archaeopress, Oxford, 173–181
- Bonde, N and Christensen, A E, 1993 'Dendrochronological dating of the Viking Age ship burials at Oseberg, Gokstad and Tune, Norway', *Antiquity* 67, 575–583
- Bonde, N and Stylegar, F-A, 2009 'Fra Avalsnes til Oseberg: Dendrokronologiske undersøkelser av skipsgravene fra Storhaug og Grønhaug på Karmøy', *Viking* 72, 149–168
- Broodbank, C, 2010 "'Ships a-sail from over the rim of the sea": Voyaging, sailing, and the making of Mediterranean societies c. 3500–800 BC', in A Anderson, J H Barrett and K V Boyle (ed), *The Global Origins and Development of Seafaring*, McDonald Institute for Archaeological Research, Cambridge, 249–264
- Capelle, T, 1986 'Schiffsetzungen', *Præhistorische Zeitschrift* 61, 1–63
- Crumlin-Pedersen, O, 1997 'Large and small warships of the north', in A Nørgård Jørgensen and B Clausen (ed), *Military Aspects of Scandinavian Society in a European Perspective, AD 1–1300*, National Museum of Denmark, Copenhagen, 184–194
- Crumlin-Pedersen, O, 2010 *Archaeology and the Sea in Scandinavia and Britain*, Viking Ship Museum, Roskilde
- Gifford, E and Gifford, J, 1996 'The sailing performance of Anglo-Saxon ships as derived from the building and trials of half-scale models of the Sutton Hoo and Graveney ship finds', *The Mariner's Mirror* 82, 131–153
- Grønvik, O, 1985 *Runene på Eggjasteinen: en hedensk gravinnskrift fra slutten av 600-talet*, Universitetsforlaget, Oslo
- Haywood, J, 1999 *Dark Age Naval Power: A Reassessment of Frankish and Anglo-Saxon Seafaring Activity*, Anglo-Saxon Books, Pinner, Middlesex
- Imer, L, 2004 'Gotlandske billedsten: dateringen af Lindqvists gruppe C og D', *Aarbøger for nordisk Oldkyndighed og Historie* 2001, 47–111
- Jesch, J, 2001 *Ships and Men in the Late Viking Age*, Boydell, Woodbridge
- Larsson, G, 2000 'Contacts between central Sweden and Russia indicated by ship remains', in *Study of the Marine Archaeology, Vol 4*, Russian Academy of Sciences, Institute for the History of Material Culture, St Petersburg, 102–114
- Larsson, G, 2007 *Ship and Society: Maritime Ideology in Late Iron Age Sweden*, Uppsala Universitet: Department of Archaeology and Ancient History, Uppsala
- Lebecqz, S, 1983 *Marchands et navigateurs frisons du haut Moyen Age*, Presses universitaires de Lille, Lille

- Lindquist, S, 1941–42 *Gotlands Bildsteine I–II*, Wahlström & Widstrand, Stockholm
- Lönnroth, E, 1961 *Från svensk medeltid*, Aldus/Bonniers, Stockholm
- Marcus, G W, 1980 *The Conquest of the North Atlantic*, The Boydell Press, Woodbridge
- Möller-Wiering, S, 2007 ‘Under canvas’, in C Gillis and M-L B Nosch (ed), *Ancient Textiles: Production, Craft and Society*, Oxbow, Oxford, 122–126
- Mulk, I-M and Bayliss-Smith, T, 2006 *Rock Art and Sami Sacred Geography in Badjelánnda, Lapponia, Sweden: Sailing Boats, Anthropomorphs and Reindeer*, Department of Archaeology and Sami Studies/Kungl. Skytteanska Samfundet, Umeå
- Opedal, A, 1998 *De glemte skipsgravene: makt og myter på Avaldsnes*, Arkeologisk museum i Stavanger, Stavanger
- Pieper, P, 1989 *Die Weser-Runenknöchen. Neue Untersuchungen zur Problematik: Original oder Fälschung*, Isensee, Oldenburg
- Rieck, F, 1995 ‘Ships and boats in the bog finds of Scandinavia’, in O Crumlin-Pederson and B M Thye (ed), *The Ship as Symbol in Prehistoric and Medieval Scandinavia*, National Museum of Denmark, Copenhagen, 125–129
- Shetelig, H and Johannessen, F, 1929 *Kvalsundsfunnet og andre norske myrfund av fartoier*, Bergen Museum, Bergen
- Svanberg, F, 2003 *Decolonizing the Viking Age 1*, Almqvist & Wiksell International, Stockholm
- Thier, K, 2003 ‘Sails in the north: New perspectives on an old problem’, *International Journal of Nautical Archaeology* 32, 182–190
- Varenius, B, 1992 *Det nordiska skeppet: Teknologi och samhällsstrategi i vikingatid och medeltid*, Stockholms universitet, Stockholm
- Weski, T, 1998 ‘Anmerkungen zum Wasserverkehr während der römischen Kaiserzeit im Odergebiet und auf der Ostsee’, in *Beiträge zum Oderprojekt* 5, Deutsches Archäologisches Institut, Berlin, 59–74
- Westerdahl, C, 1993 ‘Skepp och Farleder’, in N Lund (ed), *Norden og Europa i vikingetid og tidlig middelalder*, Museum Tusulanums Forlag, København, 69–90
- Westerdahl, C, 1995 ‘Society and sail: On symbols as specific social values and ships as catalysts of social units’, in O Crumlin-Pederson and B M Thye (ed), *The Ship as Symbol in Prehistoric and Medieval Scandinavia*, National Museum of Denmark, Copenhagen, 41–50
- Westerdahl, C, 1996 ‘Sparlösa-stenen: Symboler och “politiska” attityder i tidig vikingatid’, *Västgötabygden* 51(5), 16–21
- Westerdahl, C, 2004 ‘Scando-Baltic contacts during the Viking Age’, in J Litwin (ed), *Baltic Sea Identity: Common Sea-Common Culture?*, Centralne Muzeum Morskie w Gdańsku, Gdańsk, 27–34
- Westerdahl, C, 2008 ‘Boats apart. Building and equipping an Iron-Age and early-medieval ship in Northern Europe’, *The International Journal of Nautical Archaeology* 37, 17–31
- Westerdahl, C, 2011 ‘Sparlösa, Kälvesten och Rök: Symboler och samhälle’, *Västgötlitteratur* 2011, 13–50

CHAPTER 3

TRADE AND TRUST IN THE BALTIC SEA AREA DURING THE VIKING AGE

By INGRID GUSTIN

INTRODUCTION

When the existence of different socio-political areas and regional identities in the Baltic Sea region is discussed, one should remember that people did not live their lives in isolation. People, then as now, had social relations that stretched to other regions and societies. These could concern social contacts such as blood brotherhood and marriage alliances, or trade relations and tribute dealings, as well as relations based on common values (Burström 1991, 39; Callmer 1991).

For the central Baltic Sea region and the Russian river valleys the archaeological material reveals evidence of the existence of diversified interaction. This is apparent not only through the raw material, partially manufactured items, and prestige objects that were mediated between different regions. It can also be seen through the jewellery and the personal belongings that are found far away from where they were manufactured or where the prototype existed. In the following study, the presence of Scandinavian groups in the Baltic Sea region and Russian area provides an example of the interaction that existed. As will be shown, some Scandinavians were involved in activities connected to trade. Since trust is vital for trade being conducted, this article also addresses how trust was created through material culture and how material culture could facilitate interaction between trading actors.

THE SCANDINAVIAN PRESENCE IN THE CENTRAL BALTIC SEA REGION AND ALONG THE RUSSIAN RIVERS DURING THE VIKING AGE

Scandinavian objects have been found within present-day Russia, especially along the river systems that create the Baltic Sea–Volga and Dnieper routes leading to the Caspian Sea and the Black Sea. Both routes have their starting point at Staraja Ladoga. Here the population consisted of many ethnic groups from the very start of the town. Scandinavian artefacts are present in the oldest layers, which are dated to the AD 750s. Furthermore, one cemetery in the Ladoga area, Plakun, situated across from Staraja Ladoga, is regarded as Scandinavian and dates to the 9th and 10th centuries (Callmer 2000, 34ff; Jansson 1987, 784; 1997, 27ff; Nosov 1998a; 1998b, 62ff).

Based on the archaeological material, it seems that Scandinavian families were present, even living permanently in many places within the territory of present-day Russia (for further reading, see Callmer 2000 and Jansson 1997). Typical Scandinavian objects have, for example, been found in Rjurikovo Gorodišče, Novgorod's predecessor from the second half of the 9th century, and Gnězdovo along the Dnieper from the 10th century (Figure 3.1). The places can be interpreted as exchange and craft-production centres with a mixed population, and they were situated along the important communication paths (Callmer 2000, 37; Jansson 1997, 27ff; Nosov 1998a, 65; 1998b, 73).

Scandinavian merchants seeking Islamic silver started to travel south, probably along the rivers Volga, Don and Donets, during the end of the 8th century (Noonan 1986, 321ff; 2001, 145ff). To gain access to the dirhams they needed commodities that were attractive to the Caliphate. One of the most important was fur. There was plentiful access to fur in eastern Europe, and this product could be acquired *en route* through, for example, trade or tribute. Thus, it was not necessary to transport the fur all the way from Scandinavia to the Khazarian markets and the markets along the

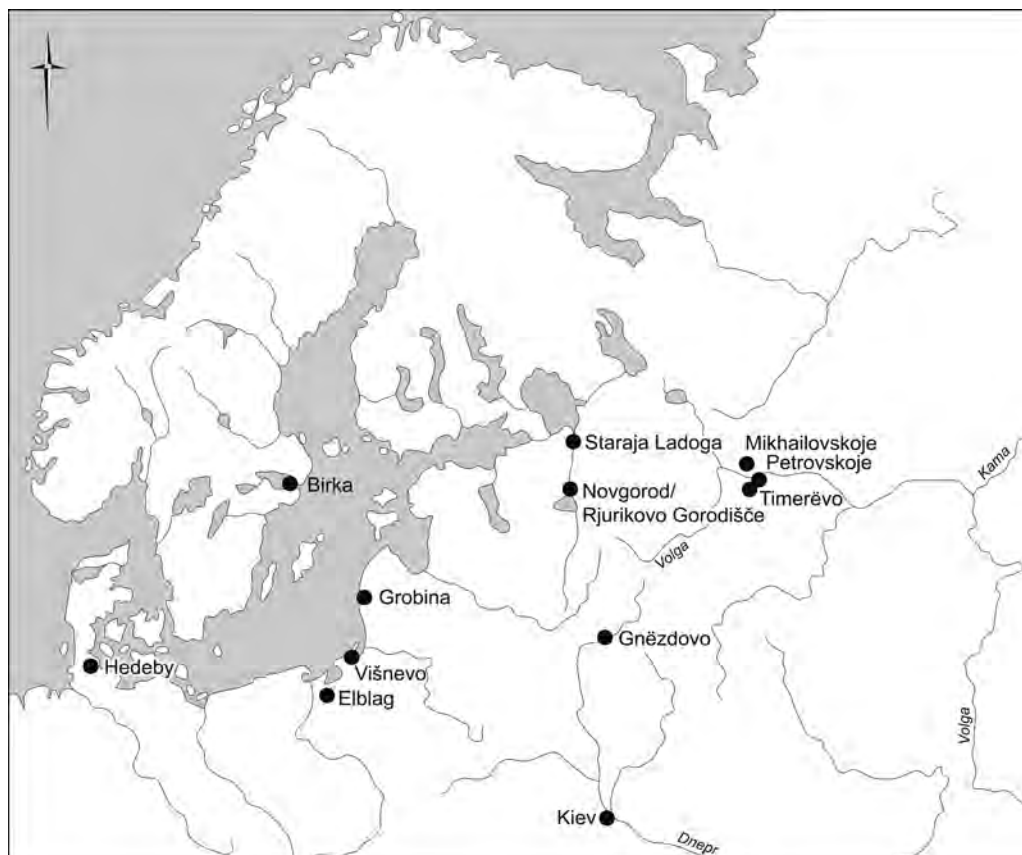


FIGURE 3.1 Places mentioned in the text (I Gustin and Vicki Herring after Jansson 2000, 110)

Volga. The Scandinavians encountered the long-established Finno-Ugric people in the east, as well as Slavic populations as they travelled. In order to establish themselves in the fur trade the Scandinavians needed to become a part of the existing local communities, and this process of integration may be witnessed in the burial evidence. For example, this is demonstrated through graves in the cemetery at Gnëzdovo along the Dnieper, and in the cemeteries at Timerëvo, Petrovskoje and Mikhailovskoje, which are all in the area around Jaroslav, ie the upper Volga area (Callmer 2000, 34–35; Nosov 1994, 187; 1998b, 61ff).

The reasons for the Scandinavian expeditions and presence in eastern Europe were not only to trade, take tribute and plunder. The associated material culture is diverse and suggests that this population was also involved in activities connected to military interests and craft production. The Russian archaeologist Evgenij N. Nosov argues that some Scandinavians came to create, or participate in, the top level of the social elite, an interpretation that draws on both archaeological material and the later chronicle evidence (Nosov 1998b, 73, 80).

There are also signs of other reasons for the migration of some Scandinavians to the Russian areas. The absolute largest group of identifiable Scandinavian artefacts within present-day Russia is female jewellery, oval brooches in particular (Figure 3.2). The jewellery indicates a relatively large presence of Scandinavian women. The archaeologist Ingmar Jansson argues that the large number of Scandinavian women cannot only be connected to the assumed few groups of warriors and traders that settled in European Russia. The female presence is taken as evidence that Scandinavian families with an agrarian background also emigrated eastwards in order to farm (Jansson 1987, 790; 1997, 26ff, 55).

While the archaeological material from present-day Russia provides evidence for extensive and diverse contacts between the Scandinavians and the indigenous population, there is less material from Finland and the Baltic States. If this paucity of evidence does not indicate fewer contacts, then at least it implies considerably fewer Scandinavian immigrants.

However, similarities in weaponry and male costume in Finland, the Baltic States and Gotland show that contacts between the areas were vigorous. Concerning the penannular brooches, belt fittings and belt buckles that have been found within the three areas it has even been viewed as difficult to determine if the types originated from Gotland, Finland or the Baltic States (Lehtosalo-Hilander 1983, 291ff; Thunmark-Nylén 1983, 310–311; Tönnisson 1962). This is regarded as the case for male dress items, whereas the female costume in the region reveals a number of local traits.

The role of Gotland in the Viking Age connections in the Baltic Sea area is often discussed, but hardly explained. The inhabitants of Gotland differ from their neighbours in one important aspect concerning material culture: they rejected foreign objects. This feature of the island's special character has been viewed as a conscious strategy on the part of the Gotlanders to cope with the intensive interaction with people from Finland and the Baltic States (Callmer 1992, 104). Interestingly, finds of burials of Gotlandic type outside the island are rare.¹ The extreme number of silver

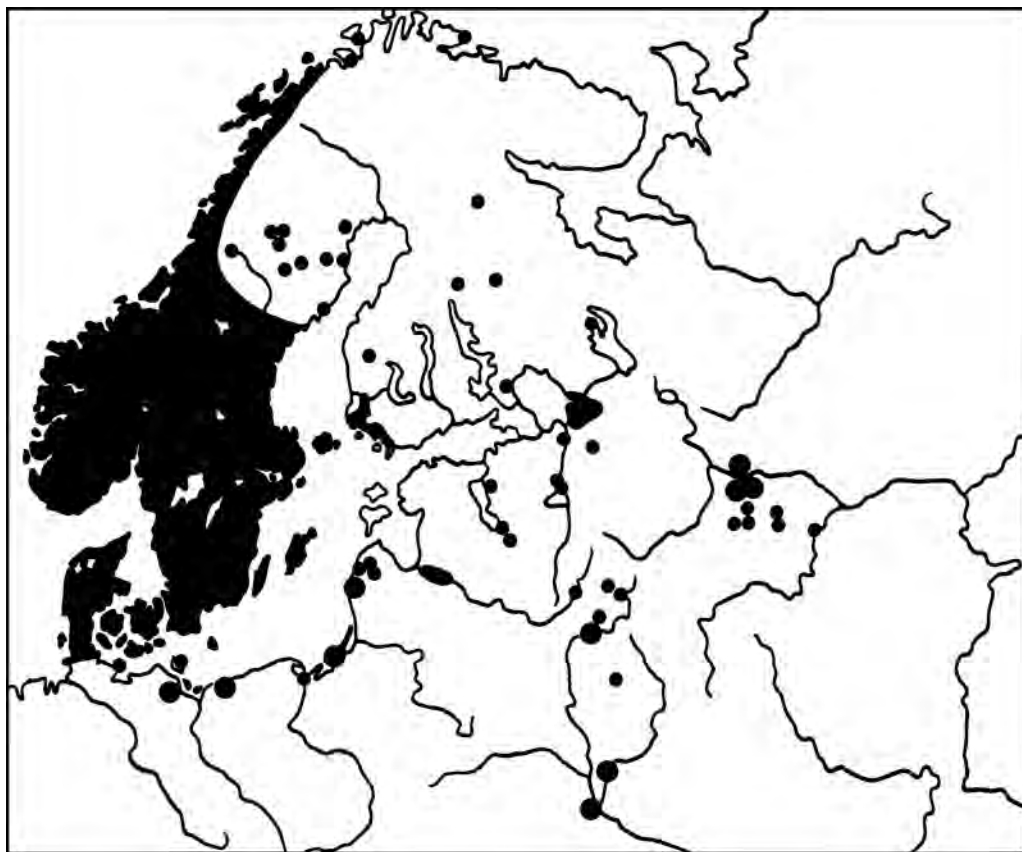


FIGURE 3.2 Distribution of bronze oval brooches from the mid-Viking Age
(after Jansson 1987, 777)

hoards — *c*700 — that have been found on Gotland does, however, testify to the fact that the island had wide-ranging contacts (see Chapter 5). The number of 10th-century Islamic coins in these hoards clearly exceeds the number found in mainland Sweden or in the other countries around the Baltic Sea (Noonan 1994, 223, table 1; Östergren 2008). At the end of the 10th century the number of western European coins, especially German and English coins, increased and after AD 990 they made up the majority of the coinage. In fact, more German and English Viking Age coins have been found on Gotland than in their home countries (Östergren 1983, 34).

What activities have the Gotlandic people been involved in outside their own island? The Gotlanders, in their capacity as travelling farmers, have often been seen as mediators of different merchandise in the Baltic Sea region during the Viking Age. In recent years it has become possible to reconstruct a map demonstrating Gotland's role as a hub for trade by charting the large number of harbours from the Late Iron Age along the coast of Gotland. The harbours vary in size, ranging from small fishing camps for individual farms to extensive harbours and places for exchange, some