

Edited by Linde Egberts and Meindert Schroor

Waddenland Outstanding

History, Landscape
and Cultural Heritage of
the Wadden Sea Region

Amsterdam
University
Press



Waddenland Outstanding

Landscape and Heritage Studies

Landscape and Heritage Studies (LHS) is an English-language series about the history, heritage and transformation of the natural and cultural landscape and the built environment. The series aims at the promotion of new directions as well as the rediscovery and exploration of lost tracks in landscape and heritage research. Both theoretically oriented approaches and detailed empirical studies play an important part in the realization of this objective. The series explicitly focuses on:

- the interactions between physical and material aspects of landscapes and landscape experiences, meanings and representations;
- perspectives on the temporality and dynamic of landscape that go beyond traditional concepts of time, dating and chronology;
- the urban-rural nexus in the context of historical and present-day transformations of the landscape and the built environment;
- multidisciplinary, integrative and comparative approaches from geography, spatial, social and natural sciences, history, archaeology and cultural sciences in order to understand the development of human-nature interactions through time and to study the natural, cultural and social values of places and landscapes;
- the conceptualization and musealization of landscape as heritage and the role of 'heritagescapes' in the construction and reproduction of memories and identities;
- the role of heritage practices in the transmission, design and transformation of (hidden) landscapes and the built environment, both past and present;
- the appropriation of and engagement with sites, places, destinations, landscapes, monuments and buildings, and their representation and meaning in distinct cultural contexts.

Series Editors

Prof. dr. Gert-Jan Burgers, Vrije Universiteit Amsterdam

Dr. Linde Egberts, Vrije Universiteit Amsterdam

Rita Hermans, Vrije Universiteit Amsterdam, secretary to the board

Dr. Sjoerd Kluiving, Vrije Universiteit Amsterdam

Dr. Freek Schmidt, Vrije Universiteit Amsterdam

Waddenland Outstanding

*History, Landscape and Cultural Heritage
of the Wadden Sea Region*

*Edited by
Linde Egberts and Meindert Schroor*

Amsterdam University Press

Cover photo: Karsten Reise

Cover design: Coördesign, Leiden

Typesetting: Crius Group, Hulshout

ISBN 978 94 6298 660 2

e-ISBN 978 90 4853 788 4 (pdf)

DOI 10.5117/9789462986602

NUR 682



Creative Commons License CC BY NC ND (<http://creativecommons.org/licenses/by-nc-nd/3.0>)

© All authors / Amsterdam University Press B.V., Amsterdam 2018

Some rights reserved. Without limiting the rights under copyright reserved above, any part of this book may be reproduced, stored in or introduced into a retrieval system, or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording or otherwise).

Contents

Preface	17
---------	----

1 Introduction	19
<i>Linde Egberts, Meindert Schroor and Jos Bazelmans</i>	

Part 1 Setting the scenes

2 Waddenland: Concoction or reality?	31
Defining the Wadden Sea region in a geographical and historical context	
<i>Meindert Schroor</i>	
3 The Wadden Sea region as a cultural landscape	45
History, heritage, management	
<i>Hans Renes</i>	

Part 2 The relationship between natural and cultural heritage

4 Protecting the natural and cultural values of the Wadden Sea coast in the Anthropocene	67
An urgent call for integration	
<i>Jens Enemark, Ludwig Fischer and Karsten Reise</i>	
5 The Wadden Sea: A natural landscape outside the dikes	81
<i>Hans-Ulrich Rösner</i>	
6 The North Frisians and the Wadden Sea	95
<i>Thomas Steensen</i>	

Part 3 Memory, mentality and landscape

- | | | |
|----|--|-----|
| 7 | Victory over the sea | 109 |
| | Dutch diiking techniques in the seventeenth and eighteenth centuries and their impact on Europe's history of mentality | |
| | <i>Ludwig Fischer</i> | |
| 8 | Between National Socialist ideology and resistance | 121 |
| | Interpretations of artworks depicting the Wadden Sea | |
| | <i>Nina Hinrichs</i> | |
| 9 | Living with water in the Tøndermarsk and Gotteskoog | 137 |
| | <i>Anne Marie Overgaard</i> | |
| 10 | Remystifying Frisia | 151 |
| | The 'experience economy' along the Wadden Sea coast | |
| | <i>Goffe Jensma</i> | |
| 11 | Maritime death, memory and landscape | 169 |
| | Examples from the North Sea coast and the islands | |
| | <i>Norbert Fischer</i> | |

Part 4 History and archaeology

- | | | |
|----|--|-----|
| 12 | Waddenland | 183 |
| | From early modern prosperity to relegation to the periphery | |
| | <i>Meindert Schroor</i> | |
| 13 | Local communities and regional economies with a global touch | 199 |
| | Contacts along the Danish Wadden Sea coast in the eighteenth century | |
| | <i>Mette Guldberg</i> | |
| 14 | Was there a maritime culture in Bremen in the nineteenth century? | 211 |
| | Ethno-historical notes on coastal societies | |
| | <i>Jan C. Oberg</i> | |

15	Yeoman capitalism and smallholder liberalism Property rights and social realities of early modern Schleswig marshland societies <i>Carsten Porskrog Rasmussen</i>	227
16	Drowned by the Grote Mandrenke in 1362 New geo-archaeological research on the late medieval trading centre of Rungholt (North Frisia) <i>Hanna Hadler, Dennis Wilken, Tina Wunderlich, Annika Fediuk, Peter Fischer, Michaela Schwardt, Timo Willershäuser, Wolfgang Rabbel and Andreas Vött</i>	239
17	Reinterpreting nature A brief environmental history of trilateral conservation in the Wadden Sea region <i>Anna-Katharina Wöbse and Hans-Peter Ziemek</i>	253

Part 5 Political, economical and social challenges for cultural heritage management

18	Energy transition A challenge for the management of the cultural landscape <i>Ulf Ickerodt and Matthias Maluck</i>	269
19	The Lower Saxon UNESCO Biosphere Reserve Programme Engaging with inhabitants and stakeholders for a sustainable development <i>Peter Süßbeck and Jürgen Rahmel</i>	283
20	Senses of place in the North Frisian Wadden Sea Local consciousness and knowledge for place-based heritage development <i>Martin Döring and Beate Ratter</i>	293
21	The Wadden Sea coast challenged by sea level rise <i>Karsten Reise</i>	305

22	A future for cultural history of the Dutch Wadden region Challenges and policies in a maritime-agricultural landscape <i>Linde Egberts</i>	315
23	Conclusion <i>Linde Egberts and Meindert Schroor</i>	329
	Index	335

List of figures and tables

Figures

Figure 1.1	Wadden Sea World Heritage Site Courtesy of Common Wadden Sea Secretariat	22
Figure 2.1	The Wadden Sea Region, or Waddenland, coincides with the marshes. Courtesy of Cartografisch Bureau JPhZ, Groningen and author	34
Figure 2.2	The Groningen coastal marshland at the Wadden Sea Coast at Noordpolderzijl. The Noordpolder was embanked in 1811. Photo by author	37
Figure 2.3	The Van Deventer provincial map of Friesland (1545-1559), actually showing the other northeastern provinces of the Netherlands (Groningen, Drenthe and Overijssel) as well, very neatly shows the contrast between the densely populated marshes with their numerous villages and an 'empty' hinterland. Courtesy of Tresoar, KvF 51d	38
Figure 3.1	The town of Bolsward (Friesland) originated as two dwelling mounds in a tidal landscape. Upper part: Actueel Hoogtebestand Nederland; lower part: Hisgis, with additions. Cartography by Ton Markus, Faculty of Geosciences, Utrecht University	50
Figure 3.2	The Slachtedijk/Zeedijk at Oosterbierum. A number of stones mark past stages in the heightening of the dike. Data by Sytse Keizer	51

Figure 3.3	Ponds in the coastal marshes of North Friesland (near the village of Hallum). Source: Google Earth	52
Figure 3.4	Gravestones of whalers at St Clemens churchyard on the German island of Amrum (a, b) and at Kirkeby on the Danish island of Rømø (c). Photos by author	54
Figure 3.5	The oldest house on the island of Ameland (Johan Bakkerstraat 7, Hollum) is a so-called 'commandeurs' house. In the early nineteenth century a shed was added, converting the house into a farm. The front gives the date 1516, but it is suggested that the figures are mixed up and different authors give 1561, 1615 or 1651 as the probable building date. Photo by author	55
Figure 3.6	Population and occupations in Terschelling 1900-2000. After Hoekstra et al., 2009. Drawing: by Ton Markus, Faculty of Geosciences, Utrecht University	56
Figure 4.1	Satellite image taken in 2000-2002 and combined to show low tide conditions everywhere. Light clouds seaward of the Wadden and islands show suspended matter. Courtesy of Eurimage, Common Wadden Sea Secretariat & Brockmann Consult	68
Figure 4.2	Aerial view of Hallig Hooge with the island of Pellworm at the horizon. On Hooge, about 100 people live on dwelling mounds (Warften). A salt marsh area of 5.5 km ² is inundated by storm surges which top a 1.2-metre-high stone revetment. Sediment accretion is now lagging behind sea level rise because of the revetment. Photo by Karsten Reise	73
Figure 4.3	Aerial view of former Hallig Ockholm, embanked around 1515. Some houses are still on dwelling mounds (foreground). Sönke-Nissen-Koog (upper left) was embanked in 1926 and a new dike has been fronting Ockholm Koog since 1991. Seaward, a foreland of salt marshes was claimed with brushwood groins and ditching, now discontinued to facilitate natural development. While the foreland is growing with the sea, the polder area is subsiding. Photo by Karsten Reise	74

Figure 5.1	A poster showing the East-Atlantic Flyway of water-birds, with the Wadden Sea being the major hub right in the middle between most of the breeding areas and many of the wintering areas. Courtesy of WWF Germany	83
Figure 5.2	A natural landscape in the Wadden Sea. Photo by author	84
Figure 5.3	A cultural landscape in the Wadden Sea region, in this case old grassland with high natural values. Photo by author	85
Figure 5.4	Edge of marshland on Hallig Hooge showing how with each flooding new sediment layers have been added, allowing the land to grow with the sea. Photo by author	88
Figure 5.5	New cultural landscape with the use of three different renewable energy sources. The surrounding land is intensively used by agriculture and has only very few nature values left, thus it is probably an appropriate choice of location. Photo by author	90
Figure 6.1	Hallig Habel on the horizon. Photo by author	98
Figure 6.2	Wanderers on their way to Hallig Oland. Photo by author	99
Figure 6.3	Catching prawns with a 'Gliep'. Photo by Ernst C. Payns, Nordfriisk Instituut	102
Figure 8.1	Magnus Weidemann, <i>Versunkenes Land</i> , date unknown (before 1939). Published in: Weidemann, M. (1939). <i>Unsere nordische Landschaft</i> , Karlsruhe: Müller, p. 125	123
Figure 8.2	Erna Lendvai Dirksen, <i>Arbeitsdienst bei Dagebüll</i> , date unknown (sometime before 1939). Published in: Lendvai-Dirksen, E. ([ca. 1939]). <i>Das deutsche Volksgesicht</i> . Bayreuth: Gauverlag, p. 38	125
Figure 8.3	Michael Mathias Kiefer, <i>Die Wacht</i> , date unknown. Published in: <i>Große Deutsche Kunstausstellung 1939 im Haus der Deutschen Kunst zu München</i> (1940), Munich, p. 51, Nr. 589	127
Figure 8.4	Franz Radziwill, <i>Eisberge auf der Jade</i> , 1940/41. place unknown	128

Figure 8.5	Caspar David Friedrich, <i>Das Eismeer</i> , 1823/24. Kunsthalle Hamburg	128
Figure 8.6	Max Beckmann, <i>Nordseelandschaft I (Gewitter)</i> , 1937. Private	130
Figure 8.7	Max Beckmann, <i>Nordseelandschaft II (abziehende Wolken)</i> , 1937. Private	130
Figure 8.8	Max Beckmann <i>Stürmische Nordsee (Wangerooze)</i> , <i>Nordseelandschaft III</i> , 1937. Private	131
Figure 8.9	Emil Nolde, <i>Marschlandschaft unter Abendhimmel</i> , in the time period 1938-1945. Nolde-Stiftung Seebüll	132
Figure 8.10	Franz Radziwill, <i>Der Kosmos kann zerstört werden, der Himmel nicht</i> , 1953. Stadtmuseum Oldenburg	133
Figure 9.1	Map of the Tøndermarsk area on both sides of the Danish-German border. Courtesy of the Fisheries and Maritime Museum, Esbjerg	138
Figure 9.2	Fresh water flooding in Møgeltønder Kog, 1913. Photo by H. C. Davidsen	141
Figure 9.3	Building one of the pumping stations in 1928-29 in the Tøndermarsk Photo by A. Martinsen	146
Figure 10.1	The Frisian territory. T. Bosse – Own work, CC BY-SA 3.0, Wikimedia Commons.	155
Figure 10.2	‘Welcome to the experience farm’. Advertisement for an Experience Farm in Lekkum. Courtesy of Burmania Boerderij.	161
Figure 10.3	Frisian freedom as regional branding. Courtesy of Ostfriesische Landschaft	162
Figure 10.4	The Frisian Folkmetal Band Baldrs Draumar. Courtesy of Baldrs Draumar	163
Figure 11.1	Memorial to the flood of 1962 in Hamburg-Wilhelms- burg, near Reiherstieg-Hauptdeich. Photo by author	172
Figure 11.2	Waiting Woman: Sculpture near Brake Harbour. Photo by author	174

- Figure 11.3 Cemetery of the Nameless, Nebel, Island of Amrum.
Photo by Karin Gröwer 177
- Figure 12.1 Map of the Frisian coastal districts between Vlie and
Jade by Pieter van der Keere, 1617.
Courtesy of Tresoar, KvF 59c 187
- Figure 12.2 Brickmaking, a traditional activity in the marshes.
Female workers at a brickworks near Harlingen, about 1900.
Courtesy of Museum Hannemahuis 191
- Figure 12.3 Historical map of Franeker, birds-eye map of Franeker
by Pieter Bast (1598). Note the industrial suburb in the
southwest (upper right) and the ships in the canals.
The university was housed in the quadrangle at #3.
Courtesy of Tresoar KvF 285 194
- Figure 13.1 Towns that imported goods from Holland via Varde/
Hjerting in the eighteenth century.
Customs Accounts Varde, Danish National Archives.
Graphic by Claus Smedegaard 201
- Figure 13.2 Varde's main harbour Hjerting was an important
harbour for importing goods from Holland to large
parts of Jutland. Nevertheless, being a harbour in the
Wadden Sea, there were no built structures. Hjerting in
the 1760s.
Source: Pontoppidan, E. (1769). *Danske Atlas*.V:2.
Copenhagen 203
- Figure 13.3 Loading and unloading on the tidal flats. The ewer Ane
Cathrine unloads hay, Niels M. Gerald, 1901.
Courtesy of Fiskeri- og Søfartsmuseet 207
- Figure 14.1 Bremerhaven 1844. Lithographic print by G. Weinhold
after a sketch by F.W. Kohl.
Focke Museum. Published in Focke Museum Bremen
(ed.) (1922). *Das alte Bremen* (no. 85). Leipzig: Insel 212
- Figure 14.2 Kaufmann G.J. Bechtel. Photography, 1849.
Published in Görgens, H. and A. Löhr, A. (1985). *Bilder
für alle. Bremer Photographie im 19. Jahrhundert*. Focke
Museum, Hefte, 68 (p. 37, no. 26). 216
- Figure 14.3 Sailors in Bremerhaven. Watercolour painting, 1840.
Focke Museum. Published in Schwarzwälder, H. (1977).
*Bremerhaven und seine Vorgängergemeinden. Veröffent-
lichungen des Stadtarchivs Bremerhaven* (p.121, no. 181),
Bremen: Hauschild 218

Figure 16.1 Historical map and historical photos showing remnants of cultivated medieval marshland destroyed by the First Grote Mandrenke in 1362 that are still preserved in the tidal flats around Hallig Südfall, North Frisian Wadden Sea. In the 1920s, cultural traces were widely exposed and mapped by Andreas Busch (a) (Busch 1923). Remains of a two-chambered wooden sluice were discovered southwest of Hallig Südfall (b). At that time, remains of a medieval dike are still traceable over several hundreds of metres in the tidal flats (c). Close to the sluice, several wooden posts found in the course of the dike likely indicate repaired damage (d). Drainage ditches, partly filled with storm surge deposits (Hadler and Vött 2016) are widely preserved in the tidal flats (e, f).

Map modified after Busch (1923); all photographs from unpublished albums of Andreas Busch

242

Figure 16.2 Geophysical survey in the tidal flats southwest of Hallig Südfall within the Rungholt project. Preliminary results of the magnetic prospection (a) are comparable with cultural remains already observed by Busch (b) (Busch 1923). Apart from the track of the dike and supposed re-localization of the two sluices, geophysical investigations revealed two possible channels leading towards a wide, probably basin-like structure outside the medieval dike.

Map modified after Busch (1923)

244

Figure 16.3 Examples of historical and modern harbour-associated tide gates and/or tide locks. Like the Rungholt tide gate, the structure at Bongsiel (North Frisia) was constructed using wooden beams and is not navigable for ships (a). The lateral dimensions of the brick-built (non-navigable) tide gate at Hooksiel is almost identical to the dimensions of the younger Rungholt tide gate (b). Even today, tide-gate-associated harbours are commonly located outside the dike (e.g. Neuharlingersiel) (c). During low tide, the so-called ‘Sielhäfen’ (tide-gate-associated harbours) may fall dry; at Neuhaus/Oste, the harbour is only accessible during high tide (d). The structure of the small harbour at Spieka-Neufeld,

	situated at the landward end of a tidal inlet, resembles the structure found associated with the Rungholt tide gate (e). Photos by A. Busch (a), A. Vött (b), M. Nolte (c), W. Rademacher (d) and H. Mester (e)	247
Figure 17.1	Book cover of Abrahamse et al., <i>Waddenzee</i> , 1977. Photo by Herman Conens, Aerofoto Eelde, courtesy of Waddenvereniging	261
Figure 18.1	The expansion of the renewable energy sector is causing change. As the example of Pellworm shows, traditional farming is shifting towards energy production with wind power, biogas plants and photovoltaics. Agricultural historical cultural landscapes are changing towards the production of energy, and new 'transformation' or 'energy' landscapes are evolving. Courtesy of Archäologisches Landesamt Schleswig-Holstein, Linda Hermannsen	271
Figure 18.2	The erection of wind power plants has repercussions for the landscape that go far beyond the actual location of the plants, as demonstrated by the example in the northern part of the district of Nordfriesland: it is accompanied by the construction of infrastructure, trenches for cables, electric power transformation stations and high-voltage power lines. Courtesy of Archäologisches Landesamt Schleswig-Holstein, Linda Hermannsen	276
Figure 19.1	Synergy of World Nature Heritage, MAB Biosphere Reserve and National Park in the Wadden Sea of Lower Saxony. National Park Wadden Sea Niedersachsen	286
Figure 19.2	Map of the Biosphere Reserve of Lower Saxony. The counties of the coastal area of Lower Saxony are currently used as an operation area for the development of the Biosphere Reserve Wadden Sea of Lower Saxony. National Park Wadden Sea Niedersachsen	289
Figure 22.1	Boundaries of the Core Decision on Planning Wadden Sea. The green line demarcates the Wadden Sea area, whereas the red line marks the area on which the Core Decision is applicable. Source: VROM, 2007	319

Tables

Table 2.1	Area (km ²) and share of the different parts of the Wadden Sea Region (Essex County Council 2010)	33
Table 3.1	The concepts of landscape and nature	46
Table 3.2	A model for relations between sailing/fishing, agriculture and population size	53

Preface

The Wadden Sea is a UNESCO World Heritage Site due to its outstanding universal value as an area of natural beauty. It is situated within the maritime-agricultural Wadden Sea region, which has a settlement history of about 2500 years and as such has extensive experience in coping with the environment, essentially being an interface and transitional area between salt and fresh water as well as between land and sea. The trilateral Wadden Sea region or Waddenland is part of Denmark, Germany and the Netherlands. It includes the Frisian or Wadden Islands, the Wadden Sea itself and the adjacent marshes – endiked as well as salt marshes – on the mainland, which owe their existence to marine sedimentation. Humans have always played an important role in and around the Wadden Sea. For that reason, as well as for safeguarding the World Heritage label, it is imperative that we garner insight into the present and past involvement of the people living in the Wadden Sea region.

This is what motivated the Dutch Waddenacademie (in Leeuwarden) — together with the German Nordfriisk Instituut (in Bredstedt) and the Danish Fiskeri- og Sjøfartsmuseet (in Esbjerg) — to organise the symposium *Waddenland Outstanding* on the history, landscape and cultural heritage of the Wadden Sea region. This 17th symposium of the Waddenacademie took place from 1-3 December 2016 in Husum, North Frisia in Germany and was the first symposium of the Waddenacademie that was held outside the Netherlands. During the symposium, over 30 presentations were delivered to an audience of about 150 participants. The selected contributions included in this book offer a unique overview of the state of the art in cultural-historical research in the Wadden Sea region. By bringing together ongoing work by researchers from a wide span of disciplines and from all three countries involved, this book provides starting points for a more coherent and well-funded dialogue to overcome the nature-culture divide and to contribute to further developing public awareness and more integrated policy and management approaches.

Prof. Jouke van Dijk
Chair of the Waddenacademie

About the author

Prof. Jouke van Dijk is professor of Regional Labour Market Analysis and chair of the Department of Economic Geography at the Faculty of Spatial Sciences of the University of Groningen. He is also President of the Board of the Waddenacademie-KNAW, an institute of the Royal Netherlands Academy of Arts and Sciences that sets the agenda and coordinates research activities in the field of ecology, geology, economics and social sciences in the Wadden area. Van Dijk graduated in 1981 from the Faculty of Economics of the University of Groningen with a degree in regional science. In 1986, he obtained his doctoral degree with his dissertation entitled *Migration and the Labour Market*. From 1981 to 1991, he held several positions in the Department of Spatial Economics at the University of Groningen's Faculty of Economics.

1 Introduction

Linde Egberts, Meindert Schroor and Jos Bazelmans

The Wadden Sea region encompasses the embanked coastal marshes, the islands and the Wadden Sea of Denmark, Germany and the Netherlands. It has an exceptional common history in many respects: naturally, archaeologically, economically, socially and culturally. These histories, however, are not well known, largely because it has never constituted a political unity. Nonetheless, the region shares coastal landscape and cultural heritage features that are unique in the world. Its settlement history of more than 2,000 years is still mirrored in its maritime-agricultural landscape. The approaches to water management and their related societal organisation developed in this region during the last millennium have set worldwide standards for land reclamation. The Wadden Sea itself has been placed on UNESCO's World Heritage List for its outstanding universal value as an area of natural beauty since 2009. In this book, we focus on the *Waddenland* — the mainland marshes and the islands — and address the heritage, landscape and history of this area, which is closely interlinked with that of the Wadden Sea.

The objectives of this book are fourfold. First, we set the scene by describing what exactly is meant by the *Waddenland* and the Wadden Sea region, both apparently obvious but in reality barely perceived adjacencies of the actual Wadden Sea, from a geographical, historical and cultural viewpoint. The book ponders the question of whether and for what reasons the Waddenland could be perceived as a region based on its historical and landscape qualities, despite governmental fragmentation and a strong focus on the natural values of the Wadden Sea as opposed to the land.

Second, the book aims to take stock of the research in this field with a view to promoting further interdisciplinary and transboundary research. As yet, no overview exists of what problems are being studied in ongoing research on the Wadden Sea region in the field of history, landscape and heritage. By bringing together ongoing work by researchers from a wide span of disciplines and from all three countries involved, this book offers

a new state of the art of the knowledge and foci of academic research in these interrelated fields. By doing so, it provides a valuable update and expansion of the scarce literature on the landscape, heritage and history of the Wadden Sea region (see Bazelmans et al. 2012; Common Wadden Sea Secretariat 2007; Frederiksen 2012; Vollmer 2001).

Third, this volume aims to further the integration of research into and management of the cultural and natural landscape heritage. As will become clear from the contributions, the dichotomy between natural and cultural heritage in the perception, research and management of the Wadden Sea region is experienced as an obstacle in developing sustainable strategies for the future of the area. A main problem in this regard is the lack of coherent and applicable knowledge of the historical landscape and common cultural traits to feed transboundary discussions and cooperation between nature conservationists and cultural heritage experts. By offering an overview of recent research on the history, landscape and cultural heritage of the region, this book provides starting points for a more coherent and well-funded dialogue to overcome the nature-culture divide in research as well as in practice.

Last but not least, the book aims to contribute to further developing public awareness and relevant common policy and management approaches. Especially the last part of the book provides critical reflections on the ways in which citizens are engaged and addressed in the planning, development and management of the Wadden Sea region. Moreover, the book's ambition is to develop a stronger degree of coherence and cooperation between the area's currently fragmented management structures.

Cross-cutting themes

This book discusses several themes that bind together the chapters of this book in all their diversity in terms of disciplinary background, uses of concepts, and geographical or temporal scale.

The first two contributions in the book address the Wadden Sea region from a geographical and historical perspective as well as from a cultural viewpoint. The general question is whether there are any common denominators that define this area from a landscape, historical and cultural perspective, apart from the fact that geologically it owes its existence to the sea. Answering this question is a prerequisite for an integrative and inclusive approach to the Wadden Sea within the context of its immediate surrounding islands and mainland. Meindert Schroor argues that the

Wadden Sea landscape is as much man-made as it is natural. He makes a first attempt to define the Waddenland and, based on the history of the Frisians as a foundation, he pleads for an investment in raising public awareness and encouraging the engagement of citizens. He regards this as a prerequisite for the World Heritage label to become a broadly supported success. Hans Renes underscores the need for an integrative approach by focusing on the ways in which societies have interacted with the natural circumstances of the area in the course of their presence in the Wadden area. He argues that regarding the Wadden Sea region as a maritime cultural landscape could help to establish management approaches that integrate both natural and cultural heritage values.

Apart from these introductory chapters, this book centres around four cross-cutting themes:

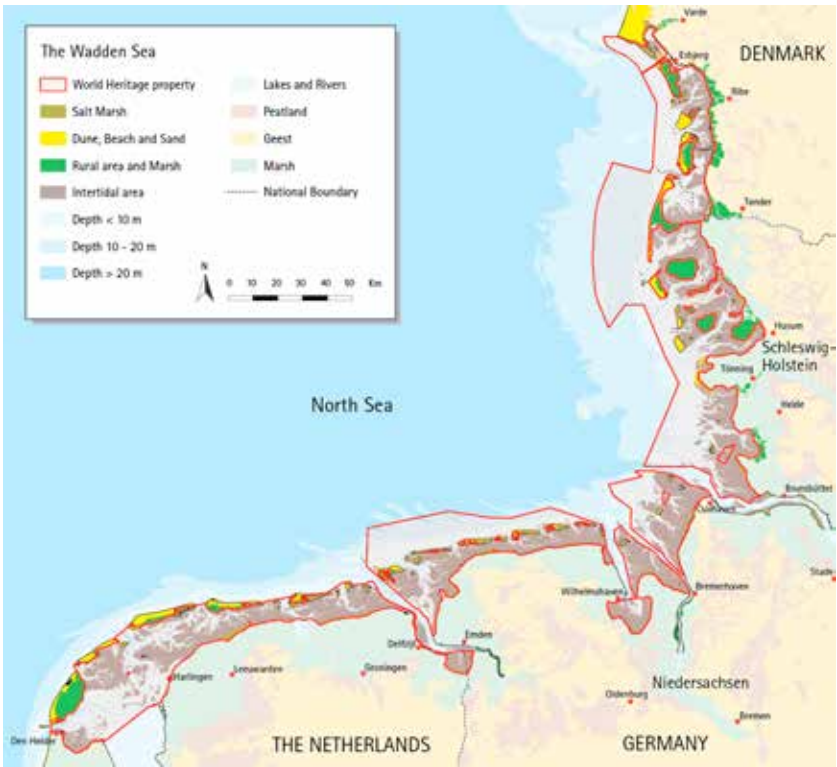
- *nature and culture*: the relationship between natural and cultural heritage;
- *immaterial heritage*: myths, ideologies, and memories through the ages set against the background of reality;
- *the history and archaeology of the Waddenland*: the historical dimension of an agrarian-maritime landscape;
- *cultural heritage management*: political, economic and social challenges.

Nature and culture

In different chapters of this book, the Wadden Sea and Wadden Sea region are either called a natural landscape, a bureaucratic natural landscape, a half-natural or half-cultural landscape, a maritime cultural landscape or a maritime agricultural landscape. In using these different names, the authors stress different aspects of this landscape that together encompass the Wadden Sea and its surrounding mainland and islands. Some of the contributors attempt to find characteristics that are recognisable in the nature, culture, heritage, landscape and governance of the area, while others mainly focus on the process in which the image of this region is constructed.

Some provocatively consider a discussion among researchers on the area's defining characteristics waste of time. However, in one way or another we have to deal with the fact that the area is officially designated by UNESCO as natural heritage based on existing protection regimes at the national and regional levels. The ability to put an exclusive label on something is always an expression of a successful claim by a certain group on the object being labelled. In the case of the Wadden Sea (region), this is the successful

Figure 1.1 Wadden Sea World Heritage Site



Courtesy of Common Wadden Sea Secretariat

claim of nature conservationists and their supporters, who have indeed revolutionised our view on the area since the 1960s. Many contributions to this book can be seen as a response to this: a theme throughout many of the chapters is that the area has been partly or largely given shape by people and has always been intensively used by people. Therefore, the traces of their presence should be regarded as an integral part of the governance and protection of the region. In chapter four, Jens Enemark, Ludwig Fischer and Karsten Reise press for a paradigm shift by arguing that “the old dualism needs to be overcome, foremost at a coast challenged by embracing globalisations and sea level rise of some metres in the Anthropocene”. Hans-Ulrich Rösner argues that the nature-culture dichotomy is mirrored in and outside the dikes and points to a coexistence in which flexibility is a central theme.

At the same time, the nature-culture divide is deeply ingrained institutionally, in politics, in society, in public discourse and, let’s not forget, in science itself. Moreover, the relationship between nature and culture

is not only a pragmatic issue regarding governance and policy, it is always linked to the values regarded most highly by people: core values that guide relationships within society and the relation/exchange between society and the outside world. In our highly diversified society, there is no consensus on this. On the one hand there are people aiming to recreate wilderness to re-establish a proper relationship with 'mother nature'. And on the other hand, others regard themselves as age-old responsible users of what is their *Heimat*. These views are incommensurable. Nevertheless, Martin Döring and Beate Ratter consider how the place-based values of citizens could be integrated into the region's heritage management and governance based on their empirical research in North Frisia, Germany.

Thomas Steensen addresses the same area and the relationship between its inhabitants and its cultural landscape, arguing that a stronger recognition of cultural heritage in the context of the World Heritage status of the larger region would do more justice to the connection of the inhabitants to the Wadden Sea area in the past as well as in the present.

Immaterial heritage

An important aspect of this book is the focus on the immaterial or intangible heritage of the Wadden Sea region. The formation of identities — for example in literary writing, music, myth, ritual, mass media or the visual arts — should be studied in the complex interplay of economic, social, political and cultural relationships and processes. The contributors carefully illustrate how people in the area — both in the past and the present — define themselves in relationship to significant others, in relationship to the sea and its inherent dangers, or in relationship to nature as defined in the many religious or intellectual traditions of early modern times up until today. Ludwig Fischer explains the impact that the Dutch experience and perceptions of diking, for a large part implemented in the Wadden Sea region, have had on Europe's history of mentality. The Wadden Sea area provided useful imagery for Nazi ideology, as Nina Hinrichs shows on the basis of an analysis of paintings from the National Socialist period. Goffe Jensma shifts our attention to the present and reveals how much modern society and technology are moulding older Frisian ways of myth formation. These older myths are often constructed around language and history and are now transformed into myths based on tangible, material heritage. This allows them to fit well into a new reality of global tourism as well as the need in modern humans for a vague, mythical past.

The Wadden Sea region is perforce associated with salt water. That fresh water was as much a constituting factor is proved by Anne Marie Overgaard in her analysis of two coastal marshes on both sides of the Danish-German border. Norbert Fischer investigates the ultimate fate linked to the rages of the sea: drowning and death by shipping disasters and floods and their impact on the landscape of the Wadden Sea coast and the islands.

As is shown, no self-definition of a group can be taken for granted. In every instance, one should look not only for the dominant perspective but also for subversive opponent 'voices'. Taken together, these contributions address the construction of a region, a landscape and a shared past through means that range from the instalment of monuments along the coast, the appropriation of older myths in newer forms, monumental works of writing, or politically charged works of art. Academic research could also have been among the subjects of study in this part of the book. In this respect, we need to be aware of how we as researchers contribute to processes of identity formation ourselves.

History and archaeology

The historical and archaeological research on the Waddenland shows that the area shares many sometimes internationally unique characteristics as regards its physical geography. Throughout its millennia-long history of human presence, the area has been intermediate and somewhat peripheral, but it has also known prosperous phases, as Meindert Schroor argues. This is in stark contrast with the present situation, in which most of Waddenland belongs to the poorer parts of Denmark, Germany and the Netherlands. We should, however, be cautious about thinking of the area as a coherent whole in a socio-cultural sense, as expressed for example in the new label 'Waddenland'. In the past, the ways of life of many communities shared common traits, the building of dwelling mounds being of course the most outstanding and unique example. Similar means of livelihood developed in the marshes and were related in similar ways to the labour demands of a changing world system. In early modern times, as Mette Guldberg argues, this system had Amsterdam and later Hamburg at its centre, in some ways tying both commercial metropolises to the Wadden Sea region. The maritime culture coinciding with the regional is also treated by Jan C. Oberg, who focuses on nineteenth-century Bremen from an ethno-historical angle. Older aspects of the maritime character of the Wadden Sea region are reflected in the chapter by Hanna Hadler et al. on the archaeological

traces of the late-medieval trading centre of Rungholt, which was submerged in 1362. The rural side of the Wadden Sea region is addressed by Carsten Porskrog Rasmussen, proving how early modernity could have entirely different impacts even across short distances, especially in North Frisia. Anna-Katharina Wöbse and Hans-Peter Ziemek analyse the way in which a trilateral conservation was initiated after conservationists in the three countries discovered the outstanding values of the Wadden Sea as a region of ecological importance and natural beauty.

Phenomena and developments as described in the contributions do not necessarily make the area stand out as compared with other peripheral coastal or wetland areas in Europe. Nor should we be blind to the strong variation within the trilateral region as regards the economic and societal makeup of the many communities. Some areas that were neglected by science altogether — submerged landscapes in North Friesland, for example, or the peat areas in Dutch Friesland — are now getting the attention they deserve, and this is leading to quite spectacular new insights into the history of habitation. Nevertheless, international comparison is very much needed in the study of the Wadden Sea region.

Management of cultural heritage

We seem to be confronted with a strong combination of an ever-expanding number of challenges to natural and cultural heritage management, many of which are already visible today but will be more influential in the future. There is no need to create or raise a sense of urgency regarding the issues we should address, for example sea level rise and climate change adaptation, the *Energiewende* (energy transition), and demographic and economic stagnation or decline. However, we seem to be in the middle of an uncertain and unfinished paradigm shift with regard to natural and cultural heritage management: from one that is driven by research-based knowledge to one that incorporates 'sense of place' and public participation, from institutionalised approaches that involve only specialists and professionals to more informal, networked, interactive approaches that involve stakeholders and society too.

With his background in ecology, Karsten Reise addresses coastal zone management with regards to future sea level rises. He argues that new approaches are necessary to adapt to the rise in sea levels, some of which go back to historical strategies of living with water rather than fighting it, such as living on dwelling mounds. Peter Südbek and Jürgen Rahmel turn

our attention to the management of heritage in Lower Saxony (Germany), expressing their wish for more integrated heritage management strategies for this particular part of the Wadden Sea region. They propose a three-step process to implement a transition zone around the biosphere reserve, which may do more justice to the current and historical presence of people. A similar regional approach is adopted by Ulf Ickerodt and Matthias Maluck, who discuss Germany's energy transition, or *Energiewende*, and the challenges it raises for sustainable cultural heritage management in Schleswig-Holstein, Germany. Linde Egberts also focuses on heritage management in one particular area within the Wadden Sea region. She analyses the changing discourse on cultural heritage and history in the current and future Dutch spatial planning policies and comes to the conclusion that the increasingly developmental perspective could open up new opportunities for including cultural and landscape values in national spatial planning.

Discussion

With the term *Waddenland*, the title of the book captures the editors' ambition to address the landscape aspects of the Wadden Sea area, which figure less prominently in conservationists' discourses than the ecological qualities of the sea. But by doing so, the title itself becomes a recognition of the dichotomy between nature and culture that its authors so dearly want to overcome. Another divide that the book aims to address is the fragmentation in research and especially governance of the region. But whereas the contributions in this book contain concrete analyses on how to improve this situation at the national and regional levels, concrete measures for solving the issue on a trilateral level remain virtually invisible.

All in all, the book does not quite succeed in practising exactly what it preaches. Stemming from the wish to formulate cultural historical narratives on the Wadden Sea region, the authors nonetheless end up confirming the practice and discourse that is dominant in nature preservation: the Wadden Sea is the realm of ecosystems and geological heritage, while the land in between and around it is *grosso modo* not part of the protected zone. By entitling this book *Waddenland*, the contributors are almost suggesting that they agree with this dichotomy: they accept that the sea is nature and seem to argue that the land should then be addressed in cultural terms. Nevertheless, this book is intended to be an important step in the direction of opening up discourses on nature conservation by offering culturally rich counternarratives.

References

- Bazelmans, J., Meier, D., Nieuwhof, A., Spek, T., & Vos, P. (2012). Understanding the cultural historical value of the wadden sea region: The co-evolution of environment and society in the Wadden Sea Area in the Holocene up until early modern times (11,700 BC-1800 AD): An outline. *Ocean & Coastal Management*, 68, 114-126.
- Common Wadden Sea Secretariat. (2007). *LANCEWADPlan: The Wadden Sea Region: A living historic landscape*. Wilhelmshaven: Common Wadden Sea Secretariat.
- Vollmer, M. (2001). *LANCEWAD: Landscape and cultural heritage in the wadden sea region: Project report*. Wilhelmshaven: Common Wadden Sea Secretariat.

Acknowledgements

The idea for this book emerged during the symposium *Waddenland Outstanding* on the history, landscape and cultural heritage of the Wadden Sea region held in December 2016 in Husum in North Frisia, Germany. The scientific meeting was organised by the Dutch Waddenacademie (in Leeuwarden), the German Nordfriisk Instituut (in Bredstedt) and the Danish Fisheries and Maritime Museum (in Esbjerg). We thank the organisers and contributors to the symposium for the groundwork they laid by putting the subject on the agenda, bringing together so many experts, and fuelling discussion and knowledge exchange. We also would like to thank Werner Krauss of the Artec Center for Sustainability Research of the University of Bremen for providing relevant feedback on an earlier version of this manuscript.

About the authors

Dr. Linde Egberts is an assistant professor in the interdisciplinary field of heritage studies at Vrije Universiteit Amsterdam. She studied human geography and cultural history at Utrecht University and at Vrije Universiteit Amsterdam, where she defended her PhD thesis, *Chosen Legacies*, in 2015. Her research interests lie in heritage, identity, regions, landscape, and the interplay of tourism and identity. As a member of the research institute CLUE+, she currently focuses on heritage in coastal landscapes in Europe. She combines her research endeavours with lecturing and coordinating the master's programme in heritage studies at Vrije Universiteit Amsterdam.

Dr. Meindert Schroor is a freelance geographer and historian at his own Bureau Varenius in Leeuwarden. Active since 1976 in researching and writing on the landscape, urban history, demography, water management and cartography of Fryslân (Friesland) and Groningen, he has developed into the most prolific researcher and writer on cultural history in the Northern Netherlands. Schroor received his PhD in 2014 on the demographic and economic history of the town of Groningen and is editor-in-chief of the *New Encyclopaedia of Fryslân* (published on paper in 2016). Since 2014, he has been a member of the board of the Waddenacademie responsible for the cultural history and society portfolio.

Prof. Jos Bazelmans studied cultural anthropology and received his PhD with honours in 1996 with his dissertation entitled *By Weapons Made Worthy. Lords, Retainers and Their Relationship in Beowulf*. From 1995 to 2000, he worked as a postdoctoral researcher at the University of Amsterdam and the Rijksuniversiteit Groningen. He supervised the Frisia project, a study of the social-political development of tribal communities in the Dutch-Frisian coastal area in the Roman era and the early Middle Ages. This engagement resulted in several critical reflections of the political geography and development of the early medieval Frisian kingdom. Towards the end of the 1990s, he played an active role in encouraging research into the dwelling mounds in the northern Netherlands. Since 2000, Bazelmans has had various coordinating positions at the National Service for Archaeological Heritage (Rijksdienst voor het Oudheidkundig Bodemonderzoek, ROB), the National Service for Archaeology, Cultural Landscape and Built Heritage (Rijksdienst voor Archaeologie, Cultuurlandschap en Monumenten, RACM) and the National Agency for Cultural Heritage (Rijksdienst voor het Cultureel Erfgoed, RCE). Since 2003, Bazelmans has been endowed professor of monument conservation. From 2009 to 2014, Bazelmans was a member of the board of the Waddenacademie.

Part 1

Setting the scenes

2 Waddenland: Concoction or reality?

Defining the Wadden Sea region in a geographical and historical context

Meindert Schroor

Abstract

The Waddenland is a rather new concept not findable on any map at all. At first sight, this is the obvious outcome of a wanting collective cultural identity and administrative context, the lowest common denominator being a somewhat loose, fairly undefined Frisian identity associated with the Wadden Islands (Frisian Islands) and three-quarters of the mainland marshes. Waddenland refers to an area where physical-geographical criteria are applied and that at best shares some weak socio-cultural traits but has never been a political unit. Since the 1960s, ecologists have put the Wadden Sea on the map, resulting in its inscription as a World Heritage Site in 2009 and 2014. In order to turn this honourable assignment into a successful label, the involvement of the population of the islands as well as the mainland marshes is a prerequisite. Assuming that the Wadden Sea area is as much a man-made landscape as it is a natural landscape is a first and essential step in fostering awareness.

Keywords: cultural identity, political/administrative context, Frisian identity, man-made landscape

Waddenland outstanding is the central theme of this volume. At first sight, ‘outstanding’ seems to be an appropriate distinction for a land of particular quality, beauty or peculiarity. This at least is what one would expect from a part of the earth — the Wadden Sea — that has been designated by UNESCO as a World Heritage Site. Outstanding, however, is a rather ambiguous concept. It also means unsettled and unresolved, and from a socio-cultural point of view this at least seems to be nearer to the truth than the initial

idea evoked by the term. The reason for that is quite simple: at the moment no such Waddenland, let alone a Wadden identity, actually exists. Moreover the subject matter is refractory and complex, like the area itself. This treatise is a first attempt to identify which elements are essential in defining the Waddenland. The various contributions in this volume elaborate on the host of cultural phenomena emphasising both the complexity of the Wadden Sea and its adjacencies (the Waddenland). At the same time, they confirm the connections between the Wadden Sea and the land surrounding it. In this contribution I will nonetheless go into this matter both as a scholar and as an inhabitant of the Wadden Sea area and try to explain the reasons for this longing for identity as well as the necessity of creating one, for it is the inhabitants of the islands and the marshes that are the necessary as well as first and foremost stakeholders in maintaining and developing the natural and cultural values of the area.

Setting the physical scene

I begin with some facts and figures. The Wadden Sea region comprises the existing as well as former tidal flats, inland sea and islands fringing the southern North Sea shore of mainland Western Europe. This coastal land is an international region extending over three countries: the Netherlands, the Federal Republic of Germany, and Denmark. The area includes the West, East and North Frisian Islands — including the Danish Islands of Fanø, Rømø and Mandø (Aagesen 1952-1953) — the shallow Wadden Sea itself and the overwhelmingly embanked marshlands (or ‘polders’) on the mainland. Its outer limits are the Hondsbossche Zeewering near the Dutch village of Petten in the southwest ($52^{\circ} 46' \text{ N}$, $4^{\circ} 39' \text{ E}$) and the Danish Blåvands Huk ($55^{\circ} 34' \text{ N}$, $8^{\circ} 4' \text{ E}$) at the northeastern end. Seaward, the 10-metre depth contour in the North Sea can, more or less, be considered its boundary (Hofstede 2005). Inland, the Wadden Sea region's limits are determined by the extent of the clay districts (marshes), resulting in a rather irregular physical boundary (Schroor 2008). In general the marshes, deposited by the sea, are at their broadest in the west, whilst their inward extent reaches farthest along the banks of the rivers Ems, Weser, Elbe and Eider. The coast is at least as capricious: deeply penetrating bays like Dollard and Jade and estuaries are punctuated by points, Pleistocene headlands and peninsulas of the mainland. In all, this region measures some 22,000 square kilometres, almost equally divided between land (48.5 percent) and water (51.5 percent). The German part covers about 63 percent (64 percent of the marshes) of

the total Wadden Sea region, with the Dutch and Danish parts comprising about 30 percent (33 percent of the marshes) and 7 percent (2.5 percent of the marshes) respectively.

Table 2.1 Area (km²) and share of the different parts of the Wadden Sea Region (Essex County Council 2010)

	Denmark	Schleswig-Holstein	Lower Saxony	Netherlands	Total
<i>Wadden Sea</i>	1,100	4,410	2,914	2,915	11,339 (51.5%)
<i>Frisian Islands</i>	190	334	193*	400	1,117 (5%)
<i>Marshes</i>	247	2,078	4,051	3,179	9,555 (43.5%)
Total area	1,537 (7%)	6,822 (31%)	7,158 (32.5%)	6,494 (29.5%)	22,011

* incl. Scharhörn and Neuwerk belonging to the Hamburg part of the Wadden Sea

All the landforms in the Wadden Sea region have essentially developed in a marine or tidal environment. The influence of fresh water systems in forming the marshlands has been marginal. This is true for the islands as well as for the sand banks and tidal flats, the inlets between the islands, the estuaries, the salt marshes and the embanked marshes or polderlands. In contrast to other deltaic and river-derived coastal areas, the tides are the main generators of sediment transport, resulting in a decrease in soil texture (from sand to clay) landward instead of seaward as is the case in freshwater-dominated coastal environments.

From the perspective of landscape evolution, the marshes — *de klei, klaai, die Marschen, marsk* — are an integral part of the Wadden Sea region. However, by defining them this way we create an area according to physical-geographical criteria that in fact has never been a political or even a socio-cultural unit, although there are quite a few interesting similarities in this area. In fact, this volume on the history, landscape and cultural heritage of the Wadden Sea region is, to be honest, merely one of the outcomes of a growing awareness from the 1960s onward of the ecological uniqueness of the Wadden Sea. However, this awakening ecological consciousness did not come without friction among the local populations, and it has been made clear that the success of the World Heritage label is dependent on the active involvement of the population of the Wadden Sea islands and the bordering mainland. Although a Waddenland as such does not exist at present, the area as such has certain common characteristics, often with a long history, that will be elaborated upon in the following paragraphs.

the invisible, treacherous shallows. In the seventh century, the name Frisia reappears in what are now the coastal parts of the Netherlands, expanding in the eastern direction in Carolingian and Ottonian times as colonists from Frisia west of the Weser settled in Wursten and even on the western shores of Schleswig-Holstein. In the High Middle Ages, Frisian traders formed a link between the Frankish and Anglo-Saxon world on the one hand and pagan Scandinavia on the other, with Dorestad and Hedeby as their main trading hubs. The coastal lands between Vlie and Weser at least seem to have been one of the most flourishing and populated parts of Western Europe. The need for security in providing merchandise like hides and skins, wool, grain and the alimentary needs of a growing population, and last but not least the rising threat of inland water draining from the cultivated bogs most certainly gave impetus to the embanking of the marshes between 900 and 1200. Another main catalyst for the great reclamations of the adjacent inland peatlands was, moreover, population growth (De Langen 1992; Knol 1993). Protected from the unpredictable, albeit frequent, jeopardy of floods, the marsh people concentrated on dairy and arable farming, brickmaking, peat-cutting, fowling and fishing, inland shipping and the services that went with them. During the Late Middle Ages, this flat alluvial coastland behind the dikes developed into a host of free farming communities, separated from each other by estuaries, bays and bogs, though essentially having a similar legal order. Along with the decline of power of their formal rulers (counts and bishops) under the so-called Frisian freedom, this legal system more or less relapsed into a world of feud and vendetta. Penalty registers show that every punishment could be redeemed by money. This legal system dissolved with the introduction of Roman law by central rulers from the fifteenth century onwards. What remained, however, was an appreciation of the wealth of the marshes and a distinct feeling of superiority towards their hinterlands (Van Lengén 2003).

Moreover, the idea of freedom and individualism prevailed in the marshes until the end of the nineteenth century, a time when this coastal fringe started losing ground to fast-developing industrial and commercial centres along the Rhine and Ruhr. The marshland Frisians not only kept a sense of superiority towards the seasonal day labourers and textile vendors from Lower Saxony, they actually adopted the same attitude towards their fellow Frisians on the Geest (*wâldtsjers*, living in areas with poor sandy soils) (Knottnerus 1992). Wealth and freedom remained a strong ideological fundament for the indigenous yeoman farmer as well as farm labourer. Far into the modern age, texts (especially in Germany) stressed the tenacity, perseverance and obstinate love of freedom of marsh people seemingly induced by a prolonged battle with the sea (Schrepfer 1935).

Aloofness from the sea

Without doubt, the extreme fertility of the marshes and the prospects of increasing the cultivated land by reclamation from the sea, in combination with the colonisation of the boggy fringes, have contributed to this 'splendid moral isolation', a sort of offshoot mentality from being the successful colonisers. The contrast between the marshes and their hinterland still stands out on most on sixteenth and seventeenth-century maps, from the Van Deventer-map of Friesland (1545) onwards, where one sees the proliferation of villages and towns in the marshes compared to the near-empty boggy and sandy hinterlands. Moreover, the marshes were not only less maritime but also less rural than many researchers would have us believe. This at least can be derived from the importance of inland shipping and trade as well as the processing of local raw materials such as grain, rapeseed, flax and dairy as well as salt, peat, clay and shells. West of the Elbe, inland shipping facilitated a strong interconnectivity between the adjoining bogs and the marshes as well as within the marshes, and the same more or less seems to have been the case north of the Elbe river. Towns like Harlingen, Sneek, Leeuwarden, Dokkum, Appingedam and Emden had their 'woud' or 'wold' alleys, waterways, gates, roads and suburbs.

As already stated, most of the inhabitants of the marshes, with the exception of a few coastal communities (not to mention the islands), have since the closing of the land by seawalls some one millennium ago turned their backs on the sea. This is already perceptible at first glance. The actual Waddenland lacks great commercial ports like Rotterdam, Amsterdam, Bremen or Hamburg. The main existing ports are in fact new creations — some with a naval background (e.g. Den Helder 1780; Wilhelmshaven 1853), some plainly commercial, albeit with underlying political motives (Bremerhaven 1827; Cuxhaven 1885; Eemshaven 1973; Esbjerg 1868). It is also clear that the few historical ports of any importance there are, like Harlingen and Emden, mostly lived with their backs turned on the land. An extreme, albeit perhaps artificial, example: since the nineteenth century, real Harlingen people (*ouwe seunen*, as they call themselves) still mockingly entertain the idea of their harbour town being a suburb of London (Schroor 2015)!

By the same token, the Frisian aloofness from the sea reached its zenith in the eighteenth century. In three so-called Deductions to the States-General in The Hague (1718, 1770 and 1786), the Estates of Friesland, aiming to reduce the Frisian share in the general taxation of the Dutch Republic, stressed the agrarian character of their province. They also referred to its non-participation in the 'Great Navigation', in contrast to Holland and

Figure 2.2 The Groningen coastal marshland at the Wadden Sea Coast at Noordpolderzijk. The Noordpolder was embanked in 1811.

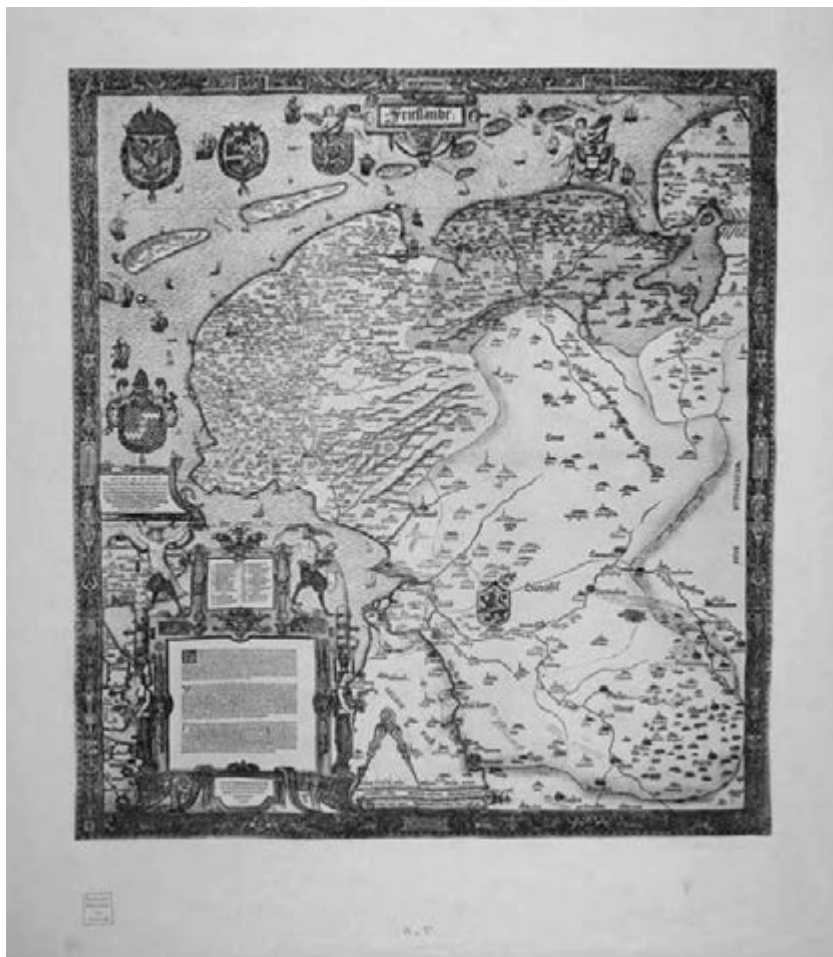


Photo by author

Zeeland, which made the already high financial burden of coastal defence all the more heavy for them. Coastal dwellers thus mostly lived with their backs to the sea. For Amsterdam merchants sailing their own ships or Amsterdam shipowners as employers, merchant shipping was important. But it was west of the Weser where crews from the lowlands moors and Fen Colonies (apart from the islands and some coastal places) manned, built and owned the merchant ships more than their marshland counterparts (Blondel 1897; Gerding 1992).

A pre-war German textbook on geography pointed out the contrast between the marshes as quiet and introverted rural countryside ('stiltes in sich gekehrtes Bauerland') as opposed to the islands with their beach tourists, lured by the wash of the waves, the salt water, their stimulating atmosphere and the broad sandy beaches (Schrepfer 1935). Before World War II, tourism had already lifted the impoverished German Wadden islands towards a higher level of prosperity, and this gradually reached the Dutch and Danish Wadden islands by the 1950s, although there are differences that remain. Whereas even the mainland of the German Wadden Sea region now successfully participates in Wadden Sea tourism, Dutch authorities have so far been unable to sell the Wadden marshlands as a serious tourist destination, let alone to promote beach tourism there, one or two artificial beaches at best being frequented by locals while the Dutch marshlands remain aloof.

Figure 2.3 The Van Deventer provincial map of Friesland (1545-1559), actually showing the other northeastern provinces of the Netherlands (Groningen, Drenthe and Overijssel) as well, very neatly shows the contrast between the densely populated marshes with their numerous villages and an 'empty' hinterland.



Courtesy of Tresoar, KvF 51d

Political and administrative fragmentation

Another major aspect of the Wadden Sea area is its traditional administrative and political fragmentation. Although this has diminished, the Wadden Sea region is still divided among three Dutch provinces, two German

federal states (or, strictly speaking, four if one includes the 'Wadden parts' of Bremen and Hamburg) and two Danish counties (Amter: Sønderjylland and Ribe, today the Syddanmark region). Moving from the southwest to the northeast almost four centuries ago, in 1660, the Waddenland formed part of the County of Holland, the Seignury of Friesland, the Seignury of Groningen & Ommelanden (all three belonging to the Dutch Republic), the County of East-Friesland (1464-1744, then Prussia), the Seignury of Jever (Anhalt-Zerbst), the County of Oldenburg, the Duchy of Bremen, Ritzebüttel as part of Hamburg and Land Hadeln as part of the Duchy of Lauenburg, the Danish Duchies of Holstein and Schleswig (partly under Gottorp, partly under the King of Denmark) and last but not least Amt Riberhuser in Denmark itself. One doesn't need much imagination to conclude that the spatial form of the Waddenland — *literally* outstretched and shallow (that is, not far land-inward) — hasn't been much help in overcoming this fragmentation, while at the same time this makes the different parts of the Waddenland prone to annexation by larger political and administrative bodies. History has proven that becoming part of larger political entities with their centres elsewhere distracted attention away from the area itself (e.g. in education and learning). What, then, are the similarities? Similarities are essential to create if not a Wadden identity, at least a sense of common interest among the residents of the marshes in respect of the Wadden Sea's World Heritage status.

The lack of historical knowledge about their own environment, however, leads to a Waddenland that, apart from the islands, is heavily undervalued by large parts of the population and not considered as essentially one geographical region: an archipelago of islands in the sea and embanked marshy peninsulas on the mainland. If we consider a shared identity as essential to conserving, developing and enhancing the World Heritage label as is the case from the viewpoint of natural uniqueness and coherence, we have to look for similarities and we must increase knowledge and awareness.

Similarities and awareness

In the previous section I have already touched on some of these similarities, especially in contrast to the hinterland, such as the fertility of the soil, the flat open aspect, the aquatic nature of the area and its relative wealth and populous character expressed in a wealth of parishes through the ages. Nature, however, is not an isolated phenomenon. To these mostly natural characteristics can be added more cultural resemblances: character traits

like the agrarian-maritime, the interactive (salt, fresh and brackish) environment, an early modern society and as such even a precursor to the European economic and social crisis. These are all aspects that will be reviewed in this volume. The fact that, until now, similarities like these have remained unrecognised can perhaps be seen nowhere better than in the entirely divergent perceptions on mainland coastal tourism in the three countries. The Dutch and Danish mainland Wadden Sea coasts are devoid of tourists compared to their German counterparts. In the first two essentially maritime nations, these muddy coasts are considered no substitute for the attractive and sandy alternatives directly on the North Sea, south of Den Helder as well as north of Esbjerg. In the Netherlands, the Wadden mainland coast also experiences competition from the IJsselmeer coasts and the inland lakes of Friesland, Overijssel and Holland-Utrecht.

Increasing awareness seems a difficult task. And yet it is just around the corner. A few examples from my own (West Frisian or Fryslân) part of the Waddenland will do. The main street in Leeuwarden (Nieuwestad) has, for more than a century at least, been the most frequented and well-known shopping street in the Dutch province of Fryslân. Few, if any, of the thousands of shoppers and passers-by will realise that the canal bordered by the shops is in fact the remnant of an old salt marsh creek. Linking such a familiar phenomenon to the Waddenland story can help increase landscape awareness (and awareness in general) about the link between the marshes and the area behind the dikes, which has been considered a totally different part of the world for so long. Another example: in *Tussen Kunst en Kitsch*, the popular Dutch version of the *Antiques Roadshow*, seventeenth to nineteenth-century silver, glasswork, ceramics and terracotta tiles are among the most common objects brought in to be appraised. When such objects are seen on the programme, one out of three of them turn out to have been fabricated in Fryslân and Groningen. (One of the participating appraisers, Joseph Estié, told me that for anything from Fryslân the price of the object 'immediately doubles'.) Without explanation, most people see no immediate connection between the origin of these mostly luxury objects and the former prosperity and occupational diversification of the land where they were made. In the meantime, eye-openers like these can be useful in enhancing knowledge and pride in an area plagued so long by neglect, defeatism and relative economic stagnation. They will undoubtedly be complemented by German and Danish examples, not to mention countless appealing individuals of world fame varying from Willem Barendsz, Abel Tasman, Peter Stuyvesant, Jacob Riis, Theodor Mommsen, Mata Hari, Alma

Tadema and Theodor Storm as well as companies such as Ecco Shoes or Maersk that have their roots in or near the Wadden Sea region (Bredebro and Ballum/Rømø, respectively).

Connecting Frisians

It has become clear that apart from its already recognised natural beauty which is attracting visitors from elsewhere to the actual Wadden Sea and Wadden islands, it will be mainly cultural amenities with which the mainland will have to sell itself to tourists. A prerequisite for developing cultural historical tourism is, in addition to identification with the area by its population, knowledge of its qualities and history and ways in which to organise and promote this kind of tourism. There is a lot to be gained, especially if some viable form of cooperation gets under way, by trilateral routes and programmes, preferably more elaborate than earlier efforts such as the Green Coast Road leading through Denmark, Germany and the Netherlands (Goodall et al. 1988; Van Gelder 2013). But connecting the components of the Waddenland will be a tough process, as evidenced for example by the mediocre rail connection between the two most important urban centres in the Dutch part of Waddenland — Leeuwarden and Groningen. Worse still, and perhaps more significant, the rail connection between Groningen and Bremen is poor. Repairing the Friesenbrücke (Frisian railway bridge) across the Ems between Weener and Leer, which was severely damaged in December 2015, seems literally a bridge too far and is obviously not on any political agenda, certainly not at the national levels. Its reconstruction is currently scheduled for 2021! Connecting the Waddenland must start with physical interventions like these that, by literally connecting people, have a symbolic importance of virtually immeasurable value.

Only from the Frisian angle (e.g. the Interfrisian Council) does a more or less coherent view of cultural cohesion exist, more so in Germany than in the Netherlands. There the town of Groningen acts as an interfering factor, whereas Fryslân is, as its inhabitants see it (but in the eyes of most people in the Netherlands, too), more or less a country in itself. In Germany, where Frisians occupy two-thirds of the Wadden Sea coast, they have remained *das Volk am Meer* (Kurowski 1987). The Frisian influence has even extended into the Danish part of the Wadden Sea (Rasmussen 1973). Compared to its size, the Netherlands has much more sea and coastline than Germany, while at the same time the Dutch maritime narrative is spun around its sometimes spectacular global trading and naval history, based around Holland and

Amsterdam. So the Dutch Frisians do not have a quasi-monopoly on the Wadden Sea. That should not dissuade us from looking into the viability of the Frisian ticket as a metaphor for the Waddenland, considering that the Frisian identity includes much more than the Frisian language, which is often viewed by other Dutch people with something between compassion and contempt.

Scientific, symbolic and mobilising

In the preceding paragraphs I have elaborated on the geographical, historical, economic and cultural similarities of the Waddenland that have been mostly overlooked and neglected up to now. These qualities have to be known and recognised by its population in order to create a viable environment for the success of the Wadden Sea as a World Heritage Site as well as for fostering tourism on a cultural historical base. That trilateral cooperation on the Wadden Sea proper is a viable and stimulating concept has been proven by natural scientists and conservationists over the past fifty years, though in this it was preceded by the development of tourism. The development of Waddenland awareness, necessary to create ownership among the local populations of the World Heritage designation, is an absolute prerequisite for its success and for the management of the ecological, economic, social and cultural values that go with it. However, economic decline in the form of wide-scale, prolonged unemployment and exclusion from and degradation of social services jeopardise this kind of support from the local population. The inhabitants of the Wadden Sea region still identify more with their nation, federal state or province than with the Waddenland, with the possible exception of the Frisian or Wadden islands. The trilateral LANCEWAD project (1999-2001) has delivered an initial inventory of the cultural historical elements and structures in the Wadden Sea region and has brought to the forefront a number of cultural connections and similarities. Nevertheless, the humanities have a considerable research backlog compared with the natural sciences. In enhancing awareness, the cultural history of the Wadden Sea region in all its variation has to be presented as a coherent, comprehensive story. This must be a consistent story based on scientific research of the area but at the same time one that is symbolic and mobilising: it must have the effect of increasing knowledge and restoring pride in the area and its history. It is time for the 'amnesia' of the Waddenland inhabitants about their age-old prosperous character — the result of economic and demographic stagnation and political marginalisation since 1850 — to come to an end.

Assuming that the Wadden Sea area is as much a man-made landscape as it is a natural landscape is an essential step in fostering awareness. In this, we can learn a lot from the experience that our 'ecological' colleagues have built up during the past half century in their efforts to put protection of the Wadden Sea on the agenda.

References

- Aagesen, A. (1952-1963). A geographical study on the population of the Danish Northfrisian Islands. *Geografisk Tidsskrift* 52. Retrieved from <https://tidsskrift.dk/index.php/geografisktidsskrift/article/view/10338/19580>
- Blondel, G. (1897). *Études sur les populations Rurales de l'Allemagne et la crise agraire*. Paris: Librairie de la Société du Recueil Général des Lois et des Arrêts.
- De Langen, G.J. (1992). *Middeleeuws Friesland*. Groningen: Wolters-Noordhoff/Forsten.
- Essex County Council Historical Environment Branch (2010). *Comparative Analysis of the Landscape and Cultural History of the Wadden Sea Region*. Chelmsford: Essex County Council.
- Gerding, M.A.W. (1992). 'Turfschipperij in Noord-Nederland en Noord-Duitsland 1600-1940. Een vergelijking'. In Knottnerus, O.S., Brood, P., Deeters, W. and Van Lengen, H. (eds.), *Rondom Eems en Dollard/ Rund um Ems und Dollart. Historische verkenningen in het grensgebied van Noordoost-Nederland en Noordwest-Duitsland/Historische Erkundungen im Grenzgebiet der Nordostniederlande und Nordwestdeutschlands*. Groningen/Leer: REGIO Projekt/Schuster Verlag, 370-395.
- Goodall, B. and Ashworth, G. (1988). *Marketing in the tourism industry. The promotion of destination regions*. Abingdon: Routledge.
- Hofstede, J. (2005). 'Danish-German-Dutch Wadden Environments.' In E.A. Koster (ed.), *The Physical Geography of Western Europe*. Oxford: Oxford University Press, 185-206.
- Knol, E. (1993). *De Noordnederlandse kustlanden in de vroege middeleeuwen*. (Doctoral Dissertaton Rijksuniversiteit Groningen).
- Knottnerus, O.S. (1992). 'Räume und Raumbeziehungen im Ems Dollart Gebiet.' In Knottnerus, O.S., Brood, P., Deeters, W. and Van Lengen H. (eds.), *Rondom Eems en Dollard/ Rund um Ems und Dollart. Historische verkenningen in het grensgebied van Noordoost-Nederland en Noordwest-Duitsland/Historische Erkundungen im Grenzgebiet der Nordostniederlande und Nordwestdeutschlands*. Groningen/Leer: REGIO Projekt/Schuster Verlag, 11-42.
- Kurowski, F. (1987). *Die Friesen. Das Volk am Meer*. Berg/Starnberger See: Manfred Pawlak Verlag.

- Rasmussen, A.H. (1973). Frisiske kulturelementer. En introduktion og forløbig oversigt. *Folk og Kultur. Arbog for Dansk Etnologi og Folkemindevidevidenskab*, 75-85.
- Schrepfer, H. (1935). *Landeskunde von Deutschland. Band I Der Nordwesten*. Leipzig/Berlin: B.G. Teubner.
- Schroor, M. (2008). *Waddenzee. Waddenland. Historische verkenningen rond de geografische identiteit en begrenzing van het internationale waddengebied*. Leeuwarden: Raad voor de Wadden.
- Schroor, M. (2015). *Harlingen, Geschiedenis van de Friese havenstad*. Leeuwarden: Afûk.
- Van Gelder, J. (2013). *Groene Kustweg. Vrijheid. Blijheid*. Groningen: Groenste Media.
- Van Lengen, H. (2003). *Der Friesische Freiheit des Mittelalters – Leben und Legende*. Aurich: Ostfriesische Landschaft.

About the author

Dr. Meindert Schroor is a freelance geographer and historian at his own Bureau Varenius in Leeuwarden. Active since 1976 in researching and writing on the landscape, urban history, demography, water management and cartography of Fryslân (Friesland) and Groningen, he has developed into the most prolific researcher and writer on cultural history in the Northern Netherlands. Schroor received his PhD in 2014 on the demographic and economic history of the town of Groningen and is editor-in-chief of the *New Encyclopaedia of Fryslân* (published on paper in 2016). Since 2014, he has been a member of the board of the Waddenacademie responsible for the cultural history and society portfolio.

3 The Wadden Sea region as a cultural landscape

History, heritage, management

Hans Renes

Abstract

The Wadden Sea region is a typical example of what is often called a 'maritime cultural landscape', a landscape that is shaped by the forces of nature and culture and also a landscape in which the livelihood of the population is built on the use of resources from the land as well as from the sea. The author looks at the complex relation between nature and society in the Wadden Sea region in the past as well as in the present. For the sustainable management of this region, an integrated approach combining developments in nature and society is necessary. The artificial border between nature and culture introduced by some ecologists and authorities (the most notorious example being the inscription of the Wadden Sea as a World Heritage Site) is a source of conflict and complicates an integral management of the Wadden Sea region. The author is convinced that the Wadden Sea should be seen as a cultural landscape.

Keywords: Wadden Sea region, maritime cultural landscape, nature and culture, integrated approach

For most people, the first association with the Wadden Sea is 'nature'. But it is nature that has for many centuries been used by people. Around the turn of the century, a perception map of the Wadden Sea region was made, showing a collection of people's associations with specific places in the Wadden Sea region (Van Marrewijk 2001: 169). Many of these memories are related to silence, space, vegetation or the weather, but we also find

references to human activities and to the history of people and landscapes. The stories of the Wadden are about nature as well as landscape.

The main aim of this paper is to stress the importance of seeing the Wadden Sea region as a cultural landscape. Therefore, I start with some introductory remarks on the concepts of – and interrelations between – nature and landscape. In the second part, I look at the history of the Wadden Sea region, focusing on the land-water interface. I finish with a few remarks on the Wadden Sea as a World Heritage Site.

Nature and landscape

Both landscape and nature are problematic concepts (Table 1). Landscape was originally almost synonymous with ‘region’, including the management and the managing organizations. This territorial meaning of landscape is still retained in the names of such organizations, for example the *Ostfriesische Landschaft*, as well as in definitions of landscapes used by landscape ecologists. During the Renaissance, another meaning of the word landscape developed when painters started to name their depictions of rural scenes ‘landscapes’. From this, the visual meaning of the word landscape developed. Definitions of landscape differ by region. In Germany, for example, the original regional meaning is still very much alive, whereas in the UK the word landscape, which had disappeared during the Middle Ages, was reintroduced by painters from the Low Countries and therefore has a strongly visual meaning (Olwig, 2002).

Table 3.1 The concepts of landscape and nature

	Landscape	Nature
Etymology	1 Region 2 Scenery	1 Character (human) 2 That which develops without human intervention
Meaning in landscape ecology	Regional system	Regional system
Meaning among general public	Scenery	Scenery (‘nature’ is often presented as ‘landscape’)
Meaning in politics and governance	Scenery, ‘visual environmental quality’	Area with designation ‘nature’

Nature is usually described as that which exists without human interference. This concept of nature ranges from individual plants or animals to complex

ecosystems. However, nature is often presented as landscape (take the many movies, books and leaflets in which nature is presented in beautiful pictures of what I would call landscapes). Hence, for many people the two are almost synonymous. In government policies, in which nature is always connected to concrete territories, regions with limited human influence are often called 'nature' as opposed to 'landscapes' that have a strong man-made character.

Both nature and landscape are broad, holistic concepts. Only in politics are nature and landscape completely disconnected. Nature is regionalised, as it is often used as a label for protected reserves. Landscape is usually seen as a quality connected to land that has other, often agrarian, primary functions. In some cases, landscapes are also regionalised, usually in processes in which man-made landscapes receive some kind of protection.

One problem with landscapes is often the formulation of aims. For a long time, landscape protection was backward-looking and only reactive, making it difficult to cooperate with more future-oriented landscape architects. During the early years of the present century, the heritage sector, which included historic landscapes, moved from a defensive attitude towards a more open, offensive approach (Janssen et al. 2017). The aim is no longer to protect those landscape objects that have survived twentieth-century modernisations (making the period around 1900 a point of reference) but to use historic landscapes as an asset in the making of future landscapes. But even then it is difficult to formulate landscape goals; only designers take steps in this direction. For nature, such a normative approach is much easier, for there is an assumption that a larger biodiversity is always better and that every landscape will improve by erasing or minimising human influence. Attempts to create more or less natural ecosystems are often labelled 'new nature' or 'new wilderness', sometimes with the claim of reconstructing 'complete' or 'pristine' nature.

This concept of a new wilderness has two major problems. The first is the unjustified claim that wilderness can exist that is pristine and free of human modification. This is certainly not true for the Wadden Sea, which is heavily used for fishing, recreational activities, etc. Moreover, the borders of the Wadden Sea are defined by man-made structures, such as dikes. Even the Wadden Sea itself is partly man-made. During the early Middle Ages, behind the coastal dunes a huge fenland existed, which was partly inhabited and reclaimed. Remains of this landscape are still visible on the well-known map by Christian 'sGrooten, made in the middle of the sixteenth century but probably containing some information from the fifteenth century. However, by that time huge areas had already disappeared when the sea made good use of the land subsidence in the reclaimed fenlands. Using a

term coined by Bruno Latour, Olwig (2006) concludes that the Wadden Sea as pure nature is a constructed fact.

The second problem with the wilderness concept is the exclusion of people. The definitions for national parks, as they are still proclaimed by the International Union for the Conservation of Nature (IUCN), have elsewhere – in the past in the United States (for example in Yellowstone and Yosemite) and even still today in parts of Africa – led to human rights violations where groups of people that had managed the area for thousands of years and that were responsible for many of the values were evicted in the name of nature. They were reframed as poachers, which can best be defined as hunters belonging to the wrong social class. Wilderness is an idea rather than a biophysical reality.

It is interesting to look at the physical limits of the Wadden Sea as World Heritage Site (see figure 1.1). The Wadden Sea is surrounded by relatively densely populated areas. The official map of the Wadden Sea World Heritage Site shows how the designers of the nomination must have worked for days and nights drawing lines that excluded almost every individual inhabitant from the World Heritage area. The exclusion of people is a great recipe for problems. This became clear when Schleswig-Holstein designated a national park in the Wadden Sea region and, again, in the preparations for the nomination of the Wadden Sea as a natural UNESCO site (Krauss 2005; see also Van der Aa et al. 2004).

The Wadden Sea region as a maritime cultural landscape

It makes much more sense to see the Wadden Sea region as a cultural landscape that is shaped and reshaped by nature as well as by human society (Lotze et al. 2005). It is best seen as a maritime cultural landscape, as described by the archaeologist Christer Westerdahl (1992). Terminology such as (maritime) cultural landscape provides us with a framework within which the relations between nature and culture and between land and water can be understood.

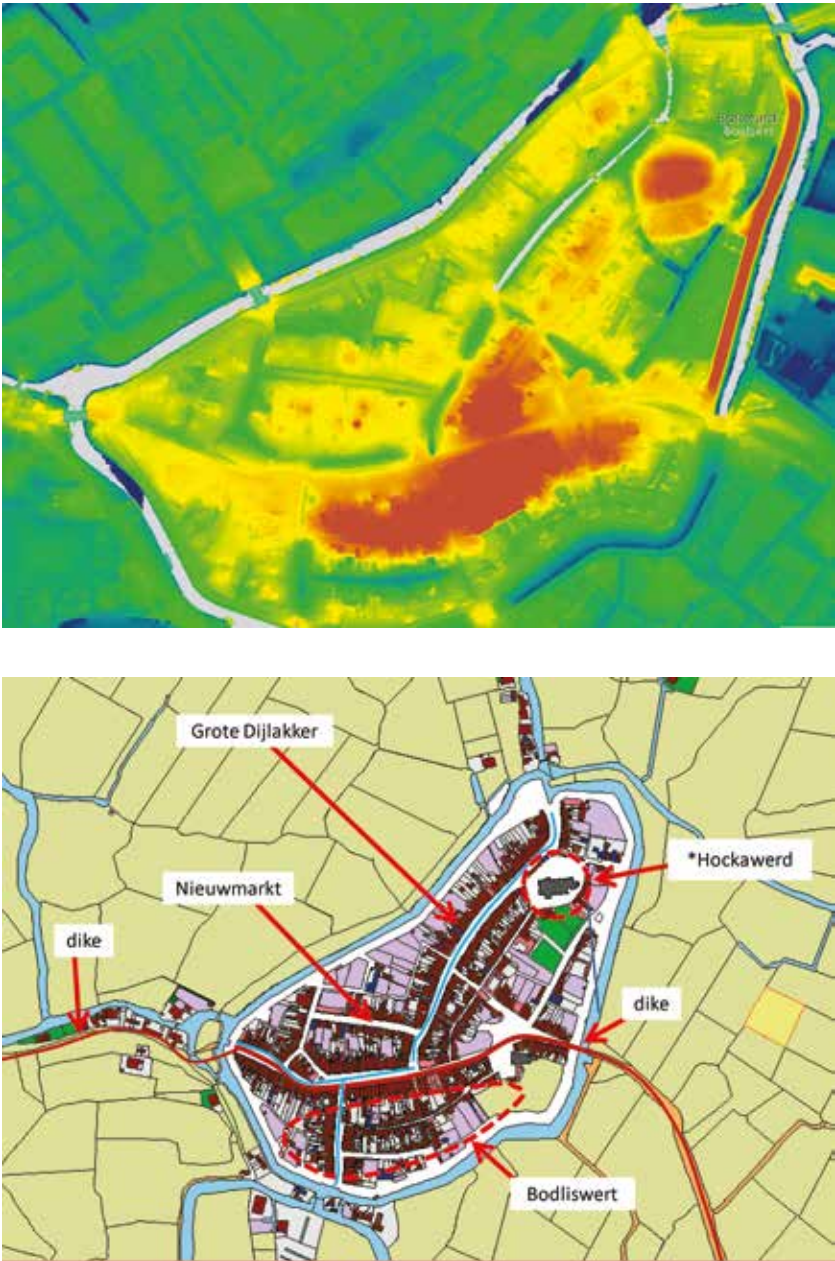
To a large degree, the border between sea and land is the result of human activities. From the Iron Age to the High Middle Ages, land and sea were not strictly divided and borders between land and sea were gradual and dynamic. Such an ‘amphibious environment’ (Knottnerus 2004: 153) can nowadays still be felt in the Halligen. Seen from the water, the Halligen show themselves as a number of dwelling mounds that rise above the flat land or, in times of extremely high water levels, from the sea.

Until the High Middle Ages, the coastal marshes as well as much of the islands were inundated with high tides — in some cases twice a day, in other cases only with extreme tides or storms. Typical for this land was a population that combined agriculture with trade and related activities. Some dwelling mounds seem to have been mainly occupied by traders and hand-workers, but most dwelling mounds must have had non-agrarian activities. Almost every dwelling mound had direct access to sea and to shipping. Agriculture consisted mainly of animal husbandry, although some arable production was possible. The focus on animal husbandry intensified the dependence on and exchange with other regions. The most quoted author on the Wadden Sea, the Roman writer Pliny the Younger, describes the region as marginal and as inhabited by poor and desperate people. But in reality, during the First Millennium this was a region with an extremely high population density that was certainly not poor given the standards of the period (Knol 2005).

Already during the times of Pliny the First, dikes were built, probably to extend the growing season for crops. But the situation changed dramatically during the High Middle Ages, when dikes were built all along the coast. The dwelling mounds lost their direct contact with the sea and with the maritime shipping routes, and gradually sea trade became concentrated in a small number of places on the coast. The process can be seen in the small town of Bolsward (figure 3.1), which was built around two old dwelling mounds, the original *Bodilwerth*, a settlement of craftsmen and traders, and the original *Hockwerd*, an agricultural settlement as well as an old religious centre with the mother church of the whole region of Westergo (Kullberg 1992). After the building of the dike, the Bodilwerth remained connected to the sea, but in the following centuries this connection disappeared as a result of land reclamations. After that, the town of Bolsward built a new position as a marketplace for the dairy farmers in the region. The canal through the town, the Grote Dijlakker, shows houses from the sixteenth to eighteenth centuries that in their building style betray connections to Amsterdam.

The example shows that while dike-building made a significant difference, it did not completely disconnect land and water. Moreover, most of the medieval dikes were low and vulnerable, and some were so low that it was still possible to improve the land by floods that brought fertile silt. This changed in many parts of the Wadden Sea region only during the sixteenth and seventeenth centuries, when an orientation towards the Amsterdam market led to a growing emphasis on grain production and, hence, better dikes. During this period, new farms with large storage capacities, the so-called *Gulphaus* type, were built along the coast from Holland to Denmark (Nitz 1989).

Figure 3.1 The town of Bolsward (Friesland) originated as two dwelling mounds in a tidal landscape. Upper part: Actueel Hoogtebestand Nederland; lower part: Hisgis, with additions.



Cartography by Ton Markus, Faculty of Geosciences, Utrecht University

Figure 3.2 The Slachtedijk/Zeedijk at Oosterbierum. A number of stones mark past stages in the heightening of the dike.



Data by Sytse Keizer

Outside the dikes, the situation remained dynamic. With every storm, parts of the fenlands eroded, and in the course of the Middle Ages most of the fen settlements were lost. Partly this loss was man-induced, as reclamations of fenlands led to oxidation of peat and hence to the subsidence of land. The earliest settlements in the western Wadden Sea, which we find in sources from the eighth and ninth centuries by place names ending with 'more', have all disappeared. In parts of the Wadden Sea, the loss of land continued in early modern or even modern times, although in most parts, the loss and accretion of land were more or less in balance during the post-medieval period. Many of the islands lost land on one side and grew on the other. But lost as well as new lands were part of human society. The lost lands became fishing grounds and some of the lost settlements had an afterlife in folk tales and other types of collective memory. The new lands were used as pasture and often, when silted up high enough, were surrounded by dikes and transformed into arable land.

The dikes have been raised over time, making them into ever sharper borders (figure 3.2; De Raad 1993; Hosper et al. 2001: 37). The Wadden Sea region is nowadays characterised by a sharp division between land and

Figure 3.3 Ponds in the coastal marshes of North Friesland (near the village of Hallum).



Source: Google Earth

sea. But still, the division is not absolute. The sea is visited and exploited from the land. Farmers still use the saltmarshes as pasture. In the marshes on the Frisian coast, a number of ponds, surrounded by small dikes, show the use of this floodplain as pasture (figure 3.3; Vroom 2013). In the past, this use of pasture was earlier or later followed by the building of a sea dike and reclamation with the aim of creating arable land. The last of such plans, in the marshes shown on figure 3.3, was abolished after much discussion in 1979 by the national government with the words: potatoes are good for Friesland, but the Wadden Sea is more beautiful (De Raad 1993: 122-124). The last large reclamation project was the Lauwersmeer, a former sea inlet that was cut off from the Wadden Sea in 1969 but was never used for its original purposes: villages were not built, agriculture took up only a small part, and the use of the land as military training ground stopped after the end of the Cold War. Now its main function is 'nature', but for that, the present situation is inferior to the earlier tidal lands. Now, plans are being made to reintroduce tidal movements in the area, softening the border between land and sea (Programma Rijke Waddenzee 2017).

But there is more. In the marshes as well as on the islands, the combination of agriculture and shipping remained a characteristic feature throughout the early modern and modern periods. The Groningen geographer Gerrit Smit (1971) described the island of Terschelling as an agrarian-maritime economy. Islands in particular have a history of economic and demographic fluctuations. Agriculture was combined with shipping and fishing (Table 3.2). The activities on water and on land influenced each other, and this relation often reflected economic fluctuations in the wider world (Renes 2014). When both types of activities became problematic, temporary or permanent emigration took place. In periods in which shipping and fishing prospered, agriculture may have received less attention, as there was sufficient income to buy goods from elsewhere. On many islands in Europe, a substantial part of the male population was at sea for part of the year, leaving the women, together with children and elderly people, responsible for agriculture. This could mean that a substantial proportion of the women never left the island, whereas the men travelled the whole world – a gender-specific polarisations in experiences (Renes 2014). However, in periods in which maritime activities were less successful, the whole island population fell back on agriculture and islands became more self-supporting.

Table 3.2 A model for relations between sailing/fishing, agriculture and population size

Sailing / fishing	Agriculture	
	Good	Bad
Good	Population growth, very intensive land use (mainly women and elderly people)	Neglect of agriculture
Bad	Population growth, very intensive land use	Emigration

The Dutch Wadden islands, for example, had important fishing fleets during the late Middle Ages but afterwards lost them as a result of competition from the mainland. The islanders continued fishing but on ships owned by mainlanders (Smit 1971: 2). During the seventeenth and eighteenth centuries, many men from the Wadden islands sailed on Amsterdam or Hamburg-owned whaling fleets (Brouwer 1936: 11; Kelm 2008: 132). The sailors not only came from the Dutch Wadden Sea islands but also from the German and Danish parts of the Wadden Sea. In 1720, a quarter of the total population of Nordmarsch was engaged in whaling (Riecken 1982: 30). In many churchyards, as in Amrum and Rømø, gravestones refer to the importance of whaling and shipping (figure 3.4).

Figure 3.4 Gravestones of whalers at St Clemens churchyard on the German island of Amrum (a, b) and at Kirkeby on the Danish island of Rømø (c).



Photos by author

All these sectors were highly fluctuating. The role of agriculture on the Wadden islands was different for each island. Many of the larger islands had a strong agricultural basis. Examples include Texel, Terschelling and Ameland. But also agriculture experienced fluctuations. In periods of high population pressure, islands could show forms of agrarian involution (a term coined by Geertz 1968), leading to an extreme fragmentation of land ownership. Systems of partible inheritance – which emerged in situations where paucity had to be shared and that could result in an extreme fragmentation of land ownership – were typical for many islands.

The Dutch Wadden island of Ameland may be seen as an example of these processes (Abrahamse et al. 2005). During the seventeenth century, people from Ameland sailed along the North Sea coasts to France and to the Baltic. Between 1650 and 1750, some 80 ships with a captain from Ameland passed the sound between Denmark and Sweden each year (Faber 1972: 603). In addition, sailors from Ameland and other Wadden Islands formed an important part of the crews of seventeenth and eighteenth-century whaling ships, and when the Wadden Island fleets disappeared from the middle of the eighteenth century, the islanders kept working in whaling ships. When whaling declined during the eighteenth century, they moved

Figure 3.5 The oldest house on the island of Ameland (Johan Bakkerstraat 7, Hollum) is a so-called ‘commandeurs’ house. In the early nineteenth century a shed was added, converting the house into a farm. The front gives the date 1516, but it is suggested that the figures are mixed up and different authors give 1561, 1615 or 1651 as the probable building date.

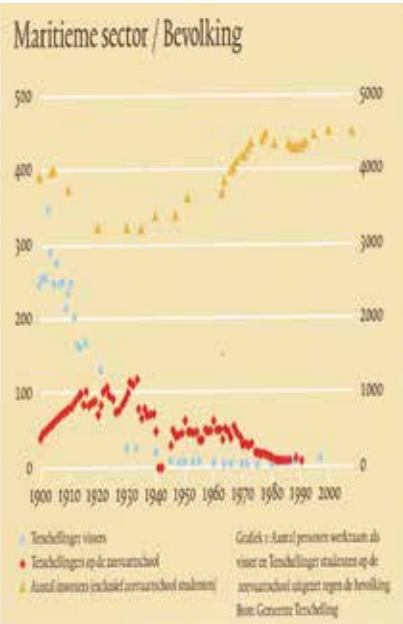
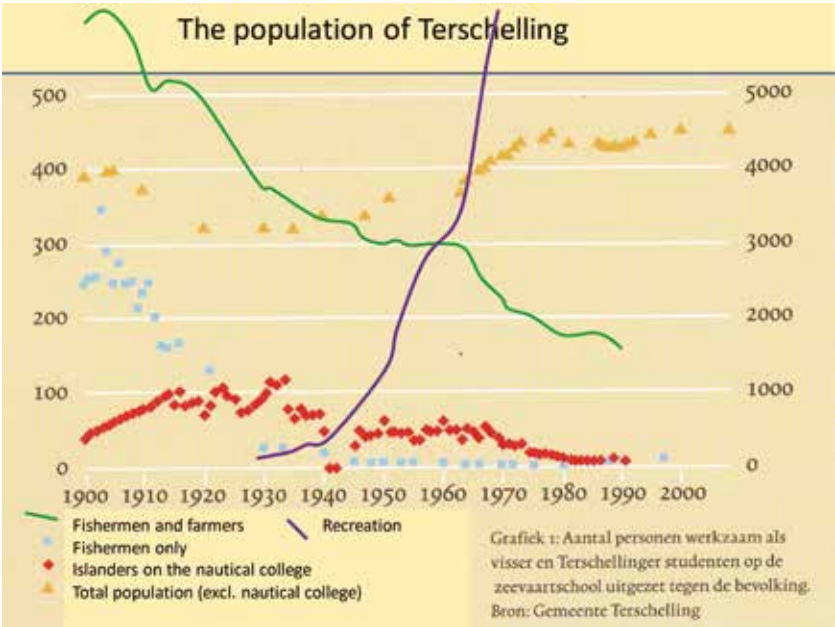


Photo by author

into long-distance shipping. During the nineteenth century, however, many sailors on Ameland, especially the most prosperous, left for the mainland, and agriculture regained a more dominant position.

A number of what are known as ‘commanders’ houses’ (*commandeur* was the local term for the captain of a whaling ship) were converted into farms at this time (figure 3.5; Brouwer 1936: 11). However, the extreme fragmentation of land, which was not a problem while agriculture was a side activity, gradually came to be seen as problematic. In 1885, 140 out of a total of 219 farmers used less than 5 hectare and only 15 used more than 10 hectare (although using rights on the commons should be added to this figure; Brouwer 1936: 35, 54-58). Originally, the hay meadows were periodically redistributed so that every farmer received a number of dispersed fields. When the periodic redistribution was abolished, the most recent allocations were made permanent, and thereafter partible inheritance caused further fragmentation (Brouwer 1936: 23). In the village of Ballum, for example, when voluntary land consolidation was carried out (the first one in the Netherlands), as many as

Figure 3.6 Population and occupations in Terschelling 1900-2000.



After Hoekstra et al., 2009. Drawing: by Ton Markus, Faculty of Geosciences, Utrecht University

2,000 fields with an average size of 0.085 hectares were owned by only 119 people (Groeneveld 1985: 34-41; Brouwer 1936: 89-91). In the neighbouring village of Hollum, the situation was even worse, with 272 owners owning 4,897 pieces of land, with arable land and hay meadows being particularly fragmented. Consolidation was delayed until 1925, when the new national Land Consolidation Law made it possible to overrule the four remaining opponents (Groeneveld 1985: 39; Brouwer 1936: 91-94).

During the twentieth century, the position of farming on the islands became ever more difficult. One reason was the limited possibility to enlarge the scale of agriculture, but changes in transport also played a role. In the past, islands could be competitive, as transport by boat was cheaper and easier than over the bad inland roads. Nowadays, land transport is faster and cheaper. Island agriculture can survive by specialisations, for example in organic agriculture, or by additional activities, for example in recreation. Many farmers derive part of their income from operating camp sites, renting out rooms and selling farm products. Between 1978 and 1995, the Wadden island of Ameland transported its milk to the mainland by a pipeline, the first of its kind; it is now used for a fibre optic connection, which is another way to lessen the isolation of island inhabitants (Ameland Info 2018).

Some data on Terschelling show that large fluctuations in the economy and in employment continued to occur in the twentieth century (figure 3.6). Fishing and shipping survived, but the number of people working in these sectors dwindled. The same was true for farming. Particularly during the second half of the twentieth century, recreation was the main growth sector. On many European islands, the success of the leisure industry has been the main factor behind the growth or decline of population numbers (Renes 2014). As this graph shows, Terschelling has been successful in building up its tourism industry and the population is still growing.

Tourist facilities are concentrated on the islands, but tourism again is an activity that connects land with water. Just like well-trained ecologists, many tourists concentrate on places where different biotopes meet, such as the beaches where the land meets the sea. Many other tourists do sailing trips on the Wadden Sea, and they see visits to the coast or the islands as an additional attraction. Also 'wad hiking' (Dutch: *wadlopen*) — walking between the mainland and one of the islands at low tide — is a rather popular activity. And let us not forget: people who visit islands are not looking for land overseas, they are looking for an island.

So, throughout history, the marshes and islands have been characterised by a mixed economy. Although the relative importance of each of the economic pillars fluctuated, the system as a whole remained intact until the

present day. The fluctuations, particularly in agriculture, had yet another effect. Periods of high pressure resulted in ‘pressure cooker landscapes’ with very high densities of landscape features. Periods of agrarian and demographic crises often meant a certain degree of neglect of the landscape, in which many features were preserved. The combination has made many islands into important heritage ensembles (Renes 2014).

Nature, landscape and the future of the Wadden Sea region

This brings me to the final part of this chapter: the present and future management of the Wadden Sea. The region combines high heritage values (Bazelmans et al. 2012) with high ecological values. There is a tendency to look to the land for heritage and to the sea (and the dunes) for nature (Egberts 2017). However, the historical overview above has demonstrated that the history of the Wadden Sea region started with an extremely soft, flexible and permeable land-water interface. Even during the last 1,000 years, when ever higher and stronger dikes became a borderline between the land and the sea, the interaction between the two continued and in fact was — and still is — not only a barrier but also a connection between the land and the sea, for example where farmers use the marshes on the seaside and where people climb the dike to view the sea.

It is governments and politicians in particular as well as ecologists that uphold the Cartesian division of the Wadden Sea area into land and water and into the domains of man and nature. In this context, it may be useful to look again at the Wadden Sea’s World Heritage status. The World Heritage List started in 1972, and from the start a strict division between natural and cultural sites was used. Two different NGOs were put in charge of the reviewing process: the natural sites were reviewed by the International Union for the Conservation of Nature (IUCN) and the cultural nominations by the International Commission on Monuments and Sites (ICOMOS). The weakness of this system became clear when landscapes were nominated. In 1987, the United Kingdom proposed the Lake District as a mixed (nature and culture) site. ICOMOS agreed, but for IUCN the region was insufficiently ‘natural’. In 1989, the Lake District was therefore proposed as a cultural site, based on a Neolithic site in Langdale. In response, ICOMOS concluded that the finds would justify inscription for that specific valley, but not for the region as a whole. Then, during one of its periodic bouts of isolationism, the UK withdrew from UNESCO, only to return again in 1997. In the meantime, the Lake District case had given rise to intensive discussions within UNESCO,

leading to the 1992 reformulation of the category of 'cultural landscapes' (Droste et al. 1995; Rössler 2006). In addition to the existing definition of designed landscapes, two new categories were added: 'continuous' (or 'living') landscapes and 'associative landscapes'. The first meant that typical man-made landscapes, which surpass the distinction between nature and culture and which by definition included continuous change, could now be added to the list. Even more innovative was the addition of 'associative landscapes', which were usually regarded as natural or semi-natural but were part of human society as a result of their significance for the regional communities. In all, UNESCO turned the failure of the Lake District proposal into a new vision of the nature-culture interface in landscapes. The new category of cultural landscapes — as reflections of the life and history of people and for their aesthetic qualities — became a successful category. The United Kingdom prepared a new nomination for the Lake District as a cultural landscape, at the same time adding the new argument that the Lake District was associated with the early interest in mountain landscapes by the poet William Wordsworth and the founders of the National Trust. The Lake District was inscribed on the World Heritage List in 2017.

In my opinion, redefining the Wadden Sea region (including coasts and islands) as a cultural landscape is a necessary step towards the future management of the region. This will certainly be opposed by the main advocates of the framing of the region as 'nature' — i.e. many (but not all) ecologists and governments/politicians. A case in point is the Dutch Ministry of Economic Affairs, Agriculture and Innovation, which took over nature conservation from the abolished Ministry of Agriculture, Nature and Food Quality in 2010. The former Ministry had a long-standing reputation for being the political arm of the so-called Green Front, the cooperation of farmers' organizations, politicians and researchers that made the Netherlands into a successful agricultural producer. Within this lobby, the Ministry of Agriculture was notorious for defending the short-term interests of the large agrarian producers. In 1983, the Ministry annexed its main opponent, the nature conservation department of the Ministry of Culture, Recreation and Welfare. Within the new Ministry, an elegant and workable situation was created in which farmers got a free hand in 90 percent of the rural areas and the remaining 10 percent was designated as 'nature', which was gradually bought from the farmers and turned into new wilderness.

The main victim of this historical compromise was landscape, which could not be traded off in hectares but would influence both the agricultural lands and the new wilderness. As a result, the ministry overlooked landscape policies almost completely, although it never admitted to doing

so. It is a policy that has caused unsolved problems, for example in the Dutch contributions to the World Heritage List. Quite a few of the Dutch sites on the list are typical cultural landscapes but were not allowed to be listed as such. For example, the former island of Schokland is listed as an archaeological site, the Beemster drained lake is listed as a work of art, and the ring of inundation zones with additional fortresses around Amsterdam is mainly defined as a collection of fortresses with surrounding lands.

In this political context, it is understandable that the Dutch Ministry of Agriculture was a key player in the lobby to list the Wadden Sea as a natural site only. But it was precisely the nomination of a natural site, together with the fundamentalist definitions used by the IUCN, which led to a model in which nature — which is mainly the Wadden Sea *sensu stricto* — is separated from the cultural landscapes of the coasts and the islands. Although many economic activities still take place in the Wadden Sea, such as gas and salt exploration, there seems to be very little interest in the basic unity of the region.

Still, there are developments in the opposite direction. Dynamic coastal management is beginning to replace the earlier macho-management of ever higher and straighter dunes by a softer border (Dynamisch Kustbeheer 2017). Another recent example are the plans of the village of Holwerd in Friesland to dig a canal to the Wadden Sea and thereby restore its connection to the sea that was lost with the medieval building of the sea dikes (Holwerd aan Zee 2017). The plan's main aim is economic stimulus, but it is also very symbolic for a village that is trying to overcome its centuries-long isolation from the sea.

The future of the Wadden Sea is dependent on human society. Predictions by the Delta Commission (Samen werken 2008) are that the Wadden Sea will survive the first half of the twenty-first century but may be inundated as a result of the sea level rise in the second half of this century. So in the longer term, the survival of the characteristic Wadden landscape is at stake. In my opinion, no policy will be successful without the involvement of the population of the region. The integrating and dynamic concept of cultural landscape could be a major contribution to the discussions.

References

- Aa, B.J.M. van der, P.D. Groote and P.P.P. Huigen (2004). World heritage as NIMBY? The case of the Dutch part of the Wadden Sea. *Current Issues in Tourism*, 9, 291-302.
- Abrahamse, J., M. Bemelman and M. Hillinga (eds.) (2005). *Wadden, verhalend landschap*. Baarn/Wilhelmshaven: Tirion/Common Wadden Sea Secretariat.

- Ameland Info (2018). Kabelbuis. Retrieved January 24, 2018 from: <https://www.ameland.info/tag/damverbinding/>
- Bazelmans, J. D. Meier, A. Nieuwhof, T. Spek and P. Vos (2012). Understanding the cultural historical value of the Wadden Sea Region. The co-evolution of environment and society in the Wadden Sea area in the Holocene up until early modern times (11,700 BC – 1800 AD). An outline. *Ocean and Coastal Management*, 68, 114-26.
- Brouwer, D.A. (1936). *Ameland; Een sociaal-geografische studie van een Waddeneiland*. Amsterdam: Paris.
- Donraadt, W.C. (1972). *Zij waren er bij; Eilanders op de walvisvaart*. Schiermonnikoog.
- Droste, B. von, H. Plachter & M. Rössler (eds.) (1995). *Cultural landscapes of universal value*. Jena: Fischer.
- Dynamisch Kustbeheer (2017). Dynamisch kustbeheer op de Waddeneilanden. Retrieved August 29, 2017 from: http://www.dynamischkustbeheer.nl/content/content.asp?menu=10620000_000000
- Egberts, L. (2017). Voorbij de harde grens. Een cultuurhistorisch toekomstperspectief voor het Nederlandse Waddengebied. In: *Visies op de Wadden: Zes essays ten behoeve van de Beleidsverkenning Toekomstige Rol en Ambitie van het Rijk voor het Waddengebied*, pp. 30-47. Leeuwarden: Waddenacademie.
- Faber, J.A. (1972). *Drie eeuwen Friesland. Economische en sociale ontwikkelingen van 1500 tot 1800* (A.A.G. Bijdragen 17). Wageningen: Veenman.
- Geertz, C. (1968). *Agricultural involution: The process of ecological change in Indonesia*. Berkeley: University of California Press.
- Groeneveld, J. (1985). *Veranderend Nederland: Een halve eeuw ontwikkelingen op het platteland*. Maastricht: Natuur & Techniek.
- Hoekstra, H., Zijlstra, E., Zwart, F., Smit-Zwanenburg, E., and Kok, J.P. (2009). *Een eeuw badgasten. Een beeld van 100 jaar toerisme op Terschelling*. Terschelling: Isola Arte.
- Holwerd aan Zee (2017). Retrieved August 29, 2017 from: <https://www.holwerdaan-zee.nl/nld/>.
- Hosper, U., Karstkarel, P. and Woude, S. van der (2001). *De Slachte: De oude dijk, de geschiedenis, de landschappen, de dorpen, de marathon*. Leeuwarden: Friese Pers.
- Janssen, J., Luiten, E., Renes, H. & Stegmeijer, E. (2017). Heritage as sector, factor and vector: Conceptualizing the shifting relationship between heritage management and spatial planning. *European Planning Studies*, 25 (9), 1654-1672.
- Kelm, B. (2008). *Rømø – von der Nordsee geprägt. Geschichte einer Insel und ihre Bewohner*. Bräist: Nordfriisk Instituut.
- Knol, E. (2005). Rijke en aantrekkelijke kustlanden. Noord-Nederland in de vroege middeleeuwen. In: Knol, E., Bardet, A.C. and Prummel, W. (eds.), *Professor Van Giffen en het geheim van de wierden* (pp. 183-93). Veendam/Groningen: Heveskes/Groninger Museum.

- Knottnerus, O.S. (2004). Yeomen and farmers in the Wadden Sea coastal marshes, c. 1500-c. 1900. In: Bavel, B.J.P. van, and Hoppenbrouwers, P. (eds.), *Landholding and land transfer in the North Sea area (late Middle Ages-19th century)*, pp. 149-86. Turnhout: Brepols.
- Krauss, W. (2005). The natural and cultural landscape heritage of Northern Friesland. *International Journal of Heritage Studies*, 11, 39-52.
- Kullberg, J. (1992). *Bolsward, gebouwd op terpen*. Utrecht: Matrijs.
- Lotze, H.K., Reise, K., Worm, B., Beusekom, J. van, Busch, M., Ehlers, A., Heinrich, D., Hoffmann, R.C., Holm, P., Jensen, C., Knottnerus, O.S., Langhanki, N., Prummel, W., Vollmer, M., and Wolff, W.J. (2005). Human transformations of the Wadden Sea ecosystem through time: A synthesis. *Helgoland Marine Research*, 59, 84-95.
- Nitz, H.J. (1989). Transformation of old and formation of new structures in the rural landscape of northern central Europe during the 16th to 18th centuries under the impact of the early modern commercial economy. *Tijdschrift van de Belgische Vereniging voor Aardrijkskundige Studies* 58, 267-290.
- Marrewijk, D. van (2001). Wad 'n plek, de beleving van de Waddenzeeregio. In: Marrewijk, D. van and Haartsen, A. (eds.). *Waddenland. Het landschap en cultureel erfgoed in de Waddenzeeregio* (pp. 165-173). Leeuwarden: LanceWad Nederland/Noordboek.
- Olwig, K.R. (2002). *Landscape nature and the body politic: From Britain's Renaissance to America's New World*. Madison: University of Wisconsin Press.
- Olwig, K.R. (2006). Introduction: The nature of cultural heritage, and the culture of natural heritage – Northern perspectives on a contested patrimony. In: Lowenthal, D. & Olwig, K. (eds.), *The nature of cultural heritage, and the culture of natural heritage* (pp. 1-5). London: Routledge.
- Programma Rijke Waddenzee (2017). Project: Verkenning duurzame kansen Lauwersmeer-Waddenzee. Retrieved August 25, 2017 from: <https://rijkwaddenzee.nl/project/verkenning-duurzame-kansen-lauwersmeer-waddenzee/>.
- Raad, H. de (1993). *De dijk op hoogte*. Harlingen: Waterschap Fryslan.
- Renes, H. (2014). Islandscapes; isolation and pressure. *Landscapes* 15 (1), 44-58.
- Riecken, G. (1982). *Die Halligen im Wandel*. Husum: Husum Druck- und Verlagsges.
- Rössler, M. (2006). World Heritage Cultural Landscapes: a UNESCO Flagship Programme 1992-2006. *Landscape Research*, 31 (4), 333-353.
- Samen werken met water. Een land dat leeft, bouwt aan zijn toekomst. Bevindingen van de Deltacommissie 2008* (2008). Deltacommissie, n.pl.
- Smit, G. (1971). *De agrarisch-maritieme structuur van Terschelling omstreeks het midden van de negentiende eeuw*. Groningen: Sasland/Leeuwarden: Miedema.
- Vroom, M. (2013). *Gras upt werp. Landschapsbiografie en draagvlakanalyse voor het huidige beheer van het kwelderlandschap van Noord-Friesland Buitendijks*. Unpublished MA-thesis Groningen.

- Warren, C.R. (2009). Wilderness. In Kitchin, R. & Thrift, N. (eds.). *International Encyclopedia of Human Geography, Volume 1* (pp. 254-259). Oxford: Elsevier.
- Westerdahl, C. (1992). The maritime cultural landscape. *The International Journal of Nautical Archaeology*, 21, 5-14.

About the author

Prof. Hans Renes is a historical geographer at Utrecht University (Faculty of Geosciences) and Professor of Heritage Studies at Vrije Universiteit Amsterdam (Faculty of Humanities). He has published on many different aspects of the landscape history of the Netherlands and Europe as well as on the relationship between landscape heritage and planning.

Part 2

The relationship between natural and
cultural heritage

4 Protecting the natural and cultural values of the Wadden Sea coast in the Anthropocene

An urgent call for integration

Jens Enemark, Ludwig Fischer and Karsten Reise

Abstract

A shallow sea and coastal plains constitute a natural entity on the Wadden Sea Coast. A highly dynamic history of natural processes and events as well as human intentions and interventions have shaped this unique region. Today, a divergent course has led to the separation of sea and land. This is based on a deep-rooted nature-culture divide in our mentality. However, this old dualism needs to be overcome, especially on a coast challenged by globalisations and a sea level rise of some metres. An approach that keeps nature protection (the sea), coastal protection (along the shore), and the protection of cultural values (in the landscape) separate from each other is bound to run aground. The natural and cultural sciences should join forces together with societies and policymakers in a transdisciplinary approach, developing new concepts for the protection of natural and cultural diversity and for coastal identity.

Keywords: Wadden Sea, nature-culture divide, dualism, Anthropocene, transdisciplinary approach

Introduction

The last two to three generations have witnessed a fundamental change in the way we approach and interact with the Wadden Sea coast. In the 1960s, the Wadden Sea was under heavy environmental pressure, and land

Figure 4.1 Satellite image taken in 2000-2002 and combined to show low tide conditions everywhere. Light clouds seaward of the Wadden and islands show suspended matter.



Courtesy of Eurimage, Common Wadden Sea Secretariat & Brockmann Consult

reclamation projects to some extent threatened the Wadden Sea's very existence. Then, its international importance as a nature area was recognised and it was fully protected by national parks and nature reserves. At the same time the Netherlands, Germany and Denmark started a cooperative arrangement to jointly protect the area. The Wadden Sea now constitutes one of Europe's largest contiguous natural conservation areas (Fig. 4.1), and in 2009 it was inscribed on the World Heritage List, a list of the natural and cultural wonders of the planet, for its natural values. This is a development we must treasure.

Twenty years ago an international conference on the landscape and cultural history of the Wadden Sea coast, Kulturlandschaft Nordseemarschen (Fischer 1997), reinvigorated interest in the landscape and cultural history of the region and laid the basis for the LANCEWAD projects (Vollmer et

al. 2001). One outcome of the conference was the increased awareness that the region shares a landscape and cultural heritage that is unique in the world. Its settlement history of more than 2,000 years is unrivalled and is still mirrored in the landscape. The approaches to water management over the last millennium, and the societal organisation that developed alongside them in this region over that period, have set world standards for the transformation of coastal wetlands into highly profitable land.

In spite of intensive interactions between the natural and cultural landscapes and the best intentions, it has not been possible to reconcile the relationship between these 'twin sisters'. Instead, they have moved further and further apart and today share very little common ground. Following an evaluation by the Trilateral Wadden Sea Cooperation, the Joint Declaration of 1982 was updated in 2010 (CWSS 2010). This is a declaration of intent concluded between the governments of Denmark, Germany and the Netherlands and the basis for their cooperation on the protection of the Wadden Sea. As a result of the LANCEWAD projects, the Joint Declaration was extended to include as an objective the maintenance of the landscape and cultural heritage. The objective applies basically to the coast beyond the Wadden Sea, which has traditionally been the object of trilateral cooperation.

Nonetheless, the definition of the geographical scope of this area of cooperation stipulates that 'activities on landscape and cultural heritage should be carried out by, or in close cooperation with, all relevant administrative levels and with support of the people living and working in the region' (CWSS 2010). This formulation in particular was included at the request of Germany, which argued that the national and state governments have no competence in this area. It can be assumed that behind this formulation there is a political concern that the landscape and cultural heritage issue could partly divert the focus from the traditional field of cooperation on nature and environmental issues. Furthermore, it could bring regional and local actors into a field of cooperation that had hitherto been dominated by the national environmental and nature conservation authorities and thus weaken the cooperation. Instead of bringing natural and landscape approaches into a common one, in a material sense, however, it reinforced the divide. The fact that the registration of the Wadden Sea on the World Heritage List for its outstanding universal natural values in 2009 coincided with the revision of the Joint Declaration likewise contributed to this divide. We contend that one of the big challenges the Wadden Sea region faces is to overcome this natural-cultural divide in the age of the Anthropocene (Steffen et al. 2011; Renn & Scherer 2015) in order to maintain a vibrant and energetic heritage enjoyed by present and future generations, and to continue

to make the Wadden Sea coast an exceptional place. Below, we argue that the superfluous divide between nature and culture in our coastal perception needs to be overcome. We refer to the effects of anthropogenic climate change on the Wadden Sea coast as a final cause for this mind shift, and we conclude with three practical recommendations of how to proceed with the integration of the natural and cultural heritage of the Wadden Sea coast.

De-constructing an old dualism

The distinction we commonly make between natural and cultural values in the Wadden Sea coast is so deeply entrenched in our mentality that we rarely reflect on it. This divide has framed our perception of nature, culture and landscape, and up to now it has determined the scientific approach, political agendas and administrative and technical practice. Should we adhere to this schism or can we move beyond it?

The old Aristotelian division between a nature that exists and develops by itself and a culture that is man-made and separated from natural processes (Glacken 1967) lives on in our distinction between natural and cultural landscape, in tensions between nature and coastal protection, and in the 'heroic' struggle of man against the remorseless North Sea. Even in protecting the values of the Wadden Sea region, nature and culture have been seen as opponents. The designation of the Wadden Sea proper as a natural World Heritage Site has regrettably contributed to reinforcing this apparent contradiction. However, this is at odds with reality and is an impediment to comprehending the whole. Do the remnants of an old well-ring or plough marks in the Wadden Sea belong to nature or to culture? Is the sinking of marshland by drainage a natural or a cultural process? How the interdependencies between sea and land have generated the Wadden Sea coast, and similarly how interdependencies between nature and culture have further transformed this *coastscape* into what it is now, are well understood, and this understanding offers the unique chance to break out of an unfortunate dualism and fictions of nature against culture and vice versa to explore the potential of new cooperation.

Through the past 8,000 years of the Wadden Sea coast, natural processes and human intentions have been tightly interwoven. In this long history, the present sharp divide into a natural waterscape and a cultural landscape is merely a snapshot. Various phases have followed each other, moved parallel with each other, or shifted out of phase in the different coastal sections as a result of natural differences as well as political and social ones. Of course,

there have always been conflicts and disasters. There can never be any sort of simple 'peace with nature'. In changing our attitude towards nature, we should refrain from simplistic concepts such as war versus peace or conquering versus submission. We, as natural and cultural beings, must always intervene in natural processes. We kill and take out and transform. However, at the same time we always cooperate with nature, even by constructing a dike with its gentle seaward slope or by mixing concrete for the foundation of a wind turbine. We even intervene when we decide to impose the strictest possible environmental protection on a site in an attempt to let nature have its own way. As concomitant natural beings and cultural actors, we remain in interaction with what we are not. Also, when we look at natural beings as mere objects or entities categorically separated from us, we create a fiction.

In some sciences, in-depth discussions have emerged about natural phenomena as 'actors', implying quite another understanding than seeing the sea as a 'cruel enemy' or animals as man-like subjects (Wirth 2016). For example, Bruno Latour's 'actor-network theory' (2005) or progress in human-animal studies imply challenges for new concepts on nature-culture interactions (Bennett 2010; McFarland & Hediger 2009; Spannring et al. 2015). This has the potential to change the scientific understanding of a wave as an 'energetic object' or of a storm as a mere acceleration in the flow of air. We have much to learn even from other cultures, as demonstrated by modern anthropologists/ethnologists like Philippe Descola (2005, 2011). A first step would be to understand our perception of nature as one of many conditioned by our history.

Clearly, we cannot go back to old historically and culturally outdated concepts of unity between nature and culture, i.e., based on animistic and nature-mystic notions. However, we must be prepared to face debates (even in science) on how to overcome the great schism in our perception between the natural environment and ourselves. The history of our Wadden landscape is virtually compelling us to take up this challenge. Nowhere else is there such an intricate interplay between natural processes and human engineering as in the development of this landscape up to now. When creating a mussel bed in the Wadden Sea, the question is not whether this bed will be artificial or natural. We need to consider why and how we want to build with nature, what are our aims, and which unintended side effects may occur. What is our justification and moral imperative? The question is not what may be technically, socially or politically feasible but rather what are the cultural implications and what are the interactions with the natural conditions.

Nowadays, the amalgamation of natural and cultural processes has reached a new dimension, caused by our scientific and technical progress.

The sedimentation patterns in the Wadden Sea are no longer entirely 'natural processes', and the population dynamics of plants and animals are all affected by human activities. Progress in protecting the cultural heritage of the Wadden Sea region can only be made by first de-constructing the old dualism of nature and culture in our mentality. This would settle old confrontations and open up new areas of cooperation. For this new era, the term Anthropocene has entered common usage.

Challenged by more water

The Anthropocene is defined as the epoch that began when human activities started changing the lithosphere, atmosphere and biosphere on a global scale (Lewis & Maslin 2015). In the new era of the Anthropocene, the radical dichotomy between nature and culture has no place anymore (Hobbs et al. 2009; Ellis et al. 2012; Corlett 2014). Of the air we inhale in 2016, 43 percent of the carbon dioxide molecules originate from industrial processes. The omnipresence of the human impact makes a mockery of the notion of protecting or restoring a pristine nature. This has gone, and history cannot be restored. Deep-rooted mentalities tend to linger on. Similarly, raising awareness of our cultural heritage cannot have as its objective a landscape museum and a ban on cultural novelties. Instead, the aims are to incorporate novelties without losing natural and cultural diversity and identity.

Global exchange and global warming, for example, constitute fundamental challenges to both the nature and culture of the Wadden Sea coast (fig. 4.2). They are in the same boat. Most importantly, the very existence of the entire region is threatened by the relentless sea level rise, which is expected to reach several metres (Bakker et al. 2017). This is an inescapable consequence of greenhouse gas emissions from burning fossil carbon and from failed land use developments. Unless adaptations are found to raise the coast in parallel with this sea level rise, the entire Wadden Sea coast will eventually cease to exist (Reise 2015).

Positioned at about the same level, the sea and the land can only co-exist in their present form if an ever-stronger system of defences is built. However, this has side effects of its own. Although for centuries the sea level hardly rose at all, tides and storm surges have begun to reach higher and higher levels. This may have to do with the modern coastal architecture of strictly separating the sea from the land. The expected sea level rise will only exacerbate this trend.

The coastal plain has been transformed from wetland to pastures and arable land by a highly advanced water management regime. Together with

Figure 4.2 Aerial view of Hallig Hooqe with the island of Pellworm at the horizon. On Hooqe, about 100 people live on dwelling mounds (Warften). A salt marsh area of 5.5 km² is inundated by storm surges which top a 1.2-metre-high stone revetment. Sediment accretion is now lagging behind sea level rise because of the revetment.



Photo by Karsten Reise

earthen sea walls, this constitutes the most characteristic cultural features of the Wadden Sea coast (Fig. 4.3). However, as an unwanted side effect of draining the land dry, soils have compacted and the land has subsided below the normal tidal level. A sinking land is now confronted with a rising sea. This clearly is an unsustainable development. In a situation of a rise in the sea level of several metres, stronger bulwarks alone cannot make up the difference. Inventive adaptations across the entire Wadden Sea coast need to be envisioned and discussed (Reise 2017).

Various options are now being discussed for the Wadden Sea coast (Ahlhorn 2018; Reise 2015): importing sand from the North Sea to buffer islands and to support mudflat areas to keep up with the sea level rise; raising the level of embanked areas by controlled flooding for sedimentation; stopping the draining of former fen and bog areas to avoid further greenhouse gas emissions and instead initiating carbon storage with wetland vegetation; transitioning from large-scale agriculture on dry land towards a plurality of wetland uses including aquaculture and the restoration of wetland biodiversity; and, above all, bringing the Wadden Sea region down to zero greenhouse gas emissions as soon as possible. This would set an example to save coastal lowlands all around the world from drowning in the sea.

Figure 4.3 Aerial view of former Hallig Ockholm, embanked around 1515. Some houses are still on dwelling mounds (foreground). Sönke-Nissen-Koog (upper left) was embanked in 1926 and a new dike has been fronting Ockholm Koog since 1991. Seaward, a foreland of salt marshes was claimed with brushwood groins and ditching, now discontinued to facilitate natural development. While the foreland is growing with the sea, the polder area is subsiding.



Photo by Karsten Reise

This long-term and overarching challenge requires not only the phasing out of the old dualism between nature and culture but also the coming together of various disciplines and interest groups. In concert, the diversity and identity of the Wadden Sea coast could be revitalised in order to cope with the challenges of the Anthropocene. Although the sea level rise might be the most dramatic challenge to the Wadden Sea coast, other aspects of climate change will threaten the ecology of the Wadden Sea as well as prospects for fisheries, agriculture and tourism. The continuing relocation of businesses, infrastructure, education and jobs to the metropolitan areas — with the concomitant drain of the peripheral regions of the coast, including extreme demographic changes — will also require comprehensive solutions.

Strategic-political implications

People have struggled hard to mould the Wadden Sea coast to their desires in an often contentious relationship. There is probably no other coastal area of this dimension worldwide where the dialectical relationship between man and his natural environment has been and will continue to be so dynamic. In the past, this resulted in a continuous reformulation of balances and shifts in the political-strategic concepts, as is apparent from the historical mind shift from the doctrine of claiming/reclaiming land for more food production to the nomination of the Wadden Sea as a World Heritage Site. The concept of the Anthropocene will demand an even more fundamental rethink. This cannot be confined to climate change. All sectors of our natural and cultural environment require an overall dynamic shift in strategic concepts.

What are the strategic-political implications of all this? It has nothing to do with the dispute on whether the natural Wadden Sea World Heritage object should also be labelled a cultural landscape because remnants of medieval settlements are found on the tidal flats or because the current coastline is largely part of intended human interference or because natural values spared in the cultural landscape require large-scale re-naturalisation. This has nothing to do with bridging the divide. The implications go far beyond this contemporary instrumental thinking of using one heritage to complement the other.

We argue for a paradigm shift. We call for an integration of the protection of natural and cultural values. We need to continuously rethink the relationship between the natural and cultural landscape values of the Wadden Sea region because of their interdependencies. As pointed out earlier, the aim is to maintain a vibrant and energetic heritage that can be enjoyed by future generations and that continues to make the Wadden Sea coast an exceptional place. We need to develop new scientific approaches, new community involvement and new policy strategies to integrate natural and cultural values into a common heritage.

Recommendations

First, we need to develop a more fundamental interdisciplinary scientific approach between the natural sciences disciplines and human-related sciences such as history, archaeology and historical geography. The goal should be to enhance research into the landscape and cultural heritage and the relationship between the natural and cultural landscape heritage.

This should not be confined to the issue of protecting and managing the heritage but, more importantly, should include the issue of contributing to a constructive and future-oriented societal discourse. We should explore such possibilities for collaboration between the different disciplines and also initiate research into the environmental history of the Wadden Sea coast.

Second, we urge the landscape and cultural heritage community to engage with the society at large in discussing and developing ideas and concepts for the Wadden Sea coast in these areas. This should be done by reinforcing existing or establishing new and transboundary fora and improving public information. For the natural environment of the transboundary Wadden Sea, the collaboration between governmental institutions and nongovernmental organisations including natural scientists have been a great success. We realise that such initiatives cannot be duplicated in other areas, but let them serve as an inspiration. We are convinced that this will accelerate the debate around bridging the divide and produce appropriate and necessary societal and democratically legitimised political answers.

Third, the current legal and institutional systems impede on all levels the development of new responses to protect the natural and cultural values in an integrated way. We therefore need to develop a new vision for the Wadden Sea coast in a transboundary context on how to bridge the divide between nature and culture and respond to anticipated environmental, social and economic developments in an attempt to maintain a diverse Wadden 'coastscape'.

The development of such a vision should be interdisciplinary and cover all sectors. It should also engage the existing Trilateral Wadden Sea Cooperation, which is the only existing formalised transboundary cooperation along the coast. Part of this process involves first deconstructing the old dualism of nature and culture in our mentality. This would settle old confrontations and open up new avenues of cooperation, which are needed to respond with a flexible strategy to the challenges of closing the divide. The parties involved must also be open to applying existing and new instruments and approaches. Having part of the cultural landscape of the Wadden Sea region inscribed on the World Heritage List alongside the natural landscape would allow the natural and cultural landscape partners to operate at an equal level. This would stimulate and further cooperation between various disciplines and encourage new political initiatives. A new narrative of the Wadden Sea coast would then unfold.

We have entitled our contribution 'An urgent call for integration': 'urgent' in the light of the challenges, and 'call' because it concerns all people living or visiting the Wadden Sea coast. The challenges of the Anthropocene — with

sprawling urbanisation along seashores, with still more material and cultural exchange across oceans, with more refugees to be accommodated among us, with a rising sea potentially inundating the entire Waddenland — are challenges that cannot be met with conventional concepts. The situation we face requires a stronger coastal identity with all its diversity that engages in an open contest of innovative ideas and approaches, based on a solid historical understanding and the maintenance of our heritage. Above all, let's bridge the divide between nature and culture first.

References

- Ahlhorn, F. (2018). *Integrated coastal zone management. Status, challenges and prospects*. Wiesbaden: Springer Vieweg.
- Bakker, A.M.R., Wong, T.E., Ruckert, K.L., Keller, L. (2017). *Sea-level projections representing the deeply uncertain contribution of the West Antarctic ice sheet*. Scientific Reports 7, 3880.
- Bennett, J. (2010). *Vibrant Matter: A political ecology of things*. Durham: Duke University Press.
- CWSS (Common Wadden Sea Secretariat) (2010). Sylt Declaration and 2010 Joint Declaration. Retrieved from <http://www.waddensea-secretariat.org>.
- Corlett, R.T. (2014). The Anthropocene concept in ecology and conservation. *Trends in Ecology and Evolution* 30, 36-41.
- Descola, Ph. (2005). *Par-delà nature et culture*. Paris: Editions Gallimard.
- Descola, Ph. (2011). *L'écologie des autres: L'anthropologie et la question de la nature*. Versailles-Cedex: Édition Quae.
- Ellis, E.C., Antill, E.C., Kreft, H. (2012). *All is not loss: Plant biodiversity in the Anthropocene*. PLoS ONE 7, e50535.
- Feyerabend, P. (2009). *Naturphilosophie*. Frankfurt: M. Suhrkamp.
- Fischer, L. (ed.) (1997). *Kulturlandschaft Nordseemarschen*. Bräist/Bredstedt: Nordfriisk Instituut.
- Glacken, C. J. (1967). *Traces on the Rhodian shore*. Berkeley: University of California Press.
- Gloy, K. (1995). *Das Verständnis der Natur. Vol. 1: Die Geschichte des wissenschaftlichen Denkens*. Munich: C. H. Beck.
- Hobbs, R.J., Higgs, E., Harris, J.A. (2009). Novel ecosystems: implications for conservation and restoration. *Trends in Ecology and Evolution* 24, 599-605.
- Latour, B. (2005). *Reassembling the social. An introduction to actor-network-theory*. Oxford: Oxford University Press.
- Lewis, S.L., Maslin, M.A. (2015). Defining the Anthropocene. *Nature* 519, 171-180.

- McFarland, S., Hediger, R. (2009). *Animals and agency. An interdisciplinary exploration*. Leiden: Brill.
- Reise, K. (ed.) (2015). *Kurswechsel Küste. Was tun, wenn die Nordsee steigt?* Kiel: Wachholtz Verlag-Murmann Publishers.
- Reise, K. (2017). Facing the third dimension in coastal flatlands. *Gaia* 26 (2), 89-93.
- Renn, J., Scherer, B. (ed.) (2015). *Das Anthropozän. Zum Stand der Dinge*. Berlin: Matthes & Seitz
- Spannring, R. et al. (eds.) (2015). *Tiere, Texte, Transformationen. Kritische Perspektiven der Human-Animal Studies*. Bielefeld: transcript.
- Steffen, W. et al. (2011). *The Anthropocene: From global change to planetary stewardship*. *AMBIO* 40:739-761.
- Vollmer, M. et al. (ed.) (2001). Lancewad: Landscape and cultural heritage in the Wadden Sea Region – project report. *Wadden Sea Ecosystem 12*. Wilhelmshaven: Common Wadden Sea Secretariat.
- Wirth, S. et al. (2016). *Das Handeln der Tiere. Tierliche Agency im Fokus der Human-Animal Studies*. Bielefeld: transcript.

About the authors

Jens Enemark has a master's degree in history and political science from the University of Aarhus, Denmark. In 1987 he was appointed the first head of the Common Wadden Sea Secretariat in Wilhelmshaven, Germany and was secretary of the Dutch-German-Danish Trilateral Wadden Sea Cooperation until his retirement in 2014.

Prof. Ludwig Fischer worked from 1978 to 2004 in literary science and media culture at the University of Hamburg. He has written and edited many books and essays on literature of the nineteenth and twentieth century, mass media, and mental history. He has been engaged in the history, culture and development of the Wadden Sea region for many years. He was a member of the LANCEWAD Project Group, has edited several books on the landscape and culture of the region, and has written many essays on the theory and perception of landscape and nature, nature protection, and the social history of the marshlands.

Prof. Karsten Reise is a retired coastal ecologist from Alfred Wegener Institute. He lives on the island of Sylt with mud at his feet, sand in his heart and a deep desire for water. He has been professor of marine zoology, biological oceanography and coastal ecology at the universities of Göttingen,

Hamburg and Kiel respectively. His written or edited works include *Tidal Flat Ecology* (Springer 1985), *Ökosystem Wattenmeer* (Springer 1998), *Ecological Comparisons of Sedimentary Shores* (Springer 2000), *Küstenmentalität und Klimawandel* (oekom 2011), *A natural history of the Wadden Sea / Eine Naturgeschichte vom Wattenmeer* (Waddenacademie Leeuwarden 2013/2014), and *Kurswechsel Küste: Was tun, wenn die Nordsee steigt?* (Wacholtz/Murmann 2015).

5 The Wadden Sea: A natural landscape outside the dikes

Hans-Ulrich Rösner

Abstract

The Wadden Sea of today is largely a natural landscape, one of the last of its kind in Western Europe. This is the case because natural forces in the Wadden Sea are so strong that the area could not be transformed into a cultural landscape before the protection of nature became an important asset for our society about 40 years ago. Consequently, the guiding principle for the protection of the entire Wadden Sea area, which was decided upon by the three Wadden Sea countries as early as 1991, is 'to achieve, as far as possible, a natural and sustainable ecosystem in which natural processes proceed in an undisturbed way'. The protection of the Wadden Sea is strongly linked to this guiding principle, and this is also what the inscription of the Wadden Sea as a World Heritage Site in 2009 is based upon.

There is a rather clear spatial segregation between the natural landscape and the cultural landscape by the dikes, the cultural landscape usually being on the landward side. However, some of the cultural landscapes, e.g. old grasslands, are also very rich in natural values. Moreover, important cultural values can also be found within the natural landscape of the Wadden Sea. The author calls for a focus on better cooperation between the sectors of nature and culture, as both face important challenges. These include the protection of old grasslands and, in particular, climate change. The latter entails the necessity to implement renewable energy production in a way that allows natural and cultural values to remain protected and to develop measures for climate adaptation to allow the Wadden Sea to grow with the sea level. The author argues that more flexibility in finding new ways to deal with water would help to better adapt to the coming sea level rise in the cultural landscape. The extension of the Wadden Sea biosphere reserves with transition areas,

as is being discussed and partly implemented in Germany, could be a good approach to improve the protection of cultural values in the Wadden Sea region.

Keywords: Wadden Sea, conservation, natural landscape, cultural landscape, climate adaptation

Introduction

There are not many other places in Western Europe, if any, that deserve the term ‘natural landscape’ as much as the Wadden Sea. And wherever one goes in the Wadden Sea, especially when moving further seawards from the dike, the landscape and nature all around usually look very natural. Most of what one can see there would have looked much the same 1,000 years ago. However, this chapter will argue that accepting the Wadden Sea as a natural landscape does not mean that there are not great cultural values as well deserving of acknowledgement and protection. There are thus good reasons to cooperate across the sectors.

Why is the Wadden Sea predominantly a natural landscape?

For our purposes, we define ‘natural landscape’ as a landscape that is predominantly formed by natural forces, the latter covering the whole range of geological to biological processes. Anthropogenic influences also exist in natural landscapes but play a minor role in actually forming their landscape and nature. As far as the Wadden Sea outside the dikes is concerned, this definition applies to almost the entire area (CWSS 2008 2012), such as the mudflats with abundant marine life, the tidal creeks and channels obviously being formed and continuously being changed by natural forces, as well as the salt marshes and dunes of which large parts have also been formed and continuously changed in a natural way. Then there are the islands or almost-islands, of which the large majority still have very natural parts, some of them even being completely natural.

This can also be expressed in extremes and numbers: the Wadden Sea is among the very few larger areas in Western Europe that remains mostly natural, having a size of about 10,000 square kilometres (with no well-defined border towards the sea, making it difficult to define an exact size). It consists of a very young and dynamic ecosystem. It has the largest

Figure 5.2 A natural landscape in the Wadden Sea.



Photo by author

continuous intertidal area, with a size of about 4,500 square kilometres, and salt marshes of about 400 square kilometres. About 40,000 harbour seals and close to 5,500 grey seals live in the Wadden Sea and the adjacent North Sea. And more than 10 million waterbirds — about 90 percent of them originating from Arctic breeding grounds — depend on the Wadden Sea, which is an extremely important stepping stone on their flyway. The role of the Wadden Sea for the migration of birds, among the most amazing phenomena in the natural world, can hardly be overstated.

Obviously, there are also exceptions to the definition of natural landscape. At first glance, these may be more conspicuous to many than the actual natural landscape because these are the places people normally see first when they come to the Wadden Sea. Among them are anthropogenic structures in salt marshes and on islands, to mention just the most obvious. There are also historical settlement traces, usually inconspicuous. However, when considering the entire area, these cover minor parts of it. Even the fisheries, while influencing the habitat structure and species composition for almost the entire area, are not a predominant factor in constituting the landscape. To prevent any misunderstanding: this paper does not argue that the existing anthropogenic impacts are not highly problematic for the

Figure 5.3 A cultural landscape in the Wadden Sea region, in this case old grassland with high natural values.



Photo by author

protection of the Wadden Sea and its species. What is argued is that they do not have the extent or impact to make the Wadden Sea a cultural landscape.

Distinction between natural and cultural landscapes

Where does the natural landscape end and where does the cultural landscape begin? All in all, there is a rather clear distinction between the largely natural landscape outside (i.e., seawards) of the dikes, which is the Wadden Sea in a more narrow sense, and the largely cultural landscape behind (landwards of) the dikes, which often is agriculturally used marshland. There are some exceptions to this rule, e.g. some quite natural landscapes on the land side of the dikes such as very wet polders, and some rather cultural landscapes on the seaside such as settlements and agricultural areas on islands. However, the overall pattern is the spatial segregation given by the dikes. This is not to say that such a segregation is necessarily a good one, as it unfortunately also interrupts ecological connections for species and habitats. But from the moment people started to build dikes, such a segregation became very

difficult to avoid. The difference between natural and cultural landscapes on both sides of the dikes also finds its reflection in the wording. Outside the dikes, it is the 'Wadden Sea' in a more narrow sense. The term 'Wadden Sea region' can be used for the Wadden Sea plus the cultural landscapes behind the dike (more formally the Wadden Sea plus the adjacent provinces/districts/municipalities; in essence, these are very often marshlands formerly deposited by the sea) plus the adjacent marine areas of the North Sea.

Timely protection allowed the Wadden Sea to remain a natural landscape

The Wadden Sea is an extremely valuable natural landscape of global importance, protected by the governments of the Netherlands, Germany and Denmark as well as jointly in the Trilateral Cooperation on the Protection of the Wadden Sea. It is also inscribed as a World Heritage Site — something to be proud of, to be sure, but not something that was easy to achieve.

The Wadden Sea was not always considered valuable nature. Until a few decades ago, it was considered by many to be land that had not yet been embanked and transformed into agricultural land. And it was the place where the danger caused by severe storm tides came from. Until the 1970s and 1980s, the number of embankments in the Wadden Sea only grew, and there were plans for even more (Wolff 1983). This trend came to an end as a result of the rise of the environmental movement, and discussions in society in all three Wadden Sea countries gave nature a much higher value than before. Thus, the reason for the remaining Wadden Sea still being a natural landscape today is that, historically, it has not been technically or economically possible to transform most of it into a cultural landscape, e.g. by embanking it. This is not because people in the past centuries loved the landscape and nature so much that they protected it. The reason may be much more that natural forces were so strong that large parts of the Wadden Sea could not be transformed into a cultural landscape before it was 'too late', i.e. before the protection of nature became an important value within our society.

A number of milestones describe the development of Wadden Sea conservation, which actually started long before the embankments were stopped. It was more than 100 years ago that some small islands were protected for their dense seabird colonies. In the decades that followed, the protected areas were enlarged, but still it was mainly species protection that guided the work of the early nature conservationists and not so much protection of the entire area where the species lived, i.e., their habitats. Habitat protection

came more into focus in the 1970s and 1980s: the Trilateral Cooperation was established in 1978, and a Joint Declaration on protection was decided upon at a governmental conference in 1982. This was also around the time when the last large-scale embankments were constructed and when most of the Wadden Sea became protected in various ways, including Germany's designation of three national parks in the area between 1985 and 1990.

At the Trilateral Governmental Conference in Esbjerg in 1991, it was decided that: 'The Guiding Principle of the trilateral Wadden Sea policy is to achieve, as far as possible, a natural and sustainable ecosystem in which natural processes proceed in an undisturbed way' (CWSS 1991). This shows that there was already in the early 1990s a joint understanding that the Wadden Sea was a natural landscape. The guiding principle still is the most important guideline for Wadden Sea protection (Rösner 2010) and has been reaffirmed by the governments many times since 1991.

The decision on the Wadden Sea Plan in 1997 was another important milestone in Wadden Sea protection, but the most important turning point was when virtually the entire Dutch-German-Danish Wadden Sea was designated a UNESCO World Heritage Site. This occurred over the period 2009 to 2014. It is important to note that it was mainly the natural landscape outside the dikes — for example in Germany essentially the three Wadden Sea National Parks — that was nominated (CWSS 2008, 2012) and accepted by UNESCO as a natural site. The inscription was based on the statement of 'Outstanding Universal Value' consisting of three mandatory pillars:

- that the criteria to assess the global importance are fulfilled (natural geological and ecological processes and the necessity for global biodiversity),
- that the condition for integrity of the site is satisfied (large size, complete, representing all habitats/species/processes), and
- that there is adequate protection and management (national parks, nature reserves, Wadden Sea Plan, monitoring).

Given its inscription as a World Heritage Site, the protection of the Wadden Sea had to focus on preserving the Outstanding Universal Value. All three of its pillars must remain in place to meet the requirements. However, that also implies that there is much that still needs to be done (Green NGOs 2014).

All this does not mean that cultural landscapes in the Wadden Sea Region are not also highly relevant for nature — besides their cultural values. Important examples include the old grassland and the associated parceling structures with all its meadow birds, which is very much under pressure. Its loss would represent both a cultural loss and a loss of natural values.

Figure 5.4 Edge of marshland on Hallig Hooge showing how with each flooding new sediment layers have been added, allowing the land to grow with the sea.



Photo by author

Joint challenges for preserving both the natural and cultural values of the Wadden Sea region

The case I am making for a better acceptance of the Wadden Sea as a natural landscape might be seen by some as not giving the appropriate value to the rich history and culture of the Wadden Sea region. This would be incorrect. As mentioned, some important natural values also depend on the protection of cultural landscapes that are situated mostly behind the dikes, as in the case of the old grassland. This is clearly a joint challenge, with the most success to be achieved if both natural and cultural values were to be protected. In the German part of the Wadden Sea, an interesting approach could be the extension of the Wadden Sea biosphere reserves with their transition areas, which covers those cultural landscapes behind the dikes where the local communities are in favour of this and where the existing cultural and natural values justify this. Following an initiative by the inhabitants, this concept was applied more than 10 years ago to the larger Halligen islands in the

Schleswig-Holstein part of the Wadden Sea. The cultural and societal values in these remarkable places have in particular benefitted from this decision.

A fruitful cooperation may also be the best approach when it comes to climate change, the most important challenge facing the Wadden Sea and the Wadden Sea region. The most relevant impact for our coast may be a sharp sea level rise (CPSL 2001, 2005; Church et al. 2013). The longer the assumptions on the extent of the sea level rise vary, the more we will continue to see it as a future problem. However, it is now already clear that there will be a considerable increase, and it is well possible that by 2100 it will be more than one metre. Due to delayed effects, the sea level will continue to rise for a long time even if global climate protection policies are successfully implemented. Therefore, if we are to save the Wadden Sea against this human impact, adaptation measures are required. Such measures should focus on sediment management, which may help the Wadden Sea and its islands to grow with the sea while at the same time not becoming smaller (Helmer et al. 1996; CPSL 2010; Fröhlich & Rösner 2015; MELUR 2015; Reise 2015; Hofstede 2015; Reise 2017). If carefully studied, piloted and implemented, such measures may also be compatible with the overall goal of Wadden Sea protection to allow natural processes to proceed as undisturbed as possible.

We must not forget that cultural values will also be impacted by the sea level rise, e.g. by erosion and disappearance and by the higher risks faced by those living in front of and behind the dikes. Already today, many of the areas behind the dikes are lower than the sea level, and this difference will only grow in the future. The traditional approach to making dikes higher and stronger will remain an important safety measure but may also not always be the best and only solution. An additional important approach for better protection of both cultural and natural values would be a greater flexibility in finding new ways to deal with water (Reise 2015). None of this will be an easy task, which is a good reason for those who work to protect natural values to join efforts with those who work to protect cultural values. However, no adaptation measure can in the longer term save the Wadden Sea if ambitious global climate policies are not implemented in time. This also means a clear responsibility for the Wadden Sea region to do its share. This intention has already been supported in the Sylt Declaration (CWSS 2010), declaring as a trilateral policy 'to work towards developing the Wadden Sea Region into a CO₂-neutral area by 2030 or before'.

This means it must be accepted that the Wadden Sea region provide a significant amount of renewable energies and that the production and use of fossil energy sources such as oil and gas must be phased out quickly.

Figure 5.5 New cultural landscape with the use of three different renewable energy sources. The surrounding land is intensively used by agriculture and has only very few nature values left, thus it is probably an appropriate choice of location.



Photo by author

However, even the ambitious goal of achieving climate neutrality within the region will not be enough, because energy must also be provided for other parts of our countries that have naturally much less wind to use for energy production. As can be seen in many (but not all) practical cases in the region, it is possible to set up enough renewables while at the same time keeping natural and cultural values well-protected. However, these cases also show that compromises must be made and underscore my argument that cross-sectoral cooperation would be invaluable in finding the best suitable locations for renewable energy production with the least potential to damage the landscape as well as nature and cultural values.

Conclusions

We can and should be proud of what has been achieved so far in the Wadden Sea region — not only for the region's unique nature but also for

our unique cultural values. Both sectors should improve their cooperation, as the Wadden Sea and Waddenland are part of one whole that we all need to take care of. For this, we have to create and support identity, cooperation, credible sustainable development and credible protection. The Waddenland approach may well contribute to this, if it comprises both the Wadden Sea in a narrow sense and the adjacent and embedded cultural landscapes, and if the coexistence of the two as wilderness/natural landscape on one side of the dike and cultural landscape on the other side is fully accepted. The many natural links between the two — including the fact that much of the cultural landscape has developed thanks to the sedimentation under marine conditions — should not be forgotten. A very important approach for better protection of natural and cultural values would be a greater degree of flexibility in finding new ways to deal with sediment and water to better adapt to the rise in the sea level, both seawards and landwards of the dikes. And an interesting approach in the German part of the Wadden Sea, still in its starting phase after good experiences on the Halligen, is to offer a sort of protective umbrella for culturally valuable parts of the landscape via the transition area of biosphere reserves.

Acknowledgments

Thanks are due to Barbara Ganter and Meindert Schroor for their constructive comments.

References

- Church, J.A., Clark, P.U., Cazenave, A., Gregory, J.M., Jevrejeva, S., Levermann, A., Merrifield, M.A., Milne, G.A., Nerem, R.S., Nunn, P.D., Payne, A.J., Pfeffer, W.T., Stammer, D. and Unnikrishnan, A.S. (2013). Sea Level Change. In: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press.
- Common Wadden Sea Secretariat, Trilateral Working Group on Coastal Protection and Sea Level Rise (CPSL) (2001). *Coastal Protection and Sea Level Rise. Final Report of the Trilateral Working Group on Coastal Protection and Sea Level Rise. Wadden Sea Ecosystem 13*. Retrieved from www.waddensea-secretariat.org/sites/default/files/downloads/cpsl-report.pdf.

- Common Wadden Sea Secretariat, Trilateral Working Group on Coastal Protection and Sea Level Rise (CPSL) (2005). *Coastal Protection and Sea Level Rise – Solutions for sustainable coastal protection in the Wadden Sea region. Wadden Sea Ecosystem 21*. Retrieved from www.waddensea-secretariat.org/sites/default/files/downloads/cpsl-ii-2005.pdf.
- Common Wadden Sea Secretariat, Trilateral Working Group on Coastal Protection and Sea Level Rise (CPSL) (2010). *CPSL Third Report – The role of spatial planning and sediment in coastal risk management. Wadden Sea Ecosystem 28*. Retrieved from www.waddensea-secretariat.org/sites/default/files/downloads/cpsl_third_report.pdf.
- CWSS (1991, November 13). Ministerial Declaration of the 6th Trilateral Governmental Conference on the Protection of the Wadden Sea, Esbjerg. Wilhelmshaven.
- CWSS (2008). Nomination of the Dutch-German Wadden Sea as World Heritage Site. Retrieved from www.waddensea-secretariat.org/sites/default/files/downloads/whs-final-dossier08-01-16.pdf.
- CWSS (2010, March 8). Ministerial Council Declaration of the 11th Trilateral Governmental Conference on the Protection of the Wadden Sea, Westerland/Sylt. Retrieved from www.waddensea-secretariat.org/sites/default/files/downloads/sylt-md-complete-final-11-02-08-web.pdf.
- CWSS (2012, December 21). The Wadden Sea, Germany and Netherlands (N1314) – Extension Denmark and Germany. Retrieved from www.waddensea-secretariat.org/sites/default/files/downloads/whn-denmark-niedersachsen21-12-12_lq.pdf.
- Fröhlich, J. and Rösner, H.U. (2015). Klimaanpassung an weichen Küsten – Fallbeispiele aus Europa und den USA für das schleswig-holsteinische Wattenmeer. Retrieved from wwf.de/watt/klianpglobal.
- Green NGOs of the Wadden Sea Region (2014, August 28). The 2014 Call for Action for the Wadden Sea. Presented at the Wadden Sea Day. Retrieved from www.wwf.de/fileadmin/fm-wwf/Publikationen-PDF/The_2014_Call_for_Action_for_the_Wadden_Sea.pdf.
- Helmer, W., Vellinga, P., Litjens, G., Goosen, H., Ruijgrok, E. and Overmars, W. (1996). Growing with the Sea – Creating a Resilient Coastline. Retrieved from www.wwf.de/fileadmin/fm-wwf/Publikationen-PDF/WWF-NL_1996_Growing_with_the_Sea.pdf.
- Hofstede, J.L.A. (2015). Theoretical considerations on how Wadden Sea tidal basins may react to accelerated sea level rise. *Zeitschrift für Geomorphologie* 59, 377–391.
- MELUR (Ministerium für Energiewende, Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein) (2015). Strategie für das Wattenmeer 2100. Retrieved from http://www.schleswig-holstein.de/DE/Fachinhalte/N/nationalpark_wattenmeer/bericht_strategie_wattenmeer2100.pdf?__blob=publicationFile&v=4.

- Reise, K. (ed.) (2015). *Kurswechsel Küste – Was tun, wenn die Nordsee steigt? Hanse-Thesen zur Klimaanpassung*. Wachholtz-Verlag – Murmann Publishers, Kiel/Hamburg.
- Reise, K. (2017). Facing the Third Dimension in Coastal Flatlands. Global Sea Level Rise and the Need for Coastal Transformations. *GAIA* 26/2: 89-93. Retrieved from https://epic.awi.de/44953/1/GAIA2_2017_089_093_Reise.pdf.
- Rösner, H.U. (2010). The Guiding Principle for the Wadden Sea: Advantages of a dynamic approach in a changing world. *Wadden Sea Ecosystem* 26: 23-28. Retrieved from www.waddensea-secretariat.org/sites/default/files/downloads/wse-no-26-proceedings-2009.pdf.
- Wolff, W.J. (ed.) (1983). *Ecology of the Wadden Sea*. Balkema, Rotterdam.
- Zukunft Dockkoog – Gemeinsam für Husum mehr erreichen, Bericht der Projektgruppe Dockkoog 2015/16 (2016). Retrieved from www.wwf.de/fileadmin/fm-wwf/Publikationen-PDF/Zukunft-Dockkoog-Bericht-der-Projektgruppe-Dockkoog-2015-2016.pdf.

About the author

Hans-Ulrich Rösner has been working for the protection of the Wadden Sea since 1984. As a biologist and ornithologist, he began working for the Schutzstation Wattenmeer on the island of Pellworm, and since late 1985 he has worked for the global nature conservation organisation World Wildlife Fund (WWF), initially on migratory bird research and monitoring. He is now head of the Wadden Sea office of WWF based in Husum, focusing with his team on issues such as fisheries, tourism, energy, shipping, coastal defence, nature restoration and climate adaptation but also on public information and education. He has supported the development of the national parks in the German part of the Wadden Sea as well as the progress in trilateral cooperation. On behalf of the WWF and the Green NGO's Wadden Sea Team, he is also serving as an advisor to the trilateral Wadden Sea Board.

6 The North Frisians and the Wadden Sea

Thomas Steensen

Abstract

The Wadden Sea is not the edge of North Frisia, it is not a marginal part, but an integral and central element. The district of North Frisia (Kreis Nordfriesland), founded in 1970, covers an area of 2,083 square kilometres. To that must be added the Wadden region between the Eider River and the Lister Tief, covering an area of about 1,750 square kilometres. North Frisia consists of 55 percent land and no less than 45 percent mudflats. The Wadden Sea, especially the North Frisian part of it, has been shaped by an interplay over centuries between man and his natural surroundings, a phenomenon that it difficult to find elsewhere in the world. Large parts of the Wadden Sea form a 'cemetery of the marshlands'. *Kulturspuren* (traces of culture) such as remains of terps and dikesdike, bricks, pottery shards, tidal gates, ditch systems, furrows, entire farming fields, and places of early salt peat extraction are a testament to the interdependence between man and nature. Archaeologist Hans Joachim Kühn considers this 'an inexhaustible archive of remembrance and research, sometimes even of shudder'. Throughout the centuries, there has been a special relationship between the North Frisians and the Wadden Sea. This is reflected by the intense discussions on the establishment of a national park. It really would have been appropriate if in 2009 the Wadden Sea had been recognised not only as a World Natural Heritage Site but also as a World Cultural Heritage Site. So far, this cultural landscape has not been sufficiently put into focus.

Keywords: Wadden Sea, North Frisia, traces of culture, national park, World Cultural Heritage

North, East and West Frisia are all bordered by the Wadden Sea, that unique and peculiar region at the edge of the North Sea which, at the height of medieval Frisian trading (i.e., in Carolingian times), was sometimes called the Frisian Sea (*Mare Frisicum*). All Frisians have a special relationship to the Wadden Sea. This article gives an overview of the essence of the relation between the North Frisians and the Wadden Sea, from five different angles: landscape, literary imagination, traces of material culture, economics and the vicissitudes of conservation.

The area: Interface between land and sea

A brief glance at North Frisia's topography clarifies the special relationship between North Frisia and the Wadden Sea. The Wadden Sea is not on the edge of North Frisia; it is not a marginal part but rather an integral and central element. The district of North Frisia (Kreis Nordfriesland), founded in 1970, covers an area of 2,083 square kilometres. But to this we must add the Wadden region between the Eider River and the Lister Tief covering an area of about 1,750 square kilometres (50 square kilometres of foreland, 50 square kilometres of sands, 1,100 square kilometres of waddenmudflats up to the sea level minus two metres and 550 square kilometres of tidal currents). This adds up to a total of about 3,800 square kilometres. North Frisia consists of 55 percent land and no less than 45 percent wadden. Thus, the Wadden Sea can be considered a transitional region, an interface between the land and the sea in which — ignoring the man-made dikes — a boundary line between them hardly exists (LANCEWAD 2001; Schroor 2008; Steensen 2008, 2009). High tide and low tide make that clear twice a day. Even Roman writer Pliny the Elder (who actually had never been to North Frisia) expressed this fact in his *Naturalis Historia* (Book XVI, c. 1), as well as the antagonism between the sea and the land: 'Here, the ocean rises and falls twice within day and night, flooding an immense area. And in the end, when faced with this eternal struggle, no one can tell if this region belongs to land or sea.'

Landscape: Constant change

The Wadden Sea, especially the North Frisian part of it, has been shaped over centuries by an interplay between man and his natural surroundings that is found virtually nowhere else. Life and livelihood in a region threatened by the natural force of the sea, man's continuous struggle to secure and extend

his territory, the sea continuously encroaching, constant changes, profit and loss — these are the fundamental themes. In some places, the areas of dry land have increased over the last millennium. In the Dithmarschen district, directly to the south of North Frisia, only Büsum had significant losses. North Frisia, however, irretrievably lost large parts of its medieval settlement area. This is the main signature of its history. The confrontation with the North Sea is a fundamentally classic Frisian theme. Wadden became marshland, and marshland wadden again, wadden turned into foreland and into a new Koog (salt marsh). A Koog could become a *Hallig* (island without protective dikes), some Halligen disappeared again, while new ones rose on wadden instead. Terps (artificial mounds) were raised and washed away again, entire settlements and villages were lost and sometimes refounded in another place (Müller 1917; Quedens 1975; Pingel 2000; Timrott & Timrott 2013). In churches today we find altars, carved statues, and pulpits from churches destroyed by storm tides. Myths tell us about lost settlements; some say their church bells can still be heard today. Constant change is the central theme of the region. The Wadden Sea symbolises existential topics: growth and decay, existence and finiteness (Fischer 1997).

Like in a history book, examples of different epochs can be found along the North Frisian coast. A thousand years ago, the first terps and low dikes were built by Frisians in rural cooperatives. Innumerable wrecks in the Wadden Sea's sludge tell of intensive shipping. Memories of the epoch of the early modern states recall the planning and execution of profitable land reclamation, often with the assistance of Dutch experts. And in the previous century, there was the plan — highly ideologically motivated — during the era of National Socialism to reclaim the Wadden Sea for the *Volk ohne Raum* (People without Living Space).

Then there is the connection with other parts of the Wadden Sea region, partly an element of and partly transient to more southern parts of the Low Countries. One example of such a connection with the Low Countries is Johan van Wouwer, son of a merchant family from Antwerp, born in Hamburg in 1574. He studied and worked as a scientist in Germany, France, Italy and the Netherlands. At the court of Johann Adolf, the Duke of Gottorp, he became a minister of influence and was engaged in the dike construction in Eiderstedt. As a reward, the sovereign gave him land in that area. Johan van Wouwer died at the age of 38, leaving no children. Even today, his marshland is owned by the foundation named after him. It promotes projects 'suited to enhancing the culture and region permanently'. To complete the circle, one of the projects supported by his foundation was the 'Waddenland – Outstanding' symposium held in Husum, Germany in December 2016.

Figure 6.1 Hallig Habel on the horizon.



Photo by author

Literary imagination

Large parts of the Wadden Sea form a ‘cemetery of the marshlands’. Storm tides have been responsible for thousands of deaths. They rank among the most devastating natural disasters of European history and have shaped the coasts significantly. Culture, economics, and social structures in the entire region have been influenced by them. Quite a few Frisian dialects have literally gone down into the sea. The great floods have etched themselves onto the collective memory of the people, such as the Rungholt Flood of 1362, which spawned tales, legends and poems. An entire generation of schoolchildren have learned Detlev von Liliencron’s ballad *Trutz blanke Hans* by heart. Rungholt can be found in the work of Hans Christian Andersen, and Nobel Laureate Günter Grass wrote a poem about this mystical place.

There are other important artistic and literary works that have a connection to the Wadden Sea, too. In world literature, there is Theodor Storm’s novel *Der Schimmelreiter*, which tells of dikemaster Hauke Haien, who, bringing new ideas, endeavours to transform wadden into dry land but in the end

Figure 6.2 Wanderers on their way to Hallig Oland.

Photo by author

fails during a storm tide. Theodor Storm describes the mystical world of the ambivalent Wadden Sea in an impressive way. In his poem “Meeresstrand”, the islands lie like dreams in mists upon the sea (‘Wie Träume liegen die Inseln im Nebel auf dem Meer’), and he speaks mysteriously about voices that are over the deep (‘Stimmen, die über der Tiefe sind’). Goethe himself mentioned man’s struggle with the North Sea, although he does not refer to North Frisia but to Lower Saxony. In the second part of *Faust*, he writes that ‘der Weisheit letzter Schluss’ (wisdom’s last verdict) lies at the coast of the Wadden Sea:

And in the centre here, a Paradise, whose boundaries hold back the raging tide,
 And though it gnaws to enter in by force,
 The common urge unites to halt its course.
 Yes, I’ve surrendered to this thought’s insistence,
 The last word Wisdom ever has to say:
 He only earns his Freedom and Existence,
 Who’s forced to win them freshly every day.
 Whose boundaries hold back the raging tide...

Since the Middle Ages, freedom has been associated with the Frisians, including by the Frisians themselves. It seems that it is also the North Frisian Wadden Sea where freedom dwells. In Storm's novel *Eine Halligfahrt*, a Hallig turns into a 'Ländchen der Freiheit' (little land of freedom). Another example of the Frisian sense of independence is Hermann Neuton Paulsen, owner of Süderoog; he considered leaving the Prussian State and achieving independence for his Hallig, which was no larger than one square kilometre (Klatt 2016).

Traces of culture

Traces of culture (Kulturspuren) — remains of terps and dikes, bricks, pottery shards, tidal gates, ditch systems, furrows, entire farming fields, places of early salt peat extraction — bear testament to the interdependence between man and nature. The archaeologist Hans Joachim Kühn considers this 'an inexhaustible archive of remembrance and research, sometimes even of shudder'. Everyday items found on the wadden provide us with knowledge of the living conditions of the past. Ceramic pots illustrate the connections with the Rhine area; coins allow us to draw conclusions about trade routes; skulls are reminders of the transience of life. Like the landscape, traces of culture are subject to the law of constant change, too. For a while they are visible, then they may be covered by silt or destroyed by the tidal current; others may appear in other places. Centuries ago, a medieval system of fields and farmland appeared north of Pellworm. Due to centuries of extended shaping, a system like this is no longer to be found anywhere behind the dikes but only in that submerged cultivated land.

The North Frisians' language is a testimony to their special connection with the Wadden Sea. One word can express something that English or German need several words for. 'To be surprised by the incoming tide', for example, is *beflödje* in Frisian. On the island of Föhr, *waas* refers to mudflats that can be walked on. If it smells of wadden, the noun is simply transformed into an adjective: *At stiremt waasig*.

Economy

Since the Frisians settled in this region, the wadden have been part of their life and their work. They went out to catch prawns (*garnelen*, *krabben*) with the help of the *gliep*, a net fastened to a wooden rack. Catching flatfish

with the help of feet and hands was called *buttpedden* or *buttgrappeln* (Lorenzen 1992). As early as 1749, Lorenz Lorenzen described this in his *Genauue Beschreibung der wunderbaren Insel Nordmarsch*, noting that by collecting mussels ‘arme Leute sich fast alle Zeit... des Hungers sich erwehren’ (‘poor people generally escape starvation’). The shells were used to fortify paths or were delivered to lime kilns. Eels and crabs were also caught by hand (Lorenzen 1982). It is often assumed that the North Frisians were a community of fishermen, but that was seldom the case. They mostly caught what they needed for themselves. Something else, however, was exported: ‘Frisian salt’, which was extracted from salt turf. Temporarily, the export of this salt provided a certain degree of economic prosperity.

In addition, they collected birds’ eggs to enrich their menus — an atrocity in the eyes of modern-day conservationists. They supplemented their diet not only with animals but also plants from the Wadden Sea, for example the *strandwegerich* (*plantago maritima*) of the plantain family, which has a height of 10 to 30 centimetres. These ‘Suden’ are especially aromatic as a vegetable or in a salad because of their habitat on the upper salt marshes. The inhabitants of the Halligen in particular used to eat them and were therefore given the nickname *sudenbieter* (sudenbiter).

It was most natural for people to frequently travel the wadden on foot or on horseback. But it has been only in the last decades that walking on wadden or sometimes even prawn-catching with the *gliep* — has become a tourist activity. And its popularity is increasing. Led by trained guides, thousands of people are experiencing the unique world of wadden and Halligen every summer. We must not forget that tourism has become the most important source of income in North Frisia nowadays, and the underlying foundation of this industry is the wadden. In earlier times, it had been pure necessity and part of everyday life. It is worth remembering that the tideways, with a depth of 30 and more metres today, still could be crossed on foot in earlier centuries. A master churchbuilder is said to have reached his building sites on the islands of Sylt, Föhr and Pellworm on horseback. Several courageous marches across the wadden have gone down in North Frisian history (Holander 1973). In 1864, despite drifting ice, a word of homage addressing the Duke of Augustenborg was carried to the mainland across the wadden by two captains from the island of Sylt. People crossing the mudflats for a purpose like that were regarded as either heroes or traitors — depending on the national political attitude at the time.

Many an object has washed up to the beach by the sea. Much flotsam and jetsam have been retrieved not only along the coast but on the wadden and the sandbanks, too. And of all the world’s coastlines, North Frisia — located

Figure 6.3 Catching prawns with a 'Gliep'.



Photo by Ernst C. Payns, Nordfriisk Instituut

along the busy sailing route from the North Sea to the Baltic — is probably among the 'richest' in shipwrecks.

Controversial conservation

Throughout the centuries, there has been a special relationship between the North Frisians and the Wadden Sea. This is reflected in the intense discussions on the establishment of a national park. During the first detailed discussion on this issue in 1973-74, Willi Hansen, the mayor of Nordstrand and an acknowledged authority on the Wadden Sea, made his voice heard and said that the planned law on creating a national park would take away the 'age-old customary rights of the North Frisians' and 'their crucial competences'. He added that the Wadden Sea had been created by land loss and that therefore the inhabitants of the region may be the first to claim rights (*Husumer Nachrichten*, 27 December 1973).

Frederik Paulsen, chairman of the Verein Nordfriesisches Institut at that time, made a similar argument:

The Wadden Sea is not an original natural landscape but in large part a cultural landscape lost to the sea. So, in one form or the other, the Frisian

inhabitants have paid for the Wadden Sea. That is why they primarily are entitled to decide about the Wadden Sea. In November 1973 alone, autumn storms caused a loss of about 10 meters at Goting and Utersum cliff and thereby enlarged the Wadden Sea correspondingly. Our normal sense of justice tells us that those suffering land loss must have a right in the Wadden Sea, a right that is stronger than that of the state, that of the Federation and that of the national and international nature conservation organizations.

He added that the Wadden Sea not only was a habitat of a great diversity of animals and plants but had also been 'the original habitat of the Frisian coastal community' for more than a thousand years. Paulsen considered it possible that scientific research could discover forms of economic use of the Wadden Sea, thereby providing the possibility for future generations to live in North Frisia (*Husumer Nachrichten*, 4 January 1974; see also his comment in Frisian 'At waas blaft üüs aanj', *Husumer Nachrichten*, 5 June 1976). Andreas Reinhardt, chairman of the Nordfriesischer Verein, feared that the establishment of a national park would lead to restrictions for the Frisian people and to stringent coastal protection as well. A stringent law, he argued, was not in harmony with a landscape that had been formed by the interplay of nature and man and which was under constant change (*Husumer Nachrichten*, 21 January 1974).

In a community assembly on the island of Pellworm, Johannes Jensen, the island's mayor, stated that no one on the island was in favour of a national park. He said that the people of Pellworm loved the island but also wanted to 'live and work' in this landscape in the same way as it had always been. He referred to the North Frisians as 'nature conservationists by birth'. However, it was the Frisian Georg Quedens from the island of Amrum who could not agree at all on this point: 'Most of the locals predominately considered native nature as something that should be made use of. The number of committed local conservationists, who maybe were willing to make sacrifices, has remained very low to this day' (*Husumer Nachrichten*, 15 June 1976).

Because of the numerous protests, the Schleswig-Holstein state government withdrew its first bill to establish the Wadden Sea National Park, and it took until 1985 for a new attempt to arise. Today, it can be stated that the majority of the North Frisians have not only made peace with the national park but also approve of it.

Cultural as well as natural heritage

It does seem that people and organisations from outside North Frisia were the first to be active in the field of nature conservation in the Wadden Sea. Typically, the North Frisians themselves did not see the need for such an activity. One of the non-local activists was Gert Oetken (1932-2016), a dentist from Rendsburg who founded the first society for the protection of the Schleswig-Holstein part of the Wadden Sea (Schutzstation Wattenmeer). He also turned his attention to the Wadden Sea culture, an area other nature conservationists were, for the most part, not interested in. Another non-local conservationist who dedicated himself to protecting the Halligen as early as the end of the nineteenth century was Eugen Traeger (1855-1943), a librarian from Posen (Poznań). He wrote that the Wadden Sea with its Halligen was 'one of the most peculiar regions of the world'.

There have always been North Frisians who have turned to the Wadden Sea's history. The quintessential example is farmer Andreas Busch from Nordstrand, who may rightly be considered the man who discovered Rungholt (see the contribution by Hadler et al. in this volume). The man with the greatest knowledge of sources is Albert Panten, a teacher who was familiar with nearly every sunken parish. There have been islanders who worked as wadden guides and made extraordinary discoveries during their tours. One of them is Hellmut Bahnsen, whose finds from the wadden are exhibited in a museum on the island of Pellworm. Scientists exploring the Wadden Sea and its history from a professional perspective include Albert Bantelmann, Ernst Dittmer, Hans Joachim Kühn, Marcus Petersen and Erich Wohlenberg.

In general, however, a great deal remains to be done in this area. Obviously, the Land Office for Archeology in Schleswig is predominantly concerned with Viking sites, with Haithabu and the Danewerk on the east coast, which have been nominated as World Heritage Sites in their own right. The Wadden Sea along the west coast is being neglected. Using considerable finances to explore nature in and around the Wadden Sea has been, and continues to be, justified. However, at least some funding for the exploration of the North Frisian Wadden Sea's cultural heritage would be desirable (Steensen 2001). It would have been ideal if the Wadden Sea had been recognised in 2009 not only as a World Natural Heritage Site but also as a World Cultural Heritage Site. So far, this cultural landscape has not been given sufficient attention.

References

- Goethe, J.W. von (2003). *Faust Parts I & II*. Retrieved from www.iowagrandmaster.org/Books%20in%20pdf.Faust.pdf
- Fischer, L. (ed.) (1997). *Kulturlandschaft Nordseemarschen*. Bräist/Bredstedt, Westerhever: Nordfriisk Instituut, Hever.
- Holander, R. K. (1973). Von Porrenstrikern, Postläufern und anderen. Was heißt „friesische Wattläufertradition“? *Nordfriesland* 26, 93–100.
- Klatt, G. (2016). *Süderoog. Hallig im Wattenmeer*. Bräist/Bredstedt: Nordfriisk Instituut.
- LANCEWAD (2001). *Landscape and Cultural Heritage in the Wadden Sea Region. Project Report*. Wadden Sea Ecosystem No. 12, Wilhelmshaven: Common Waddensea Secretariat.
- Lengsfeld, K. (1998). Halligleben um 1900. Heide: Boyens.
- Lorenzen, J. (1992). Die Halligen in alten Abbildungen. Eine Fotodokumentation über die Warften aus der 1. Hälfte des 20. Jahrhunderts, Bräist/Bredstedt: Nordfriisk Instituut.
- Lorenzen, L. (1982). *Genaue Beschreibung der wunderbaren Insel Nordmarsch 1749*. Hamburg: Buske.
- Müller, F. (1917). *Das Wasserwesen an der schleswig-holsteinischen Nordseeküste. Teil 1: Die Halligen*. Berlin: D. Reimer.
- Petersen, M. (1981). *Die Halligen. Küstenschutz – Sanierung – Naturschutz*. Neumünster: Wachholtz.
- Pingel, F. (2000). Leben mit Landunter: die Halligen. In: Thomas Steensen (ed.), *Das große Nordfriesland-Buch*, Hamburg: Ellert & Richter, 454–461.
- Quedens, G. (1975). *Die Halligen*. Breklum: Breklumer Verlag.
- Riecken, G. (1982). *Die Halligen im Wandel*. Husum: Druck- und Verlagsgesellschaft.
- Schroor, M. (2008). *Waddenzee. Waddenland. Historische verkenningen rond de geografische identiteit en begrenzing van het internationale waddengebied*. Leeuwarden: Raad voor de Wadden.
- Steensen, T. (2001, June). Das Wattenmeer als Weltkulturerbe? *Nordfriesland* 134, 12–17.
- Steensen, T. (2008). *Geschichte Nordfrieslands von 1918 bis in die Gegenwart* (Geschichte Nordfrieslands, Teil 5). Bräist/Bredstedt: Nordfriisk Instituut.
- Steensen, T. (2009). *Im Zeichen einer neuen Zeit. Nordfriesland 1800 bis 1918* (Geschichte Nordfrieslands, Teil 4). Bräist/Bredstedt: Nordfriisk Instituut.
- Storm, T. (1854). „Meeresstrand.“ *Mainz University*, <http://www.staff.uni-mainz.de/pommeren/Gedichte/Storm/meeresst.htm>. Accessed on January 26, 2018.
- Timrott, F. and Timrott, J. (2013). *Halligen – Entdecken und erleben*. Neumünster: Wachholtz.

Das Wattenmeer (2005). *Kulturlandschaft vor und hinter den Deichen*. Stuttgart: Konrad Theiss.

Umweltatlas Wattenmeer. Band 1: Nordfriesisches und Dithmarscher Wattenmeer (1998). Landesamt Schleswig-Holsteinisches Wattenmeer und Umweltbundesamt. Stuttgart: Eugen Ulmer.

Welterbe-Manual (2009). *Handbuch zur Umsetzung der Welterbekonvention in Deutschland, Luxemburg, Österreich und der Schweiz*. Bonn: Deutsche UNESCO-Kommission.

About the author

Prof. Thomas Steensen studied history, political science, Frisian philology and sociology at the University of Kiel. Since 1987, he has been director of the Nordfriisk Instituut in Bredstedt, the central scientific institution for the Frisian language and the culture and history of North Frisia. Since 1986, he has been lecturer at the Universities of Kiel and Flensburg and since 1999 honorary professor in Flensburg. He is a member of the organising committee of the conference 'Waddenland – Outstanding'.

Part 3

Memory, mentality and landscape

7 Victory over the sea

Dutch diking techniques in the seventeenth and eighteenth centuries and their impact on Europe's history of mentality

Ludwig Fischer

Abstract

During the Dutch Golden Age, the Netherlands achieved enormous success in economics, technology, building, the sciences and the arts. Among their greatest achievements were the securing of fertile land against the sea and the drainage of big lakes and moors. Dutch diking and draining techniques were exported to many European countries. The Netherlands became a goal for well-educated and ambitious people from neighboring nations and further afield, and in their travel reports they often praised the marshlands with terms like 'miracle' and 'paradise'. The impact of the Dutch 'victory over the sea' on Western thought, especially on the Western attitude towards nature, cannot be overstated. Strangely enough, there has been little research on this topic so far. Traces of the leading mental frameworks and the metaphorical modelling of a 'struggle against the sea' can be followed up to modern times, when famous scientists made mankind's mission the subjugation of nature in a kind of war against its violence. Thus, to tear an area of fertile land from the waves and to defend it successfully could be described as the accomplishment of man's endeavour, as Johann Wolfgang von Goethe described at the end of his famous play *Faust, Part II*. To be aware of such deep-rooted dispositions in our theoretical and practical relationship to nature is one of the requirements for a changed understanding of the Wadden Sea region.

Keywords: Dutch diking technology, victory over the sea, mental history, relationship to nature, Goethe's *Faust II*

Introduction

In his famous book *Traces on the Rhodian Shore. Nature and Culture in Western Thought*, Clarence J. Glacken wrote that ‘one could write an illuminating essay on the influence of Dutch hydraulic engineering on optimistic interpretations of modifications of the land by human agency’ (1967: 476). Such an essay focusing on the European history of mentality has yet to be written despite the impact of Dutch dike-building technology, in particular, on the modern view about nature, which should not be underestimated. I would like to offer a first approach to this long overdue study.

In this rather short contribution, I can only roughly describe the main line of reasoning of such a comprehensive study. Some key texts on the history of dike engineering as well as on the impression of the Dutch coastal landscape and the theoretical approach to nature make it evident that the success of land securing and drainage in the Netherlands had a significant impact on our modern understanding of nature as something that was to be subdued by science and technology. The ‘victory over the sea’ was understood as proof of the human ability to tame and exploit natural forces.

I would like to start with a very revealing and by now very well-investigated example of the outstanding impact of the Dutch victory over the sea. One of the most important works of world literature is Johann Wolfgang von Goethe’s *Faust*, a play in two parts. At the end of the whole drama, land reclamation and drainage become the (literal) ground for the redemption of the universal scholar Faust, who, according to legend, enters a pact with the devil in order to satisfy his insatiable thirst for knowledge and to get everything he desired. In the second part of the drama, the devil claims Faust’s soul, after Mephistopheles (or Mephisto) engages the never-satisfied Faust into a succession of fantastic experiences and adventures. Faust’s soul is saved only because his last project is to gain land from the sea for millions of people.

Goethe’s famous work marks the outstanding importance that the Dutch model of gaining land by defeating the sea took on in Europe’s history of mentality. And it must be mentioned that, Goethe, who was himself an ambitious scientist of his time, confirms this impact in the play, although his scientific convictions ran counter to those who contributed to the rise of modern ‘hard’ science.

Faust: Redemption by gaining land from the sea

The impact of land reclamation techniques that had been developed in the Netherlands is apparent not only in the content of Goethe's play but also in its genesis. In 1816, Goethe worked on the second part of his play, but progressed very slowly. Then, nearly ten years later on 8 and 9 February 1825, he noted in his diary that he had begun to engage with the work again. It is relevant to note that on the night of 3 and 4 February, an extremely strong storm surge known as the Hallig Flood hit the Wadden Sea coast, claiming many lives and causing much destruction, particularly in North Friesland. This natural disaster and Goethe's literature project are inseparably interconnected, as has been proven incontrovertibly by Karl Lohmeyer (1925, 1927, 1944) and Hansjörg Küster (2011).

Goethe must have learned of the devastating storm surge immediately, probably via newspapers (Fischer 2007: 250). And some months later, he instructed his conversation partner Johann Peter Eckermann to travel to the coastal region of the Lower part of the Elbe to report back to him (Lohmeyer 1925: 33; Küster 2011: 202). Why?

The storm surge reminded naturalist and poet Goethe of a travelogue by the Göttingen professor Christoph Meiners, whom he had met in 1801 and whom he estimated highly (Lohmeyer 1950: 419). Meiners was born in the area of Stade and had travelled to his home country and documented this trip in great detail, specifically describing the dike construction and land reclamation in the Lower part of the Elbe (Küster 2011: 192 et seq.). Goethe's initial interest in the travel document was principally about geological matters, but Meiner's text was also a source of inspiration that ultimately led to the elaborate Faust project, for the aged Goethe in the end lets the restless Faust, who is never satisfied with his accomplishments, start a dike-building and land-reclamation project when Mephisto tries to claim the soul that he has earned. Goethe drew from Meiner's travelogue the necessary landscape and technical-practical documentation, down to precise quotations, presumably supplemented by Eckermann's report. Today, the wording of the last scene of *Faust, Part II* provides one of the most impressive documents showing the impact of dike building and land reclamation — and particularly the way it was undertaken in the Netherlands about 200 years ago — on the history of mentality and perception.

Hansjörg Küster (2011) has pointed out the parts in Goethe's play that are based on information from Meiners' travelogue. Here I will cite only a

few important passages. In the following, the blind Faust hears the lemurs clattering with their shovels:

Faust (Comes from the Palace, groping his way past the doorposts.)
 How the clattering of shovels cheers me!
 It's the crews still labouring on,
 Till earth is reconciled to man,
 The waves accept their boundaries,
 And ocean's bound with iron bands.

Mephistopheles, however, remarks:

And yet with all your walls and dams
 You're merely dancing to our tune:
 Since you prepare for our Neptune,
 The Water-demon, one vast feast.
 You'll be lost in every way –
 The elements are ours, today,
 And ruin comes on running feet. (Goethe 2003: V. 11539 et seq.)

While the blind Faust proceeds enthusiastically with his land reclamation activity, Mephisto tries to provoke the next storm surge — and this is where Goethe very distinctly includes his knowledge about the recently destroyed Wadden Sea coast. The land reclamation project, which Faust oversees only during its planning stage and does not live to see its completion, takes on a religious dimension at the end, becoming the reason for Faust's redemption:

Let me make room for many a million,
 Not wholly secure, but free to work on.
 Green fertile fields, where men and herds
 May gain swift comfort from the new-made earth.
 Quickly settled in those hills' embrace,
 Piled high by a brave, industrious race.
 And in the centre here, a Paradise,
 Whose boundaries hold back the raging tide,
 And though it gnaws to enter in by force,
 The common urge unites to halt its course.
 Yes, I've surrendered to this thought's insistence,
 The last word Wisdom ever has to say:
 He only earns his Freedom and Existence,

Who's forced to win them freshly every day.
 Childhood, manhood, age's vigorous years,
 Surrounded by dangers, they'll spend here.
 I wish to gaze again on such a land,
 Free earth: where a free race, in freedom, stand.
 Then, to the Moment I'd dare say:
 'Stay a while! You are so lovely!'
 Through aeons, then, never to fade away
 This path of mine through all that's earthly. –
 Anticipating, here, its deep enjoyment,
 Now I savour it, that highest moment. (Goethe 2003: V. 11563 ff.)

Goethe lets Faust die at precisely the moment his pact with the devil is lifted because now that he is filled with 'deep enjoyment', Faust no longer covets supreme happiness. The dying Faust is thus redeemed when the vision of a new land area secured by dike construction and drainage is realised for millions of people. Following the model of the North Sea marshes, the act of reclaiming land and safeguarding the countryside appears to be the ultimate culmination of the human pursuit of happiness and fulfillment.

It should be noted that Goethe built in a little faltering in Faust's enthusiasm of creating land 'for millions'. Having in the end become blind, Faust hears only the lemurs digging canals and dikes, so he declares: 'report to me on progress every day', upon which Mephistopheles mocks him 'half-aloud': 'Reporting it to me the word they gave, was not quite gravel, it was more like...grave' (Goethe 2003: V. 11555 et seq.). But when Faust dies in the belief that his project of reclaiming fertile land from the sea has succeeded, he is lifted up by angels and taken to heaven, and Mephistopheles ultimately leaves without obtaining Faust's soul.

The perception of the Dutch coastal landscape and the conquest of the sea

We have seen that, in this apotheosis of the human transformation of a coastal landscape exposed to the natural forces, Goethe had been directly exposed to relevant literature on the diking of the North Sea marshes. Therefore we can and must also read his text as a commentary on mental history. And it can also be shown that Goethe's poetical drafting of the 'beneficial' land reclamation and land-saving measures in the Wadden

Sea is only a milestone in the history of the modern transformation of the Wadden Sea landscape, a result of Dutch dike construction beginning in the seventeenth century. This history of action has established a relationship to and understanding of nature that has long since been completely self-evident in our 'Western' culture, although it is now disputed.

In his classic book *The Embarrassment of Riches*, which attempts to interpret the 'Golden Age' of the Netherlands in terms of its history of mentality, Simon Schama refers to the verses from the conclusion of *Faust, Part II* and relates it directly to Holland in the seventeenth century. He describes Goethe's passage as 'the morality of Dutch landscape' (1987: 50). As Schama could have already known, this is incorrect with regard to the concrete sources of the Faust verses that are related to the landscape scenery. However, it clearly confirms the impact of the concepts that had become reality with the securing of a large part of the Dutch landscape in the period after 1570. At the beginning of his book, Schama mentions 'the transformation of a catastrophe into a fortune, weakness in power, water in dry land, mud in gold' that took place in the Netherlands and that has been a central component of the Dutch identity at least during the 'Golden Age' but also far beyond it. He writes: 'So the trial of faith by adversity was a formative element of the national culture' (ibid.: 38). Insofar as water helped the Dutch to defeat not only political enemies — such as during the siege of Leiden 1574 (ibid.: 26) — but also natural threats like storm surge destructions, the recovery and securing of the country became more and more successful, 'the ordeal of water [...] a determinant of moral authenticity' (ibid.: 25).

Countless travelogues of the seventeenth and eighteenth centuries written by curious and impressed visitors from all over Europe confirm the Dutch's self-understanding. The travellers came 'attracted by the proverbial riches of the Dutch, by the uniqueness that big parts of their territory are lying under the level of the sea, by the kind of their government, by their customs and manners...' (Murriss 1925: 7). The 'Dutch Miracle' (Wagret 1968: 75) of land reclamation and the protection of the coast is presented to the travellers in the beautifully designed and enormously successful managed marshes (Murriss 1925: 22). Albrecht von Haller and others raved about the vast and accurately bordered meadows (von Haller 1883: 27), Voltaire called the landscape a paradise (Murriss 1925: 25), and for many visitors it is a mental challenge to imagine that they are standing and walking on an expanse of ground that is below sea level. The consciousness of that fact causes admiration as well as fear (Murriss 1925: 28; Corbin 1990: 53), but praise of the astonishing Dutch ability prevails. Between 1615 and 1640, an average of about 4,500 acres of land were claimed each year by means of embankments

and drainage. Approximately 80 percent of the land gain between 1540 and 1715 was based on embankments (Wagret 1968: 77).

The fact that the design of the landscape is based on a 'conquest of the sea' is repeatedly stated in the travel reports. However, the decisive conquerors themselves, the organisers and planners of dikes and drainage, considered the aims and the means of their activity as one of the defining impulses for a changed relationship with nature that gradually prevailed in Europe in the early modern period. Schama explains that the Calvinistic interpretation of mankind's divine mission — 'deserving' the blessing of God with successful work — provided the theological-moral legitimation for the conquest of the sea (Schama 1987: 33). At that time, the political agreement and self-assertion and geographical and life-sustaining self-assertion (by dike construction and drainage) coincided with the process of legitimation (Schama 1987: 42).

This divinely certified task, comprising more than just reclaiming land and securing land after storm surges, had to be translated into certain leading ideas in the concrete strategies against the water. Such a decisive pattern of thought has long been a human struggle against the forces of nature — it is still a common metaphorical stereotype concerning coastal protection (L. Fischer 2011: 40). But you have to look closely at these patterns of thought. For centuries, the 'struggle with the menacing sea' was perceived in the form of an animal metaphorisation of the sea: the sea was like a mighty beast or a monster. It is significant that this kind of metaphor was used by Andries Vierlingh, the most important dike engineer in the first phase of the Golden Age: 'Your foe Oceanus, does not remain nor sleep, either by day or by night, but comes, suddenly, like a roaring lion, looking to devour the whole land. To have kept your country, then, is a great victory' (Vierlingh quoted in Schama 1987: 42). When the province of Zeeland placed a defensive lion at the centre of its coat of arms, this also symbolised that human prudence and determination could be a match for the lion-like sea.

It is now clear that for the successful dike constructor Vierlingh, the basic pattern of the struggle with the sea for land reclamation and security did not end in a brutal overpowering of the threatening sea forces:

Patience is an art: it is not synonymous with slowness or laziness, but it is learned from experience. We must never try to force Nature, for she is much stronger than men when she wishes to be. We must adapt ourselves to her and guide her blind strength for our benefit. Brute force will never solve anything, for the water will turn it back against you. (Vierlingh cited after Wagret 1968: 83)

The engineering art of dike construction and land reclamation can appear in Vierlingh's eyes to be a kind of 'humanistic pedagogy' when he explains that the tides are 'like naughty children that must be educated in their infancy' (Vierlingh quoted in Schama 1987: 42).

But Vierlingh also vigorously warned against underestimating the sea: 'The foe outside must be withstood with our common resources and our common might, for if you yield only slightly the sea will take it all' (Vierlingh quoted in Schama 1987: 43).

The educated humanist Vierlingh was to change his use of metaphor from that of an energetic 'transformation' to one of a clever, flexible struggle with powerful, animalistic opponents. And yet there was also a touch of theological demagoguery: 'The making of new land belongs to God alone, for He gives to some people the wit and the strength to do it' (Vierlingh quoted in Schama 1987: 35).

Towards a modern war against nature

This theological framing of the issue was to change decisively in the eighteenth century. This unmistakable paradigm shift in the understanding of human activities towards the sea led to a reinterpretation of metaphors, especially in Holland. Manfred Jakubowski-Tiessen explains the final result of this reinterpretation in the German-language literature: the 'enemy' — which could be described as a powerful, dangerous animal — became a military opponent by the end of the Enlightenment (Jakubowski-Tiessen 2011: 56). The metaphor became that of a martial attack and unambiguous military defense measures. The enlightened philosopher and mathematician Johann Nikolaus Tetens, who traveled the North Frisian coast and wrote reports on the state of the dikes, formulated it concisely in 1787: 'The war of the marshes with the water is, of course, an eternal war, like that of nature and the elements always is, which mankind has to lead in so many respects in the state of civilization and culture. One has to deal with an enemy who has no peace or a truce' (Tetens 1787: 653). And the Scottish philosopher James Dunbar noted in 1781: 'Let us learn then to wage war with the elements, not with our kind; to recover, if one may say so, our patrimony from Chaos, and not to add to his empire' (Dunbar quoted in Glacken 1967: 600). The art of engineering — above all dike construction — was understood as a warlike operation against the enemy sea, and the after-effects of this definition of man's relationship with nature can be traced to the latest texts on dike construction, even official ones (Fischer 2011: 37). The construction of the

dikes and the protection of the coast were one of the most important fields on which this war against nature took place. Only a strong, rigid coastline produces order in natural conditions, according to this idea, echoing Dunbar (Fischer 2011: 35; Glacken 1967: 600).

From the eighteenth century onwards, the dominant conviction not only among scientists but also among the general public was that Holland had shown that this war against the forces of nature could be won. Vast storm surges and their associated destruction caused mental challenges, but this only led to a more robust scientific and technical effort. The optimism resulting from the subjugation of 'disordered natural forces' to human reason could be understood as a worldwide mission until well into the twentieth century, not least for the sciences and for the 'risk management' of our time (Jakubowski-Tiessen 2011: 60; Groh, Kempe & Mauelshagen 2003). The physiologist Hermann von Helmholtz, after whom the most important association of natural science research in the Federal Republic of Germany is named, explained in detail in a lecture in 1844 that the individual researcher must maintain the conviction that 'he has also provided a building block to the great totality of science, of which the irrational powers of Nature should be subject to the moral purposes of mankind' (Helmholtz 1971: 156).

The dike architecture originating in the Netherlands has historically been one of the most important wellsprings of the long-dominant concept of the war against nature that civilised mankind must lead. We must be aware of the perspective of the history of mentality with regard this legacy if we are to discuss a paradigm shift for the understanding of the Wadden Sea coast — a paradigm shift that overcomes the attitude towards nature as a mere object of subjugation as well as the simplistic divide of nature versus culture. And we must take notice of the fact that, within the history of mental dispositions on the Wadden Sea coast, there have been concepts and practices of other principles of living with the sea (Fischer 2011). It is impossible to simply go back to them, but they could help us to understand that the leading idea of the subjugation of nature to human desire and prosperity is not without alternatives.

References

- Corbin, A. (1990). *Meereslust. Das Abendland und die Entdeckung der Küste 1750-1840*. Berlin: Wagenbach.
- Dunbar, J. (1780). *Essays on the history of mankind in rude and cultivated ages*. London: W. Strahan.

- Fischer, L. (2011). Küste. Von der Realität eines mentalen Konzepts. In Fischer, L. and Reise, K. (eds.), *Küstenmentalität und Klimawandel. Küstenwandel als kulturelle und soziale Herausforderung* (31-54). Munich: Oekom.
- Fischer, N. (2007). *Im Antlitz der Nordsee. Zur Geschichte der Deiche in Hadeln*. Stade: Landschaftsverband der ehemaligen Herzogtümer Bremen und Verden.
- Glacken, C. J. (1967). *Traces on the Rhodian shore*. Berkeley: University of California Press.
- Goethe, J.W. von (2003). *Faust Parts I & II*. Retrieved from www.iowagrandmaster.org/Books%20in%20pdf.Faust.pdf
- Groh, D., Kempe, M. and Mauelshagen, F. (eds.) (2003). *Naturkatastrophen. Beiträge zu ihrer Deutung, Wahrnehmung und Darstellung in Wort und Bild von der Antike bis ins 20. Jahrhundert*. Tübingen: Gunter Narr.
- Haller, A. von (1883). *Tagebücher seiner Reisen nach Deutschland, Holland und England 1723-1727*. Leipzig: S. Hirzel.
- Helmholtz, H. von (1971). Über das Ziel und die Fortschritte der Naturwissenschaften. In: H. v. Helmholtz. *Philosophische Vorträge und Aufsätze* (153-186). Berlin: Akademie-Verlag.
- Jakubowski-Tiessen, M. Vom Umgang mit dem Meer (2011). Sturmfluten und Deichbau als mentale Herausforderung. In L. Fischer and K. Reise (eds.), *Küstenmentalität und Klimawandel. Küstenwandel als kulturelle und soziale Herausforderung* (55-64). Munich: Oekom.
- Küster, H. (2011). Christoph Meiners, das Land Hadeln und Goethes Faust II. *Jahrbuch der Männer vom Morgenstern* 90, 189-221.
- Lohmeyer, K. (1925). Literarische und andere Nachwirkungen der letzten großen Sturmflut vom 3. und 4. Februar 1825. *Jahrbuch der Männer vom Morgenstern* 22, 7-38.
- Lohmeyer, K. (1927). Das Meer und die Wolken in den letzten beiden Akten des Faust. *Jahrbuch der Goethe-Gesellschaft* 13, 106-133.
- Lohmeyer, K. (1944). Das Küstengebiet an der Niederelbe als Schauplatz der Dichtung. *Archiv für Landes- und Volkskunde von Niedersachsen*, 347-358.
- Lohmeyer, K. (1950). Aus den Anfängen der Niedersächsischen Landes- und Volkskunde. *Neues Archiv für Niedersachsen* 14/4, 414-446.
- Murris, R. (1925). *La Hollande et les Hollandais au XVII^e et au XVIII^e Siècles vus par les Français*. Paris: Librairie Ancienne Honoré Champion.
- Schama, S. (1987). *The Embarrassment of the Riches. An Interpretation of Dutch Culture in the Golden Age*. New York: Alfred A. Knopf.
- Tetens, J.N. (1787): Über den eingedeichten Zustand der Marschländer, und die demselben anklebende Gefahr von Überschwemmungen. *Schleswig-Holsteinische Provinzialberichte* 1, 641-665.

- Tetens, J.N. (1788). *Reisen in die Marschländer an der Nordsee zur Beobachtung des Deichbaus in Briefen*. Leipzig: Unknown binding.
- Vierlingh, A. (1920). *Tractaet van Dyckagie. Waterbouwkundige adviezen en ervaringen van Andries Vierlingh*. De Hullu, J. & Verhoeven, A.G. (eds.). The Hague: Nijhoff.
- Wagret, P. (1968). *Polderlands*. London: Methuen & Co.

About the author

Prof. Ludwig Fischer worked from 1978 to 2004 in literary science and media culture at the University of Hamburg. He has written and edited many books and essays on literature of the nineteenth and twentieth centuries as well as on mass media and mental history. He has been engaged in the history, culture and development of the Wadden Sea region for many years. He was a member of the LANCEWAD Project Group, has edited several books on the landscape and culture of the region, and has written many essays on the theory and perception of landscape and nature, on nature protection, and on social history in the marshlands.

8 Between National Socialist ideology and resistance

Interpretations of artworks depicting the Wadden Sea

Nina Hinrichs

Abstract

During the period of National Socialism, art production was under the control of the regime. A variety of marine paintings show that depictions of the Wadden Sea region reflect the National Socialist ideology and propaganda. The racist 'blood and soil's' ideology was a basis for the production and reception of arts and thus also for landscape paintings of the Wadden Sea and its coast. Some paintings depicting the Wadden Sea region were interpreted as expressions of this racist ideology. Diking and gaining land were seen as a fight against the sea, and this was visualised in arts. Some naval paintings of the North Sea, its coast, and harbour cities were used for wartime propaganda. While paintings in line with the demands of National Socialism are naturalistic depictions, the paintings decried by National Socialists offer expressionist and surreal images. These artworks express critical issues, resistance, fear and, of course, the individual context of each artist.

Keywords: art production, National Socialism, Wadden Sea, ideology

This chapter will attempt to give insight into the production and interpretation of paintings depicting the Wadden Sea during the Nazi regime (Hinrichs 2017: 239-275). The links between paintings of German artists depicting the Wadden Sea and the National Socialist (NS) ideology will be discussed. During National Socialism, art production was under the control of the regime (Backes 1988; Mathieu 1997; Merker 1983). Jewish and modern artists were defamed and termed 'degenerate' (*entartet*) based on

the racist anti-Semitic theory. A traditional style of painting was promoted, and modernist artworks were prohibited. Art was seen primarily as an instrument for voicing propaganda of the National Socialist ideology and the Second World War.

The exhibition called 'Degenerate Art' that first took place in Munich in 1937 showed the art decried by National Socialists. Meanwhile, the 'Great German Art Exhibitions' were promoting visual art in accordance with National Socialism; paintings at those exhibitions were mainly naturalistic depictions of figures, landscapes and subjects concerning warfare. All their motives had to be in line with the policies and ideology of National Socialism. Paintings depicting the German Wadden Sea region did not encompass a significant portion of the total number of artworks in the Great German Exhibitions, but they were nonetheless displayed as representative of a slice of the German homeland. Some of them were interpreted as the expression of the racist 'blood and soil' ideology, with concerns about warfare being integrated into those paintings. At the same time, the paintings of the Wadden Sea created by artists decried by the National Socialists show the fear and insecurity they suffered during that period.

The Wadden Sea in the context of the 'blood and soil' ideology

The racist National Socialist theory of art is based on the idea that the artist is bound, by virtue of his race, to the landscape of his home (Schultze-Naumburg 1932, 1934, 1935; Rosenberg 1930, 1933-1944). The so-called Aryans — who were assumed to belong to the 'Nordic race' — were believed to have been bound to their Northern homeland, which included Germany. Thus, paintings of Germany were interpreted as *arteigen*, meaning pure Aryan art. In the context of the 'blood and soil' ideology, such paintings were declared as representations of the race of the artist (Scholz 1940). Thus, naturalistic depictions of Germany and depictions of the Wadden Sea were seen as exemplary for landscape paintings following the ideology of National Socialism — for example, the painting *Sunrise on the North Sea* (Rosenberg 1943b: 12) by Alfred Bachmann was recognised positively in the journal *Kunst im Deutschen Reich*, which showcased National Socialistic art (Rittich 1943). Bachmann chose a rather idyllic representation: a coast scene is visualised, with clouds in shades of grey, illuminated by the sun with pale yellow and pink hues. In the foreground, a damp beach or mudflat area reflects the colours of the sky; in the background, waves are rolling towards the beach. Bachmann's naturalistic style and the landscape motifs

Figure 8.1 Magnus Weidemann, *Versunkenes Land*, date unknown (before 1939).



Published in: Weidemann, M. (1939). *Unsere nordische Landschaft*, Karlsruhe: Müller, p. 125

of Germany received recognition under National Socialism (Hinrichs 2017: 501-508). Some of his works were popularised — Hitler even owned some of his paintings (Hinrichs 2017: 501-508) — but it is important to note that Bachmann did not want to convey racist ideology through his landscape paintings.

Some artists, however, did intend to visualise the racial ideology. Magnus Weidemann, who was not as popular as Alfred Bachmann, interpreted his paintings as the visualisation of the Northern landscape and the Nordic race. He described the North Sea, which includes the Wadden Sea, as a characteristic Nordic element (Weidemann 1939: 10, 20, 22, 38). He lived on the island of Sylt, and the Wadden Sea region was a principal motif in his artworks. In his painting *Sunken Land* (figure 8.1), he depicts the mudflats of the Wadden Sea (ibid.: 125). A great stone, an erratic block, is situated in the foreground; it is confronted with the vastness of the Wadden Sea and the sky. In the distance, one can see part of Sylt.

Weidemann also referred to a past in which the Wadden Sea basin was not yet flooded. He called this area a part of the 'Nordic original homeland', or *Urheimat der nordischen Menschen* (ibid.: 10). According to him, this Nordic homeland can still be found in Germany, especially on its coasts and Islands. The tidelands are a relic of the sunken land, but Weidemann also regarded the Wadden tideland as potential new land that would be drained in the future (ibid.: 42).

He referred to the racist idea of the 'blood and soil' ideology through the concept of the Nordic Man, suggesting that the Aryans were shaped by the

Nordic landscape (ibid.: 10) and it was their natural homeland to which they were bound for life. He supported this thesis by claiming that he knew many people in Germany who naturally felt at home on the North Sea coast (ibid.: 108). Weidemann believed that the Nordic man must rediscover the Nordic landscape (ibid.: 10, 38), and he wanted to promote this idea with his art by showing the so-called Nordic landscape where the Aryans would gather inner strength; it would be the 'mental refreshment' for the 'racial soul': 'seelische Auffrischung der besten Elemente ihrer Rassenseele' (ibid.: 108). In this context, Weidemann praised the 'strength through joy' (Kraft durch Freude) movement, which organised trips to the North Sea region (ibid.: 38).

Weidemann painted the Wadden Sea region in many different ways. The paintings do not represent the NS ideology, but he integrated racial ideas into his artworks through his writings. However, this was not the only way that the Wadden Sea and North Sea regions were perceived, depicted and interpreted. Land reclamation was another subject also represented in the arts.

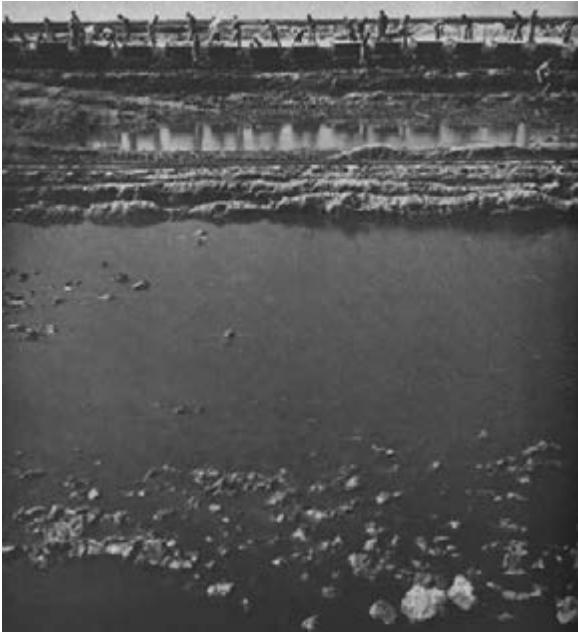
Fight against the North Sea: Land reclamation

During the reign of National Socialism, major efforts were being made to gain land from the North Sea (Trende 2011). The North Sea was personified as a hostile element that man must fight and conquer. Metaphors based on military terms were used to describe the land reclamation: diking and gaining land were portrayed as a fight against the sea. This was also reflected in the arts, especially in paintings and photographs.

Lendvai-Dircksen's photograph *Arbeitsdienst bei Dagebüll* (figure 8.2) shows the flooded land and men working to dewater it (Lendvai-Dircksen 1939: 38). The workers cannot be recognised individually in the photo; all we can see is a line of tiny people against the background. The greater part of the painting is taken up by the depiction of the land that has to be dewatered. Lendvai-Dircksen captioned the photo as follows: 'German youth is conquering new land; a young army is fighting against the wild murderous North Sea' ('Deutsche Jugend mit dem Spaten erobert Neuland, gegen die alte wilde Nord- und Mordsee ist ein neues junges Heer ausgezogen') (ibid.: 5).

By diking and dewatering the land, Germans wanted to gain more land for the homeland of the Aryans. The land reclamation of the Adolf Hitler-Koog, for example, became a propaganda event: 'Finished in the beginning of a new time, the Hitler-Koog allows a resettlement for a choice of the best of the Nordic race' ('Im Anbruch einer neuen Zeit fertig geworden, ist der

Figure 8.2 Erna Lendvai Dirksen, *Arbeitsdienst bei Dagebüll*, date unknown (sometime before 1939).



Published in: Lendvai-Dirksen, E. ([ca. 1939]). *Das deutsche Volksgesicht*. Bayreuth: Gauverlag, p. 38

Hitler-Koog eine Neubesiedlung im Sinne rassischer Auswahl der Besten') (Lendvai-Dirksen 1939: 20).

In this region, political efforts were made to settle the so-called Aryans. From a National Socialistic perspective, this region seems to have been valuable: the harsh conditions near the sea influenced the coastal inhabitants. This is interpreted in the context of the Nazi 'blood and soil' ideology: some Frisians living there were regarded as Aryans and were depicted as such in photographs by Lendvai-Dirksen and others (ibid.: 20-23).

The Wadden Sea region in the context of warfare

Of course, the Wadden Sea was not a place where naval battles had taken place. Even the North Sea was not as important as the Atlantic. Nevertheless, naval paintings show the North Sea — for example, *German destroyers in the North Sea* by Claus Bergen (Herzog 1987: 155) — and they were very popular.

The focus of this painting is on a destroyer, the *Karl Galster*. Behind it, in the distance, another destroyer is depicted. The marine ships are moving

through the waves. This painting, which was shown at the Great German Art Exhibition in 1940, received rave reviews in the NS magazine *Art in the German Reich* (Scholz 1940), with its representation of the image of a strong powerful German naval army seen as ideal. The sea — in this case, the North Sea — was interpreted as a war front.

Bergen worked as a maritime painter and contributed to the popularisation of the German navy and the glorification of battles in the First and Second World Wars. Many of his painting were interpreted in the context of war propaganda.

In addition to depictions of the navy, some naval paintings also had symbolic meanings — for example, Michael Mathias Kiefer chose to depict eagles to visualise National Socialist aggression and power. The eagle was part of the national emblem of the NS party. Another painting called *The outlook* (figure 8.3) evoked associations with the patrolling war aircrafts stationed at Helgoland at that time (GDK 1940: 35). The painting focuses on two huge eagles; they are flying above the sea and seem to be on the lookout. The island of Helgoland is depicted some distance away. The title evokes an interpretation in a martial context.

The painting *Nordic Sea* (Rosenberg 1943a: 15) can also be interpreted in a similar context. Here, two eagles are flying above the sea and the coast. The idea of being on the lookout — like the military — can clearly be felt here. These paintings are prime examples of the allegorical inclusion of war propaganda topics.

Signs of war could be seen in other paintings of the Wadden Sea region — for example, those that depicted the naval port of Wilhelmshaven. The city is referred to in NS propaganda as a guard on the North Sea (Gebietsführung Nordsee 1938: 33-34). The painting *Ice floats on the Jade* by Franz Radziwill (figure 8.4) can evoke associations of German defence against the British offensive (Soiné 1992: 126-127). Huge ice blocks are shifted to a kind of barrier, while Wilhelmshaven can be seen far in the distance. There are captive balloons in the air, which were used for military defence.

It reminds one of the famous painting *The Sea of Ice* by Caspar David Friedrich (figure 8.5) (Hinrichs 2017: 389-390). He was a great Romantic artist whose art was extensively studied by Radziwill. But in contrast to Friedrich's painting, Radziwill's depiction must be interpreted in the context of war. Radziwill lived in the Wadden Sea region and had an ambivalent relationship with National Socialism (Neumann-Dietzsch and Weigel 2011). In 1933 he became a member of the National Socialist Party. In the beginning, his art was praised, especially his paintings depicting marine and war motives. But then, when the National Socialists discovered his

Figure 8.3 Michael Mathias Kiefer, *Die Wacht*, date unknown.



Published in: *Große Deutsche Kunstausstellung 1939 im Haus der Deutschen Kunst zu München* (1940), Munich, p. 51, Nr. 589

expressionist painting, his art was labelled degenerated. At the end of the Second World War, he had developed a critical view of National Socialism, which will be referred to later in this article.

As previously stated, art and literature were used as an instrument for war propaganda. A propagandist poem for the Hitler Youth of the North Sea coast compares the storm surge of the North Sea rolling powerfully and in a destructive manner to the land with the power of the National Socialist Army fighting their enemies (*Gebietsführung Nordsee* 1938: 2). At the same time, the paintings of artists defamed by the National Socialists show the fear and insecurity they suffered during that period.

The North Sea from the perspective of the decried artist Max Beckmann

The artist Max Beckmann was excoriated under National Socialism, and his artworks were characterised by the regime as degenerate (Hinrichs 2017: 636-661). Some of his paintings were presented in the exhibition *Degenerate Art* in 1937. In June of the same year, Beckmann undertook a trip to Wangerooge. Based on his visit, he created a series of images of the North Sea.

The paintings *North Sea Landscape I (thunderstorm)* (Bürgi & Peter 2011, Illustration 1) (figure 8.6) and *Stormy North Sea (Wangerooge)* (ibid., Illustration 12) (figure 8.8) were made in Berlin, while *North Sea Landscape II*

Figure 8.4 Franz Radziwill, *Eisberge auf der Jade*, 1940/41.



place unknown

Figure 8.5 Caspar David Friedrich, *Das Eismeer*, 1823/24.



Kunsthalle Hamburg

(*leaving clouds*) (ibid., figure 8.3) (figure 8.7) was painted during his exile in Amsterdam. These works portray different stages in the course of a storm.

North Sea Landscape I (thunderstorm) shows a storm front above the sea, where the water seems to be nearly black. The painting evokes threatening impressions. *Stormy North Sea* depicts a partly flooded beach at Wangerooge, where the waters of the North Sea are being churned by strong winds. The dark clouds in the distance hint at the ominous sign of a storm. The third piece, *North Sea Landscape II (leaving clouds)*, shows the scenery of the coast

when the storm is nearly over. However, some grey clouds and the white spray of the waves still remind the viewer of the recently passed storm. Areas of the beach are still flooded, and a line of abandoned bath cabins are still lined up. In all three paintings, not a single person is depicted. The painter's focus is on the rough weather causing turmoil in the sea.

On the surface, these paintings are inspired by real weather phenomena such as storm and rain that Beckmann experienced at Wangerooge (Gallwitz, Schneede & Wiese 1994: 276). On another level, the paintings reflect the threatening situation and insecurity suffered by Beckmann because of his rejection by the National Socialists. As mentioned above, he created the last painting in this series while in exile in Amsterdam.

Reading the paintings in this order, one sees that the storm will pass by. Translating this metaphorically into the situation of National Socialism, however, we can say in retrospect that this was wishful thinking on Beckmann's part, for the most difficult time — the Second World War — was yet to come.

Emil Nolde: Unpainted paintings

In contrast to those decried artists such as Beckmann who left Germany, the maligned artists who chose to stay were prohibited from working there. Emil Nolde was one such artist living in the German Wadden Sea region. Despite his efforts to be honoured as a Nordic expressionist by National Socialists, Nolde's expressionistic works were called degenerate, and quite a few were presented in the exhibition *Degenerate Art* (Hinrichs 2017: 602-610). He was subsequently not allowed to work as an artist. While in exile in his own house in Seebüll, Nolde could only secretly work on some of his so-called unpainted paintings, or *ungemalte Bilder* (Haftmann 1963). He suffered tremendously because of this situation (Nolde 1967: 125-126).

After the end of the war, he created oil paintings based on small water-colour studies such as *Marsh Landscape and Evening Sky* (Marschlandschaft unter Abendhimmel) (figure 8.9). The splash of colour in the North Frisian landscape inspired his works. He chose atmospheric moods. In this painting, a small stretch of land is depicted, and above it looms a great abundance of sky with a riot of colours. Nolde's individual aesthetic theory relating to the subjective experience of colours can be seen in his paintings. He used an expressionistic style, as a result of which he was labelled degenerate. His unwillingness to obey the National Socialist Party's orders not to paint can be interpreted as a valiant effort to resist the Nazi regime.

Figure 8.6 Max Beckmann, *Nordseelandschaft I (Gewitter)*, 1937.



Private

Figure 8.7 Max Beckmann, *Nordseelandschaft II (abziehende Wolken)*, 1937.



Private

Figure 8.8 Max Beckmann *Stürmische Nordsee (Wangerooze), Nordseelandschaft III, 1937*.



Private

Franz Radziwill's apocalyptic images

But there are also artworks that reflect the destruction caused by the Second World War. Most of the paintings were created after 1945 when the National Socialist terror regime had been destroyed. This can be seen in the painting *Frisian landscape* (1945) by Franz Radziwill (Henkel & Nievers 2011: 151). The painter created an apocalyptic scene. In the foreground are a bomb crater, a ruined graveyard and a dead tree; behind them are buildings — a church with dark windows and another house. A stretch of water can also be seen, and there are surreal elements in a black sky. Radziwill also made similar paintings reflecting the ravages of the Second World War — for instance, his 1953 painting *The cosmos can be destroyed, but not the sky* (Soiné 1992: 146) (figure 8.10).

Cracks through the sky above the Wadden Sea coast engulfed in darkness depict the desolation and destruction inflicted by mankind. The dark background represents the metaphysical godly dimension, which cannot be destroyed and can be related to Radziwill's religious belief. So, referring

Figure 8.9 Emil Nolde, *Marschlandschaft unter Abendhimmel*, in the time period 1938-1945.



Nolde-Stiftung Seebüll

to the title, the term 'cosmos' means the human dimension, which can be destroyed, while the term 'sky' has a metaphorical meaning. According to the artist's religious belief, the godly sky cannot be destroyed (Hinrichs 2017: 420-422). The person on the right side of the painting seems to be completely unaware and ignorant of the destruction above him. He just walks on. These artworks express a critique of the ravages of war and more generally the bleak aftermath of the Second World War.

Conclusion

Under National Socialism, the racist 'blood and soil' ideology laid the basis for the production and reception of arts and thus also for landscape paintings of the North Sea and its coast. Some paintings depicting the Wadden Sea region were interpreted as expressions of this ideology.

Dike building and gaining land were seen as a fight against the sea. The land reclamation of the Adolf Hitler Koog became a propaganda event. Some Frisians who lived under the harsh conditions near the sea were regarded as Aryans and were depicted as such in photography. Furthermore, concerns about warfare were integrated into the paintings. Although the Wadden Sea was not a place where naval battles took place and the North Sea was not as important as the Atlantic, these naval paintings show the North Sea and its coast and harbour cities, with art becoming an instrument of wartime propaganda.

Figure 8.10 Franz Radziwill, *Der Kosmos kann zerstört werden, der Himmel nicht*, 1953.



Stadtmuseum Oldenburg

At the same time, paintings by artists excoriated by the National Socialists, such as Max Beckmann, show the fear and insecurity they suffered at that time. Emil Nolde tried to resist orders imposed by the NS that he refrain from painting by secretly creating his 'unpainted paintings'. The ravages of the Second World War and its aftermath are also reflected in Franz Radziwill's artworks.

While paintings in line with the demands of National Socialism are naturalistic depictions, the critical paintings referred to in this article depict expressionist and surreal images. The variety of the marine paintings show that depictions of the Wadden Sea region could reflect not only the National Socialist ideology and propaganda but also critical issues, resistance, fear and, of course, the individual context of every artist.

After the end of the Second World War, paintings by the so-called degenerate artists, including Emil Nolde, were popularised. But many artists who received positive recognition under National Socialism (such as Alfred Bachmann) continued to paint their subjects in a naturalistic style, for example the Wadden Sea. The Wadden Sea region does not represent the racist ideology of the National Socialists; it was only associated with these ideas by interpretations of the landscape paintings or by the intention of the artists. Nowadays, you may not see political or ideological ideas in

these landscape paintings without knowing the context. This shows the importance of knowing the origin and the history of how these artworks were perceived.

Today, the Wadden Sea is a World Heritage Site because of its unique nature. One has to look back in history to understand the different interpretations of its nature, which is also reflected in the arts.

References

- Backes, K. (1988). *Hitler und die bildenden Künste. Kulturverständnis und Kunstpolitik im Dritten Reich*. Köln: DuMont.
- Bürgi, B. M. and Peter, N. (eds.) (2011). *Max Beckmann. Die Landschaften*. Ostfildern: Hatje Cantz.
- Gallwitz, K., Schneede, U. M. and Wiese, S. (eds.) (1994). *Max Beckmann. Briefe. Band II: 1925-1937*. München, Zürich: Piper.
- GDK: Große Deutsche Kunstausstellung 1939 im Haus der Deutschen Kunst zu München (1940), Munich.
- Gebietsführung Nordsee (7) der HJ., Abteilung für weltanschauliche Schulung (ed.) (1938).
- Haftmann, W. (1963). *Emil Nolde. Ungemalte Bilder. Aquarelle und Worte am Rande*. Köln: DuMont.
- Henkel, K. and Nievers, L. (eds.) (2011). *Franz Radziwill. Meisterwerke aus privaten Sammlungen*, Köln: Wienand.
- Herzog, B. (1987). *Claus Bergen. Leben und Werk, Gräfelting vor*. Munich: Urbes.
- Hinrichs, N. (2017). *Wattenmeer und Nordsee in der Kunst. Darstellungen von Nolde bis Beckmann*. Göttingen: V&R Academic.
- Lendvai-Dirksen, E. (1939). *Das deutsche Volksgesicht*. Bayreuth: Gauverlag.
- Mathieu, T. (1997). *Kunstauffassungen und Kulturpolitik im Nationalsozialismus. Studien zu Adolf Hitler, Joseph Goebbels, Alfred Rosenberg, Baldur von Schirach, Heinrich Himmler, Albert Speer, Wilhelm Frick*. Saarbrücken: Pfau.
- Merker, R. (1983). *Die bildenden Künste im Nationalsozialismus. Kulturideologie – Kulturpolitik – Kulturproduktion*. Köln: DuMont.
- Neumann-Dietzsch, B. and Weigel, V. (eds.) (2011). *Der Maler Franz Radziwill in der Zeit des Nationalsozialismus*. Bielefeld: Kerber.
- Nolde, E. (1967). *Reisen, Ächtung, Befreiung, 1936-1948*. Cologne: DuMont.
- Rittich, W. (1943). *Das Meer und die Kunst. Kunst im Deutschen Reich*, 1, 9. Munich: Zentralverlag der NSDAP Franz Eher.
- Rosenberg, A. (1930). *Der Mythos des 20. Jahrhunderts*. Munich: Hoheneichen.

- Rosenberg A. (ed.) (1933-1944). *Kunst im Deutschen/Dritten Reich*. Munich: Zentralverlag der NSDAP.
- Rosenberg, A. (ed.) (1943a). *Kunst im Deutschen Reich, 1*. Munich: Zentralverlag der NSDAP.
- Rosenberg, A. (ed.) (1943b). *Kunst im Deutschen Reich, 2*. Munich: Zentralverlag der NSDAP.
- Scholz, R. (1940). *Die Malerei in der Großen deutschen Kunstausstellung 1940 im Haus der Deutschen Kunst*, *Kunst im Deutschen Reich*, 8/9, 236-249.
- Schultze-Naumburg, P. (1934). *Kunst aus Blut und Boden*. Leipzig: Seemann.
- Schultze-Naumburg, P. (1935). *Kunst und Rasse*. Munich: Lehmann.
- Schultze-Naumburg, P. (1932). *Kampf um die Kunst*. Munich: Lehmann.
- Soiné, K. (ed.) (1992). *Franz Radziwill. Bilder der Seefahrt*. Bremen: Hauschild.
- Trende, F. (2011). *Neuland! War das Zauberwort. Neue Deiche in Hitlers Namen*. Heide: Boyens.
- Weidemann, M. (1939). *Unsere nordische Landschaft*. Karlsruhe: Müller.

About the author

Dr. Nina Hinrichs is lecturer in the history of arts and the didactics of arts at the University of Paderborn.

9 Living with water in the Tøndermarsk and Gotteskoog

Anne Marie Overgaard

Abstract

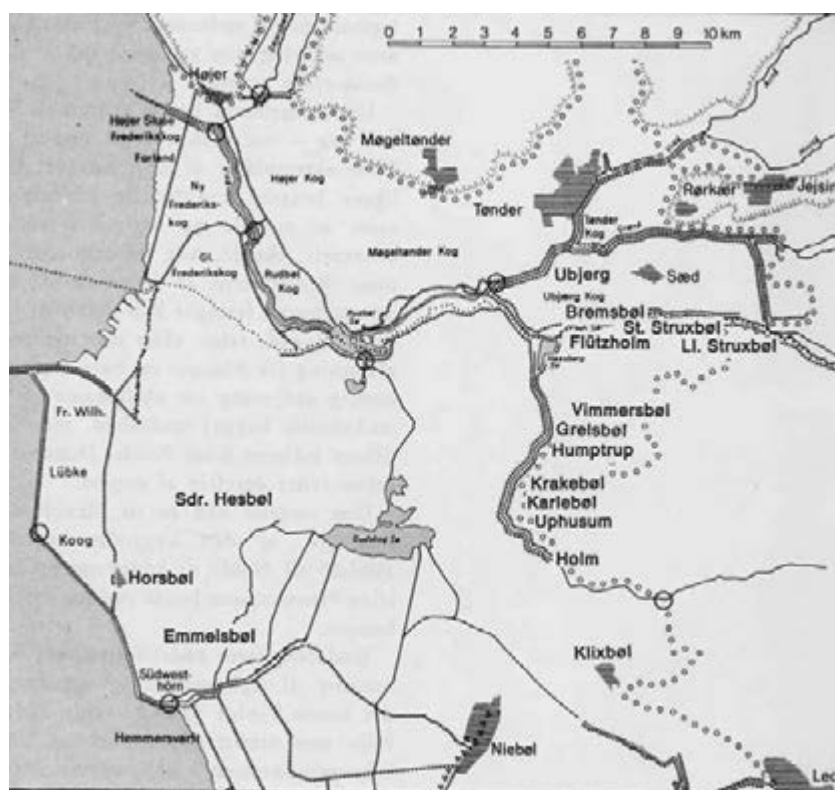
The incorporation of Northern Schleswig into Denmark (1920) paved the way for the draining of the reclaimed marshes of the Tøndermarsk and Gotteskoog, as peripheral areas suddenly gained political interest and hence received the necessary investments to implement the draining project on the Danish and German side in 1925-1930 and 1930-1932 respectively. The purpose was to improve the conditions for agricultural development by gaining control over water from the geestland. And within a few years, the drainage of the Tøndermarsk and Gotteskoog changed the landscape completely, as well as the living conditions for the inhabitants there. Based in part on interviews with local inhabitants who lived in the marshes at the time of the draining, the author has tried to identify the challenges to the traditional lifestyle caused by the draining project and how the locals experienced the change of the landscape and living conditions.

Keywords: Tøndermarsk, Gotteskoog, draining, living conditions, landscape change

Introduction

There is an old German saying: 'If we do not drown in salt water, we will drown in fresh water', which refers to the amphibious nature of many reclaimed marsh areas challenged by water from the *geest* (the inland Pleistocene sandy soils). For centuries, much effort has been put into draining these reclaimed marsh areas. Today, however, controlled flooding behind the dikes is seen as a possible solution to future climate changes.

Figure 9.1 Map of the Tøndermarsk area on both sides of the Danish-German border.



Courtesy of the Fisheries and Maritime Museum, Esbjerg

The landscape of the Tøndermarsk and Gotteskoog underwent great changes following the drainage of the marshes between 1927 and 1932 (1927-30 on the Danish side and 1930-32 on the German side). A complex system of piping, drainage and irrigation ditches, dikes on the shores of the river Vidå and pumping stations changed the amphibious landscape for good. Daily life in the Tøndermarsk and Gotteskoog was also transformed, because it had been very much adapted to the natural environment; in other words, it had reconciled itself to the presence of water.

From 1968 to 1971, the Fisheries and Maritime Museum in Esbjerg researched the marsh areas of Western Schleswig with the objective of gaining knowledge about the traditional types of boats used in the area as well as the life of the smallholder, who might have held several supplementary occupations. The project resulted in a book called *Boats and boatmen in the marsh*

(*‘Både og bådfolk i marsken’*). The research included about 45 interviews with people who had experienced the landscape of the Tøndermarsk and Gotteskoog before they had been drained. Though the research focuses on the topic of boats, boatmen and smallholders, the material also contains information about living conditions in general, challenges to everyday life, the experiences of the draining, and the changing of the landscape. With the help of interviews as well as photos recorded by local photographers of the marsh before and after the draining, one can begin to understand the significance of the presence of water for the local community.

Description of the area

The Tøndermarsk is a reclaimed marsh landscape that covers areas in both Denmark and Germany. In Denmark, it covers 85 square kilometres of reclaimed land from the village of Sæd south of Tønder town and 17 kilometres westward to the Wadden Sea. On the German side, the marsh stretches about 20 kilometres to the south. Gotteskoog is one of the polders south of the Danish-German border.

The natural landscape is characterised by several lakes and streams, which before the drainage formed a delta around the Vidå river. This landscape is also the most northern polder marsh in the Wadden Sea, and the only one of its kind in Denmark. The area that is the focus of this article is the marsh south of the village of Højer and on the German side the Gotteskoog.

The first sea dike was built here in the fifteenth century, as the ‘golden ring’ closed around Wieding Harde. The dike of Duke Hans the Elder from Højer to Rudbøl was built in 1556, and just ten years later the Gotteskoog was reclaimed. After that, several land reclamations were made. In the 1920s ‘the golden ring’ around Wieding Harde and the Højer Dyke from 1861 constituted the sea dike protection to the west of the marshes in Western Schleswig.

However, the greatest challenge for the people living in the marsh was the *geest* water coming from the east combined with the increasing difficulty of leading the water into the Wadden Sea due to the land reclamations of the eighteenth and nineteenth centuries. This was particularly challenging in the Gotteskoog, because large parts of the polder were lower than the neighbouring more recent polders, and were therefore covered with water for most of the year. Moreover, the polders north of the Gotteskoog (Højer Kog, Rudbøl Kog and Møgeltønder Kog) faced the additional problem of fresh water flooding several months a year.

Many attempts were made to solve the problem: several canals were dug to lead the water around and away from the lower areas, and in some places windmills equipped with an Archimedean screw to lift the water were employed. In the long run, however, all of these efforts proved unsuccessful.

Settlement in the marsh

The inhabitants in the marshlands settled as high as possible to avoid the returning floods of the Wadden Sea. The town of Tønder and the villages of Møgeltønder and Højer were founded on the *geest*, while in the low marsh areas people settled on man-made mounds often placed close to the natural streams or on dikes, as in the case of the settlements of Nørremølle and Rudbøl.

The mounds were established during the time that the marshlands had no high sea dikes protecting the area from the floods during winter storms. During periods with high water levels, the mounds looked like small islands surrounded by water. After the establishment of high sea dikes, the low marshland was challenged not by floods of salt water from the Wadden Sea but by fresh water from the streams running through the marshlands from the east. The natural passage of *geest* water was now blocked when the sluices on the coast closed for longer periods of time due to high water levels in the sea. Hence mounds continued to be important even after the marshland was protected by a dike.

Water as infrastructure

During the long fresh-water winter floods, the marshlands were practically inaccessible for ordinary means of traffic. Access to the marshlands was challenging at all times, as there were only a few roads and they were often in a poor state. This is one of the reasons why the mounds were placed near lakes, natural streams and tideways, making water a central part of the infrastructure.

Fisherman Theodor Andersen from the village of Aventoft said: 'In autumn [...] it was so full of mud everywhere, that for every step you took, you had to make sure your boots would follow' (FIMUS 51/1985). And the artist Emil Nolde called his horse a 'water horse', as it would cross the water fearlessly even though it could be up to one metre high (Møller 1973: 6).

Natural streams, lakes and remains of former tideways therefore formed the infrastructure of the marshlands and were supplemented

Figure 9.2 Fresh water flooding in Møgeltønder Kog, 1913.

Photo by H. C. Davidsen

by man-made ditches and canals. In terms of transport, the waterways were of vital significance to the inhabitants, who often lived several kilometres from the *geest*. Here, they used special flat-bottomed marsh boats designed to sail on low water using poles or a simple mast and sail on more open waters.

Many ditches were not navigable and were crossed with a pole measuring 3.60 metres and featuring a transverse block that prevents it from sinking deep in the mud (the pole's local name is 'æ klu'stach'). The pole was essential to the herdsman moving from one field to another looking after the grazing livestock as well as the many children who had to cross several ditches on their way to school.

In winter, ice skating was a common and important method of individual transport, when the water froze and covered the marsh with ice. This made it easier and faster to travel around, as it was possible to take short cuts, which normally would be impossible. Lorentz Petersen (1896) from Rosenkrans had never seen anyone ice skating as good as his dad, who could run 100 metres on one foot (FIMUS 56/1985). Both pole jumping and distance skating was common behind the dikes in both the German and Dutch parts of the Wadden Sea coast.

Ways of living

The inhabitants in the marsh often had several sources of income. One way of earning a living was transporting goods on the water, since land transport through the marshlands was not an option. As ships arriving in the Wadden Sea could not pass through the sluices to access Tønder, it became necessary for the goods transported to and from Tønder from the coast to be reloaded into smaller boats. At the beginning of the twentieth century this practice began to change due to better roads (for example from Rudbøl).

The two most fundamental and common ways of making a living were the cutting of reeds and livestock farming reliant on the hay collected and sailed home from the Gotteskoog. Even rather large farms could have their primary income from harvesting reeds on their land. Just as fields of grass were divided into parcels, the same was the case for the amphibious land with reed forests. Often, people who did not own land themselves were hired to harvest the reeds, which were sold on the *geest* – for example at the market in Tønder, or shipped from Højer Sluice.

Fishing was for some a primary source of income and was carried out both in the Wadden Sea as well as in streams and lakes inside the dikes. Fishing rights were sometimes linked to specific houses or farms, but often the right to fish was owned by the local government and could be rented. The fish were sold on the market in Tønder or to the hotels on Sylt or in Flensburg. Fish was an important source of food. Given that the poor did not possess any land, it was especially vital that they could fish and hence always have something to eat. They bought fishing cards, which allowed them to catch fish for their own consumption.

New political attention, new possibilities

During the 1920s, the Tøndermarsk gained political attention. In 1864, following the Danish defeat to Prussia in the Second Schleswig War, Schleswig alongside with Holstein and Lauenburg was incorporated into Prussia. After the German defeat in the First World War, national affiliation of several European borderlands — including Schleswig — was determined by referendums. The referendum held in Northern Schleswig on 10 February 1920 resulted in the incorporation of Northern Schleswig into Denmark. From a Danish perspective, Northern Schleswig had been reunited with Denmark after five decades under foreign rule. Furthermore, the region had been a part of the First World War, in contrast to the rest of Denmark. And given this background, there was much political goodwill and investments directed

to this otherwise peripheral part of Denmark. The division of Schleswig in 1920 was significant in the marshlands south of Tønder because a natural landscape was now divided between two nations. It also meant that Tønder, Møgeltønder and Højer lost their natural catchment area.

During the nineteenth century, the problem with fresh water floods became worse in the Tøndermarsk and Gotteskoog areas due to greater amounts of water from the *geest* running into the marshlands, caused by draining of the *geest* land. The large amount of *geest* water created more and longer backwater flooding and challenged both the existent agricultural practices and the possibilities for further developing these practices.

The local newspaper *Vestslesvigsk Tidende* wrote in August 1920 that the heavy rain in the previous weeks had put the meadows south and west of Tønder under water; the owners of the meadows had suffered great losses because the livestock had to be moved from the meadows. About half of the 100 cows that delivered milk to the town had to be sold because the owners were unable to get grass or hay for their animals (Becker-Christensen 1993: 19).

Up until the reunification of Northern Schleswig with Denmark, agriculture in Western Schleswig was characterised by the fattening of livestock to be sold on the German markets via the livestock markets of Tønder and Husum. With the loss of its most important market, agriculture in Northern Schleswig had to be reoriented towards holding dairy cattle and corn production.

The Danish state invested large amounts of money in developing Northern Schleswig, and from the very beginning the marsh areas were considered to have significant agricultural potential. The decision to drain the Tøndermarsk must be seen in this context: the political will to solve the *geest* water issue was present, as was the technology and not the least the finances (Overgaard 2012: 109).

Draining the Tøndermarsk

The law concerning the draining of the Tøndermarsk was passed in the Danish parliament in 1925, and the work began in 1926. The Danish engineer Ulrik Petersen made the drainage plan in which electric pumps were to be the central component of the artificial draining of the marsh areas. *Geest* water was to be led not into but around the Tøndermarsk with the help of channels, while the water in the marsh had to be lifted up into draining ditches and from there into the Vidå river and out into the Wadden Sea. To prevent the Vidå river from flooding the marsh, dikes were established on

both sides of the river from Tønder to Højer Sluice. That this was a prestige project was underlined by the fact that the two largest of the four pumping stations were designed by the estate manager of Schackenborg Castle in Møgeltønder, H.C. Davidsen, who was a well-known architect in the area and a representative of architecture inspired by the traditional style of building in West Schleswig.

The draining project was not popular among all people living in the marshlands, especially not among those whose previous way of living depended on the presence of water. The livelihood of several larger farms was based on harvesting reeds, and the owners were not experienced with the intensive agriculture planned after the drainage was complete. The senior supervisor in charge of the dikes in Wiedingharde, Überdeichgraf Volquardsen from Tetenböhl, supported the draining but stated that it was extremely difficult for people to imagine the landscape drained. And the promises of the draining committee that draining the marsh would make 'fields of wheat' out of 'land with reeds' did not always make sense in the minds of the local inhabitants (FIMUS 54/1985).

The people who relied on the waterways to make a living through reed or hay harvesting or the transportation of goods did not themselves own land and were the hardest hit by the changes. These people were also those who were dependent on the fish in the streams and lakes as a daily source of food and thus felt their existence threatened by the Tøndermarsk drainage project.

Worsening water quality

The landscape and the inhabitants were not only challenged by falling water levels, but the problems posed by the sewage from Tønder did not make the situation easier. A visitor to Tønder in 1920 would immediately notice the open sewers, which contributed to the somewhat 'rustic' atmosphere there. As the former land inspector Mosbech put it: 'Tønder maintained its distinctive character by the complete lack of sewers and wide use of open gutters.' (Mosbech 1943-44: 288) At this time, there were still many stables in the town: no less than 122 horses, 713 heads of cattle, 38 sheep and about 400 pigs still lived there (Becker-Christensen 1993: 22). The presence of this number of animals was a problem in terms of hygiene.

The mayor of Tønder, Oluf P. Olufsen, presented this problem to members of parliament visiting Tønder in 1920, and in 1923-1925 a system of sewers was built in the town, mostly financed by the Danish state. The sewers improved both the smell and the hygiene in Tønder, but it also discharged the sewage directly into the Vidå River, thus polluting the water. Furthermore, within

only a couple of years, the water level in the marsh fell about one metre due to the drainage project. Both of these factors had a profound impact on the quality of the drinking water. The inhabitants in the marsh got their drinking water from man-made rainwater reservoirs ('feting') or from the streams, lakes and ditches. The lower amounts of water due to the falling water level from 1927 onwards resulted in a lowered current in the water which, combined with the sewage from Tønder being discharged into the Vidå River, made the water less clear.

Lorentz Petersen (born in 1896 in Rosenkrans) describes the water in Rudbøl Lake after the drainage as 'pumped dirt' as opposed to the 'clean stream water' of former times (FIMUS 56/1985). And to Emil Nolde, who was very much against the drainage project, the water situation in the end became his reason to leave his home on the mound of Utenwarft. As Nolde formulated it: 'The worst situation arose as the sewers of Tønder were discharged into the Vidå River and the desperate protests from us and all of those who lived by the Vidå River were ignored. Then we could not stay any longer.' (Nolde 2011: 410).

One landscape – two nations

Until the division of Schleswig (1920), all marsh areas in Tønder County were organised under the First Dike Confederation of Schleswig, with the common administration of dikes and draining as well as a common dike supervisor. In 1922, a Danish-German Federation of Border Streams was set up, tasked with making decisions regarding issues in relation to the water level in the streams along the border, including the regulation and maintenance of streams and dikes in the Tøndermarsk.

The reunification of Northern Schleswig with Denmark posed serious challenges to the Gotteskoog because most of the water from the Gotteskoog was led out of the polder through the Vidå River, now in Denmark. The solution in Gotteskoog was also the establishment of pumping stations, which brought an end to many years of natural drainage. The new pumping stations on the Danish side of the border increased the amount of water in the Vidå River so much that large areas south of the border were flooded. The result of the flooding was the construction of the Verlatz pumping station near Rudbøl Lake that would ensure the continued draining of water from Gotteskoog (Gottburgsen & Hassenpflug 1991: 99). In addition to the pumping station near Rudbøl Lake, the building of a further pumping station, the Hemenswarf near Südwesthörn, ensured the draining of the southern part of Gotteskoog.

Figure 9.3 Building one of the pumping stations in 1928-29 in the Tøndermarsk



Photo by A. Martinsen

Defenders of the landscape

There were many who were critical of the drainage project, as it was not only a question of what was to be gained by the project but also what would be lost. One famous opponent was the artist Emil Nolde, who grew up by the shores of the Vidå River and lived in the marsh for many years — first at Utenwarf for ten years and later at Seebüll.

Nolde produced an alternative proposal to the drainage project made by Ulrik Petersen, which was sent to the drainage committee. The proposal involved reclaiming new land west of Højer Sluice and using parts of the new polder as a water reservoir. According to Nolde, no dikes along the Vidå River or pumping stations would be necessary. The water level would be lowered, but the method of draining would be less damaging to the character of the landscape (Eller 2011: 26).

Nolde's proposal was supported by the Danish Society for Nature Conservation, whose president, Erick Struckmann (1875-1962), addressed an audience in Tønder the same year, where he pleaded with them to protect the nature, arguing that it was so well preserved (Wesenberg-Lund 1925-26: 40).

Carl Wesenberg-Lund (1867-1955), a professor with a speciality in fresh water fauna, was present at the discussion between Erick Struckmann

and Ulrik Pedersen and recognised the wish to develop the Tøndermarsk for economic reasons. But he also stated: 'On the other side [...] to us, who with fresh eyes, for the first time sees the wonderful landscapes of the Tøndermarsk, it is clear that if there is any Danish landscape in danger of having its scenic beauty destroyed, it is precisely, because of its grand uniformity, the landscape of the marsh.' (Wesenberg-Lund 1925-26: 43).

The landscape in the eyes of the inhabitants

The interviews conducted by the Fisheries and Maritime Museum in Esbjerg reveal how the inhabitants of the marsh experienced the landscape after it was drained. The attitudes towards the new marsh landscape and the changes made to it seem to have been diverse.

Boatman Boy Jacobsen, who was born 1880 in Neukirchen, said: 'In 1932, as the draining was fully implemented, everyone thought that it was very bad for "the working people" now there were no reeds anymore. Everything developed differently though and the drained marsh land, before the draining was covered with reeds, is now the best "plough land"' (FIMUS 59/1985). Although it would appear that Jacobsen considered this a good thing; however, later he commented: 'This region was much more beautiful before the draining, one saw everywhere reeds surrounded by water, overgrown with duckweed, waterlilies and other kinds of water plants. Early in the morning, when one took the boat to Gotteskoog, everything came so much alive as the sun rose, all kinds of birds were heard.' Thomas Petersen from Neukirchen noted that, as far as he knew, most inhabitants in the marshes would rather have kept the life conditions from before the draining (FIMUS 53/1985).

Concluding remarks

After years of trying to solve the challenge of backwater flooding in the Tøndermarsk, it was a national event — the incorporation of Northern Schleswig with Denmark — that paved the way for the drainage, in combination with technological developments and the belief that nature could be controlled.

The drainage of the Tøndermarsk and Gotteskoog changed not only the landscape but also the living conditions for the inhabitants there, especially in the areas around Rudbøl Lake and Gotteskoog where a lifestyle that had adapted to the presence of water was challenged by falling water levels in

the streams and lakes. People were forced to get used to a different way of life and doing things differently, and for some it meant the knowledge and know-how they had inherited and to some extent developed became irrelevant.

Furthermore, the local inhabitants were also greatly affected by problems posed with regards to the access to clean drinking water, caused in part by the sewage systems in the town of Tønder. The change of the landscape was experienced differently by the locals, and the experiences were to some extent full of contradictions: some were surprised at how well-suited the marsh became for agriculture, though at the same time they lamented the absence of birds and water plants.

References

The Fisheries and Maritime Museum in Esbjerg (FIMUS): The Tøndermarsk Projekt, interviews and correspondence with people in the Tøndermarsk and Gotteskoog 1968-1970

- Becker-Christensen, H. (1993). *Byen ved grænsen. Tønder 1920-1970*. Aabenraa: Institut for Grænseregionsforskning.
- Eller, S. (2011). 'Indgreb i marsklandets sjældne og særegne skønhed'. Diskussionen om afvanding og naturfredning i Tøndermarsken 1925. *Sønderjyske Årbøger*. Odder: Historisk Samfund for Sønderjylland. 9-44.
- Gottburgsen, M & Hassenpflug, W. (1991). *Der Gotteskoog. Landschaft und Bewohner im Wandel der Jahrhunderte*. Leck: K. H. Bock.
- Hansen, L. (2014). *Marsken ved Tønder. Digebygning og afvanding*. Tønder: Lorens Hansen.
- Mosbech, J. L. (1943-44). Tønder 1920-43. In Mackeprang, M. (Ed.), *Tønder gennem tiderne* (pp. 235-86). Tønder: Gyldendal.
- Møller, A. (1973). *Både og bådfolk i marsken*. Esbjerg: Fiskeri- og Søfartsmuseet i Esbjerg.
- Nolde, E.I (2011). *Mein Leben*. Freiburg: Dumont.
- Overgaard, A. M. (2012). Byggeriet af Rømmøddæmningen. Et spørgsmål om landvindning, beskæftigelse og national handling. In *Sønderjyske Årbøger 2012* (pp. 105-30). Odder: Historisk Samfund for Sønderjylland.
- Wesenberg-Lund, C. (1925-26). En henstilling til Overvejelse i Anledning af de store Afvandingsprojekter. *Sønderjysk Maanedsskrift 1926* (2), 40-3.

About the author

Anne Marie Overgaard holds an master's degree in history and German from the University of Southern Denmark in Odense. Since 2008 she has been curator at the Museum of Southern Denmark (Museum Sønderjylland), where she works on the cultural history of the Wadden Sea. Her special interests are the reclaimed marsh areas and the development of early tourism on the islands of Fanø and Rømø. Additionally, she has done research regarding the traditional food culture of the Danish Wadden Sea area and how this heritage is managed by current agents of tourism.

10 Remystifying Frisia

The 'experience economy' along the Wadden Sea coast

Goffe Jensma

Abstract

In the dominant policy discourse on the Wadden SeaS region, 'experience' (Dutch: *beleving*) is currently a key term, used for instance in the recently published Wadden Sea 'experience map'. The basic idea behind it is that by staging a series of experiences of the authenticity of cultural heritage at different sites and venues along the Wadden Sea coast, tourists can be attracted which would benefit the local economies. In this article, the author weighs and describes what consequences this implementation of 'the experience economy' (Gillmore and Pine) has for the transfer and survival of regional cultural heritage. With a focus on Frisian cultural heritage and therein contrasting a postmodern, poststructuralist, neoliberal perspective with a modern, cultural nationalist stance, the author demonstrates how the experience economy does not value all types of cultural heritage equally. Tangible and material types are more prone to touristic commodification than immaterial assets like language and history, which in turn are the main ethnic markers in the nationalist version of Frisian culture. In the experience economy, the Frisian language tends to become a 'signal' language, only referring to Frisian in a symbolical way without actually using it. As to history, the author observes a similar process, i.e. a remystification of medieval Frisian history. This is, somewhat paradoxically, at odds with the dominant deconstructionist academic discourse on Frisian history but can be explained perfectly as part of the experience economy. This article can also be read as an elucidation of the question whether a regional or minority culture can be turned into a series of profitable commodities without eroding its 'real' authenticity. The author leaves this open to public and political debate.

Keywords: Frisianness, cultural heritage Wadden Sea, nationalism/poststructuralism nexus, experience economy

'Trying to make it real, compared to what.'

– Gene McDaniels (1966)

The 'experience economy'

Some time ago, a Facebook friend announced a contribution to a website called 'do away with that word.' This site invites people to nominate ugly, worn-out or annoying words that they feel a language should get rid of in the year to come. The word my acquaintance wanted to eliminate was 'experience'. I would nominate any compound of which 'experience' is an element. Last weekend on the Dutch Wadden island of Ameland, we passed an 'experience marsh', and later that day we arrived at an 'experience beach' — Ugh.

In the six months that have passed since then, my friend's wishes were not fulfilled. On the contrary, a recently published Wadden Sea *belevingskaart* ('experience map') started bundling a great many (mostly touristic) 'experience' sites along the Dutch part of the Wadden Sea coast, some of which are still under development or only in the planning stage (Programma Rijke Waddenzee 2017a). Initiated by a programme committee called 'The Rich Wadden Sea', this mapping project presents the concept of 'experience' in a twofold manner. On a conceptual level, it attempts to put all of the cultural heritage along the Wadden Sea coast under this single 'experience' umbrella, whereas, on the other hand, the organisation behind the project is upgraded to a higher level of public/private partnership. The executive committee was tasked with making this 'experience map' by a consortium in which all of the important players in the field were represented: national, regional and local governmental organisations as well as the joint nature conservation organisations (Waddenzee 2017a, 2017b). In a recent policy document, these parties vowed to guarantee and promote the socioeconomic and ecological sustainability of the Dutch Wadden Sea region. 'Experience' is a keyword of the programme (Programma Rijke Waddenzee 2017b).¹

This Wadden Sea programme illustrates what academic literature in the last decades has come to describe as a global phenomenon. Joseph Pine and James H. Gilmore's seminal book *The Experience Economy* dates from 1999. The subtitle of this book — *Work Is Theater & Every Business a Stage* — reveals its focus on marketing, as does the most often quoted catchphrase

1 The same emphasis on experience as a guiding concept is also used in Kabat et al. (2009, pp. 53-59), be it less pronounced.

from the book: 'staging the experience'. The two authors proclaimed the era of the 'experience economy' (Pine & Gilmore 1998; Gilmore & Pine 2007: 2). The sensibility of consumers is no longer aimed at the availability, the costs or the quality of products — as was the case respectively in agricultural, industrial and service economies — but on the experience of authenticity as part and product of the experience economy instead (Gilmore & Pine 2007: 2). Experience itself has become a commodity.

In the twenty years since 1999, Gilmore and Pine's prediction that 'leading-edge companies will find that the next competitive battleground lies in staging experiences' (Pine & Gilmore 1998: 97) has more than fully materialised. The experience economy has seeped through to the peripheries and to the lowest organisational levels of businesses, governments and NGOs. The concept of 'staging the experience' — linking an experience to a certain place, brand, service or event in order to make it sought after — makes itself felt in global city surroundings, in virtual cyberspace as well as in local economies and in cultures at the fringes of Europe, of which the Dutch-German-Danish Wadden Sea region is one. Here the Dutch term *belevingskaart* has found an equivalent in the German language (*Erlebnis-mappe*), and the Rich Wadden Sea Committee recently received a delegation of Danish colleagues to familiarise them with the concept of the 'experience marsh'. How can we lure tourists into this region?²

As to the future of the Wadden Sea region (in 2030), the authors of the Rich Wadden Sea Programme have a clear vision in mind.³ Again, it takes 'experience' as a key concept: 'For holiday-makers and tourists, the Wadden Sea area is easily accessible and *experienceable*' and 'Every schoolchild should *experience* the Wad at least once'. Furthermore, because of its ecological value ('the peaceful and spatial character'), constraints should be put on the volume of tourists in this vulnerable area. Still, to get this tourist influx

2 Programma Rijke Waddenzee (2017c). Deense Nationalpark Vadehavet op werkbezoek. Retrieved 2 August 2017 from <https://rijkewaddenzee.nl/nieuws/deense-nationalpark-vadehavet-op-werkbezoek/>.

3 'Voor recreanten en toeristen is het Waddengebied eenvoudig bereikbaar en beleefbaar. Het aanbod van excursies en overnachtingen sluit goed aan op het rustige en ruimtelijke karakter van dit unieke Werelderfgoedgebied en is makkelijk te vinden. Bewoners zijn trots om het verhaal van hun gebied te vertellen. Vissers hebben hier een nieuwe broodwinning. Ieder schoolkind heeft het wad minstens zelf een keer beleefd. Het gebied is in toenemende mate het decor van beeldenroutes, kleinschalige festivals en kunst. De verdere groei van de economie past bij de lokale identiteit en wordt vooral gevonden in kleinschalige moderne bedrijven, ook dicht bij de dijk in het noorden van Fryslân, Groningen en Noord-Holland' (Programma Rijke Waddenzee 2016: 17).

going, a positive and constructive dialogue between inhabitants and tourists is advised, as 'Local residents are proud to tell the story of their region'.

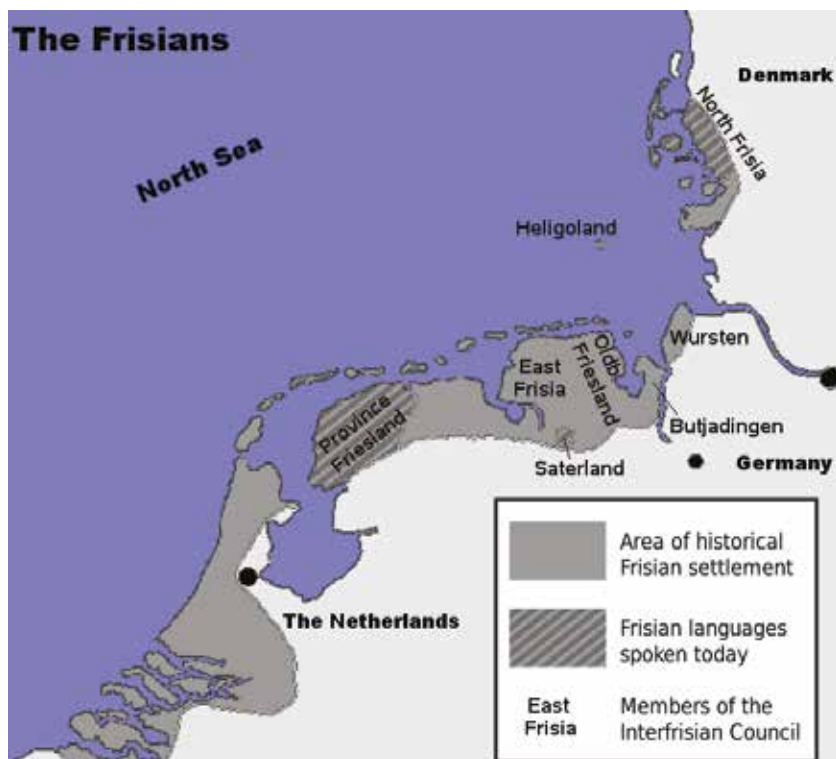
The experience of the Wadden Sea area's authenticities, in other words, has become a commodity that could possibly save the shrinking local economy. The preclusion of mass tourism, the ambition to lessen and to greenwash the extraction of natural resources from the area (fish as well as oil and gas), and the explicit inclusion of local culture and identity may turn this Rich Wadden Sea programme into a form of ecotourism, i.e. 'environmentally responsible tourism in a natural setting' (Ballantyne & Packer 2013: 1). However, notwithstanding the responsibility that ecotourism takes for the conservation of the natural environment, it is still a free-marketbased, neoliberal way of dealing with cultural heritage (Büscher & Davidov 2013; Duffy 2015).

In this chapter I will address some more theoretical and historical issues that rise from this regional implementation of global developments. The main question that I will focus on is how this way of branding the Wadden Sea region relates to previous views on its language and history. What is the impact of the experience economy on the presentation of regional cultural heritage?

Demystifying Frisia

What experiences does the Wadden Sea region have in stock that could be forged into lucrative commodities? What could be the convincing and exciting stories that the people along the Wadden Sea would proudly want to share with the incoming tourist? The most obvious form of shared cultural heritage and identity of the region is in my view Frisianness. The whole Wadden Sea region — often denoted as 'Magna Frisia' or 'Tota Frisia' — maintains a certain relationship with its Frisian past, albeit discontinuous, ambivalent and even contrary (Van Lengen 2003; Munske 2001). Nowadays the island chain along the southern North Sea coast is still best known as the 'Frisian Islands'.

Figure 10.1 depicts this Frisian territory in its largest imaginable form: as a real Greater Frisian Empire stretching from the Belgian coastline in the south up to the Danish border in the north. A Frisian territory as large, coherent and undifferentiated as this has never existed, not even in the era that this particular map refers to, i.e. the Early Middle Ages. Through its particular history of inhabitancy, its loss of former greatness, and perhaps its seaward focus, Frisia may well have strong mythogenetic traits; in fact,

Figure 10.1 The Frisian territory.

T. Bosse – Own work, CC BY-SA 3.0, Wikimedia Commons.

however, the map in figure 10.1 represents a nineteenth-century nationalist and essentialist idea of ‘the’ Frisian nation. It is exactly this idea that is projected onto the distant past of the Early Middle Ages, suggesting the existence of a Frisian nation state *avant la lettre* — and with it its continuity.

The map was (and still is) an instrument used by Frisian intellectual leaders to try to mobilise their fellow Frisians into forming a modern community and a ‘nation’ of Frisians. Once having come into existence, these (sub)nationalist Frisian groups indeed functioned as recognisable cultural communities within the encompassing German and Dutch nation-states. Increasing contacts between Dutch and German Frisians in the nineteenth and twentieth centuries also raised a transnational consciousness of Frisianness. This preeminently modern Frisian ideology entailed, as I have shown in earlier work, a more or less fixed set of ideas on a shared history, a sometimes ambivalent or absent relationship with the Frisian language, a strong emphasis on peripheral rurality, and specific ideas on

the freedom-loving, independent and level-headed character of (all) Frisians (Jensma 1998a: 183; Jensma 1998b).

Although the mythogenetic character of the region certainly helped inspiring historians and archaeologists, scholarly research and mythmaking have grown apart. Most archaeologists and historians nowadays look at Frisian history as a more complex whole, a hotchpotch of 'Frisian' puzzle pieces. The available research gives no certainty as to the continuity and the territory of the Frisians at every single moment in history. On the contrary: many differences in time and space remain hidden from sight by the myth of the greater Frisian Empire. Most of the Frisian regions, for instance, had come to speak languages other than Frisian as early as the Middle Ages or shortly thereafter, yet these regions still maintained an awkward relationship with their Frisian past. The scholarly research on Frisianness eventually resulted in a voluminous, complex and subtle body of knowledge on the region.

A fine example of this intricate character of Frisian history is the theme of Frisian freedom, which will be dealt with here mainly from a Dutch-Frisian perspective (Vries 2015, 2012; Kunz, Pingel & Steensen 2013; Knottnerus 2013; Pingel & Steensen 2004; Van Lengen 2003; Tielke 2003).⁴ The alliterating adjectives Frisian and free have been attributed to the Frisians throughout most of their history and as such implicitly (but falsely) suggest unbroken continuity. The original, medieval narrative on this Frisian freedom (or, more properly, liberty) was about the exemption from feudal domination that was allegedly granted to the Frisians by Charlemagne. In later times, however, this myth has been interpreted (and cherished) in three different ways, all according to the historical periods in which it functioned. In the High Middle Ages itself, the myth indeed operated as an argument against feudalisation and as a legitimisation of armed resistance against conquerors. The famous battle near Warns in Dutch Friesland in 1345 is an example of this. At the start of the Early Modern period, this idea of Frisian freedom changed, at least in the Dutch province of Friesland. In the Dutch Revolt (beginning in 1568), the concept of Frisian freedom served as an argument to regain some older privileges that had been taken away by the sixteenth-century centralist Habsburg rulers (Spanninga 2012: 39 and 418).

All of this, however, changed again profoundly at the end of the Early Modern period when Friesland (in 1798) lost its political sovereignty and

4 In 2017 I gave some lectures on the theme of the reception of Frisian freedom from the Middle Ages onwards, which I intend to rework and publish in 2018. Much of what is brought up here is derived from the research underpinning these lectures.

became part of the Kingdom of the Netherlands in 1813-1815. The loss of sovereignty was compensated in a cultural manner. A process of selfing and othering between the centre of the Kingdom of the Netherlands (Holland) and the Frisian periphery led to the creation of a hierarchically organised, subnational 'nation' of Frisians. The aforementioned coherent, consistent concept of Frisian culture was typically the product of this modern era, only now the Frisians became a people with a shared, standardised (or to-be-standardised) language of their own, with clearly demarcated ideas about their shared history, identity and traditions (Jensma 1998a, 1998b).⁵ This same process took place in Germany among the North Frisians (Steensen 2010) as well as among the East Frisians (Van Lengen 2003: 7-8). Modern Frisian cultural nationalism no longer viewed Frisian freedom as a political principle but as an inbred trait of every individual member of the Frisian nation, as an ethnic marker. And as such, Frisian freedom also became a mobilising concept: 'If you want to be a real Frisian, you should be freedom-loving'.

Like everywhere else in Europe, this nationalist ideology was intended to turn indistinct inhabitants of certain regions or states into self-aware carriers of internalised 'nationalist' identity values. The alleged innateness of Frisian freedom is but one of these values. Frisian identity as a whole was a product of the nineteenth century, paradoxically turning nineteenth and twentieth-century Frisians into Frisians of all times, every single one of them having the same 'eternal' character traits. One of these tokens of Frisianness, especially in the Dutch province of Friesland, was also the Frisian language itself; in the nationalist discourse, a language could be corrupted by influences from other languages, but these interferences could by definition not change the core of the real (Frisian) language, which equalled the eternal 'soul of the nation'.

Craving authenticity

The spell of this cultural nationalism, however, is broken nowadays. The eternal Frisian has stepped down from the stage of history. The more or less

5 Just like in many other regions of Europe this construction of a subnational (in this case, Frisian) ethnic culture made use of older cultural traditions from within as well as from outside the region itself. All European national and subnational cultures developed (as Leerssen 2006 and others make clear) by appropriating and articulating rather indistinct elements taken from a more general, overlapping form of European cultural heritage.

fixed elements of Frisian identity — the clear-cut set of character traits, the canon of specific historical knowledge, the standardised language proficiency — are all fragmentised, and the essentialist idea of the ‘eternal Frisian’ behind it has been smashed into postmodern smithereens. The background of this breakdown lies in global dynamics. The world has — in the words of Zygmunt Bauman — transitioned from ‘solid modernity’ with its fixed hierarchical structures to a more liquid, socially and culturally diverse postmodernity (Bauman 2001, 2011). Communities are losing (or have already lost) their hierarchical structures; languages have a tendency to destandardise (Androutsopoulos 2011) and become more fluid; and history is no longer understood primarily in terms of political nationalism but has increasingly become a leisure commodity in its own right.

What goes for groups and for cultures and languages applies all the more so to individuals. ‘One’s place in society no longer comes as a (wanted or unwanted) gift... Needing to *become* what one *is* is the feature of modern living’ (Bauman 2001). And so people easily identify on multiple levels at the same time and therefore have ‘multiple identities’, some related to their political and national, diasporic, local or global binding, others to lifestyle and gender, or to religion, work etc. (Spickard 2013).

Such is the configuration in which people start to ‘consume’ authentic ‘experiences’. Bauman tellingly uses the figure of the ‘tourist’ as a metaphor for the postmodern man (Franklin 2003). Postmodern humans are ‘tourists’ — wanderers by birth, always craving to fill the void inside with pure and authentic experiences. They are consumerists, willing and ready to pay for ‘unique’ experiences that make them feel real (Blackshaw 2005: chapter 5).

The contrast between this new, fluid, consumerist reality and the more static, hierarchical production society that preceded it is obviously relevant to the case of the Wadden Sea region as well. In this periphery, the experience economy is in the process of being superimposed (to say the least) onto the existing mixed economy of agriculture, industry and services. This creates situations in which ‘authenticity’ can be produced as an experiential, performative interaction between, on the one hand, the Wadden Sea landscape and the Wadden Sea cultural heritage and, on the other, the incoming tourist. What else could the commodity of a *belevingskwelder* (an experience marsh) be but an experience of authenticity, the pleasant ephemeral feeling that one really exists (when wading through the smelly salty silt)? And is it not a real win-win situation when the periphery can be rebranded by re-intensifying the experience of such an insignificant place (Timm Knudsen & Waade 2010: 5)?

This same configuration, however, has drastic consequences for the cultural heritage of the region. The reason is that not all of what is considered cultural heritage is equally easily commodifiable as a craved-for experience of authenticity. As I have shown in previous publications concerning the Dutch province of Friesland, a repositioning of values is to be perceived that can fit in with the changes in society as described above (Jensma 2008, 2010). This process can be summarised in a number of parallel shifts. The most important of these is that the experience economy prefers immediate experience as means of transferring meaning above the toilsome acquisition of knowledge. In 2006, when provoked to come up with plans and with a sound view on the future of their province, Frisians already appeared to have fully internalised the principles of neoliberal policymaking and had started thinking of the province of Friesland in terms of tangible cultural heritage: the landscape, water, sports, museums, etc. (Provincie Friesland Buro Voorlichting 2007). These forms of cultural heritage are ripe for commodification, for instance as a 'typical Frisian sporting event' (cargo ship regattas or pole jumping), that can be presented to the public in Dutch or in English but still experienced as typically Frisian through the use of some Frisian 'signal' words and/or Frisian flags. Heritage language and history, on the other hand, need much introduction and instruction and as such are less suited for commodification (cf. Edwards 2010: 73).

The issue here is that in the past two hundred years, language and history have become fundamental to Frisianness and to the Frisian community, more than tangible, material heritage. Its language and shared history kept the Frisian communities in Germany and the Netherlands together as a recognisable unit, distinct from the outside world, from 'the other'. Nowadays, however, cultural heritage (tangible or not) no longer seems to function as a self-representation of such communities but rather as a presentation of a distilled version of the community culture to the tourist. The tourist has become the so-called significant other. The self (the identity) of regional culture therefore necessarily has to be adapted to these new circumstances. This unavoidably results in language and history being sidelined.

All in all, it makes one wonder whether a peripheral regional culture (like the Frisian culture) can indeed be turned into a series of profitable commodities without eroding its 'real' authenticity. What consequences will the shift to the experience economy have for the communal identity and social cohesion in the Wadden Sea region? Which stories will Frisians remember to proudly tell the tourists?

Remystifying Frisia

What exactly happens when a peripheral culture is being turned into a commodity? Does such a culture gain from this, or will it be maimed? More than on factual reality, the answer depends on the ideological and academic perspective that one takes. Clinging to a cultural nationalist ideology, as outlined above, would probably result in a more holistic, static and — as regards language — (serial) monolingual stance. The commodification of one's own language and cultural heritage might in such cases be seen as an unwanted surrender to globalisation. At the same time, a pluralistic, post-structuralist approach — at present *en vogue* among academics (Pietikäinen & Kelly-Holmes 2013) — fits in much better with the global dynamics of the experience economy. This perspective prefers to see the fluidly multilingual context of the contacts between residents and tourists as beneficial to both. It considers authenticity the result of a process of authentication, negotiated between traditional insiders and outsiders, residents and tourists.

A prime example (as seen from this last stance) is given by Pietikäinen in an article on the Sami in Finland. At a reindeer farm (reindeer are the traditional livelihood of the Sami), tourists are invited to participate in a 'real' (but staged) reindeer hunt, an event at which some Sami yells are shouted and some typical Sami clothing is worn. The resulting experience of authenticity — an 'authentication' — is produced as a trade-off between the Sami and the tourist (Pietikäinen 2013). It is not difficult to locate comparable cases from the Wadden Sea region, sometimes as close to this specific Sami example as a Frisian 'experience farm' where visitors can learn about farming by taking excursions or buying gifts (Burmania Boerderij); see figure 10.2.

In actual practice, these two perspectives pinch in at least two settings: (1) language policy, and (2) the (academic) discourse on history and cultural heritage. As to language policy, poststructuralist, 'free-market' pluralism usually emphasises the beneficial effects of language transfer in tourism settings. Outdated language ideologies will be adapted to global dynamics, in turn raising the language status not only among tourists but also among the mother tongue speakers (Jaffe & Olivia 2013). Then again, many languages of peripheral regions — in this case North Frisian, Low Saxon and West Frisian — are subject to protection on European, national and regional levels. The unspoken implication of the language policies resulting from this is that these languages should be conserved as the standardised or semi-standardised languages they came to be in the nineteenth and twentieth centuries. Commodification practices might be at odds with

Figure 10.2 'Welcome to the experience farm'. Advertisement for an Experience Farm in Lekkum.



Courtesy of Burmania Boerderij.

this in that they tend to only make partial use of 'the' language and instead turn it into what might be labelled 'signal' language (referring to more than actually using 'the' language).

The Frisian Museum in Leeuwarden is a spectacular example of this. Its mission is to present Frisian culture to a mainly Dutch-speaking public. Both perspectives on language (the Frisian minority language as a protected 'national' language and the poststructuralist paradigm) are at work here. The Frisian Museum's language policy sees to it that every bit of information is available not only in Dutch but also in Frisian — clearly an outcome of 'nationalist' language policies at the provincial level. At the same time, though, Frisian is part of the museum presentation itself and as such it clearly functions as a 'signal' language. Some signposts are in Frisian (together with unmistakable icons), and in one of the stairwells some Frisian words are more or less randomly painted on the wall. The positive authentication experience this raises with the tourist is probably not sufficient enough to induce him to read every information flyer in Frisian. Both perspectives serve different goals. They may be complementary to each other but can by no means replace each other.

A similar dichotomy is at work in the field of history and cultural heritage. The theme of Frisian freedom offers plenty of examples of how commodification practices are at odds with the results of academic historical work.

Whereas academic historians nowadays are convinced of the constructed character of the national Frisian myth and therefore almost by instinct question previously assumed continuities of Frisian-ness and with it of Frisian freedom (see above), commodification practices do the opposite. A

Figure 10.3 Frisian freedom as regional branding.



Courtesy of Ostfriesische Landschaft

few examples out of many suffice to show how the Frisian past is currently being remystified. In German East Frisia, the Ostfriesische Landschaft and the city of Aurich initiated the placement of large advertising plates along the Autobahn. 'For more than 800 years, Frisian freedom... was only to be found here in East-Frisia' proclaims the website of the Ostfriesische Landschaft⁶ (figure 10.3). The website also mentions the positive resonance among the local population. Pop music lends itself perfectly to conveying this same Frisian myth to a larger public. The West-Frisian heavy metal/folk band Baldrs Draumar ('Furious Frisian Folk'), for instance, refers to a vague, mythical, medieval Frisian past. In its Frisian lyrics, the band takes elements from all Northern European religions and mythologies to combine them with a bricolage of historical facts and fervid Frisian nationalism. At festivals like the German East-Frisian Tota Frisia festival, the band performs, as usual, in fantasy old Frisian attire, thus creating 'authenticity' (Ragherrie

6 'Friesische Freiheit', gab es ... über 800 Jahre nur hier in Ostfriesland (Ostfriesische Landschaft).

Figure 10.4 The Frisian Folkmetal Band Baldrs Draumar.



Courtesy of Baldrs Draumar

2015). Tota Frisia is one of many re-enactment festivals today, and Baldrs Draumar are not the only ones dressing up like medieval warriors; most of the audience do as well. At a similar festival in Vijversburg near Leeuwarden, portentously called the 'Imaginarium festival', knights and Vikings fight each other like they did in the Middle Ages, i.e. with real (albeit blunted) weapons, just to make it feel as 'real' and 'authentic' as possible (Santema 2017). 'Again Ennorandirrm and the Free Frisians from Middle Earth have come to Imaginarium to amuse you' reads the website (Imaginarium Festival 2017).

The comparison with pseudo-historical fantasy movies (like *Game of Thrones*) is not farfetched. A similar movie on the medieval Frisian king Redbad is in the making. It will depict early Medieval Frisian society as a real democracy in which equality and freedom rule but which, threatened by Christian extremism, is soon to lose all of its noble civilisation (Radboud de Film 2017).

If we want the experience economy to succeed, such are the stories that we should instruct the inhabitants of Friesland to tell to the outside world. They fit perfectly with the mystic and misty character of the marsh landscape along the Wadden Sea coast. This combination could be considered the perfect instrument to get the shrinking economies along the Wadden Sea coast blooming again. Even more than in the setting of language, though, it

is clear that both ways of dealing with history — the academic discourse and the commodification practice — might at times be mutually complementary, but they are not interchangeable.

This last conclusion leads back to the question with which this essay began: can Frisian culture, or for that matter any other regional or minority culture, be turned into a series of profitable commodities without eroding its 'real' authenticity, without taking on Hollywood-like modes of representations of reality and filling them up with some intriguing local elements?

References

- Androutsopoulos, J. (2011). Language Change and Digital Media: A Review of Conceptions and Evidence. In Coupland, N. and Kristiansen, T. (eds.), *Standard Languages and Language Standards in a Changing Europe*, 145-161. Oslo: Novus.
- Ballantyne, R. and Packer, J. (2013). *International handbook on ecotourism*. Cheltenham: Edward Elgar Publishing.
- Bauman, Z. (2001). *The individualized society*. Cambridge: Polity Press.
- Bauman, Z. (2011). *Culture in a liquid modern world*. Cambridge: Polity Press.
- Blackshaw, T. (2005). *Zygmunt Bauman*. London: Routledge.
- Büscher, B. and Davidov, V. (2013). *The ecotourism-extraction nexus: Political economies and rural realities of (un)comfortable bedfellows*. London: Routledge.
- Burmania Boerderij Retrieved August 4, 2017 from <http://www.burmaniaboerderij.nl/>
- Duffy, R. (2015). Nature-based tourism and neoliberalism: Concealing contradictions. *Tourism Geographies* 17(4), 529-43.
- Edwards, J.R. (2010). *Minority languages and group identity cases and categories*. Amsterdam: John Benjamins.
- Franklin, A. (2003). 'The tourist syndrome: An interview with Zygmunt Bauman.' *Tourist Studies* 3(2), 205-217.
- Gilmore, J.H. and Pine, B.J. (2007). *Authenticity: What consumers really want*. Boston: Harvard Business School Press.
- Imaginarium Festival (2017). Ennorandirrm en de Frije Friezen. Retrieved August 3, 2017 from: <https://www.imaginarium-festival.nl/nieuws/41>
- Jaffe, A. and Olivia, C. (2013). Linguistic creativity in Corsican tourist context. In Pietikäinen, S. and KellyHolmes, H. (eds.), *Multilingualism and the periphery*, 95-117. Oxford: Oxford University Press.
- Jensma, G. (1998a). *Het rode tasje van Salverda: Burgerlijk bewustzijn en friese identiteit in de negentiende eeuw*. Ljouwert/Leeuwarden: Fryske Akademy.

- Jensma, G. (1998b). Cultuur in Friesland en Friese cultuur, 1795-1917. In Frieswijk, J., Kuiper, Y., Huizinga, J.J., and Jansma, L. (eds.), *Geschiedenis van Friesland 1750-1995*, 172-208. Amsterdam: Boom.
- Jensma, G. (2008). Kangoeroe naast kieviet. Over beeldvorming en overdracht van Friese cultuur en geschiedenis. *It Beaken* 70(1/2), 23-40.
- Jensma, G. (2010). Plat land, diepe geschiedenis. Friesland als trauma. *De Vrije Fries* 90, 207-22.
- Kabat, P., Bazelmans, J., Van Dijk, J., Herman, P.M.J., Speelman, H., Deen, N.R.J. and Hutjes, R.W.A. (2009). *Knowledge for a sustainable future of the Wadden: Integrated research agenda of the Wadden Academy*. Leeuwarden/Amsterdam: Waddenacademie/KNAW. <http://www.waddenacademie.knaw.nl/fileadmin/inhoud/pdf/english/09->
- Knottnerus, O. (2013). 'Der Freiheitsgedanke und die Konstituierung einer friesischen Identität im 19. Jahrhundert.' In Kunz, H., Pingel, F. and Steensen, T. (eds.), *Die "freien Friesen": Geschichte und Perspektiven der Selbstverwaltung in den Frieslanden: Beiträge von der Konferenz: Die "freien Friesen" im 21. Jahrhundert: Geschichtsbilder, Traditionen und Selbstverständnis der friesischen Volksgruppe in Deutschland*, 7. *Historiker-Treffen des Nordfriisk Instituut* (Nordfriisk Instituut No. 226), 79-92. Bräist: Nordfriisk Instituut.
- Kunz, H., Pingel, F. and Steensen, T. (eds.) (2013). *Die "freien Friesen": Geschichte und Perspektiven der Selbstverwaltung in den Frieslanden: Beiträge von der Konferenz: Die "freien Friesen" im 21. Jahrhundert : Geschichtsbilder, Traditionen und Selbstverständnis der friesischen Volksgruppe in Deutschland*, 7. *Historiker-Treffen des Nordfriisk Instituut*. Bredtstedt/Bräist: Nordfriisk Instituut.
- Leerssen, J. (2006). *National thought in Europe. A cultural history*. Amsterdam: Amsterdam University Press.
- Lengen, H. van (2003). *Die Friesische Freiheit des Mittelalters*. Aurich: Ostfriesische Landschaft.
- McDaniels, G. (1966). *Compared to what*. Song lyric.
- Munske, H. (ed.) (2001). *Handbuch des friesischen = Handbook of Frisian studies*. Tübingen: Max Niemeyer Verlag.
- Ostfriesische Landschaft. Friesische Freiheit. Retrieved August 4, 2017 from <http://www.ostfriesischelandschaft.de/61.html>
- Pietikäinen, S. and Kelly-Holmes, H. (2013). *Multilingualism and the periphery*. Oxford: Oxford University Press.
- Pietikäinen, S. (2013). Heteroglossic authenticity in Sami heritage tourism. In Pietikäinen, S. and Kelly-Holmes, H. (eds.), *Multilingualism and the periphery*, 77-94. Oxford: Oxford University Press.
- Pine, B.J. and Gilmore, J.H. (1998). Welcome to the experience economy. *Harvard Business Review* 76, 97-105.

- Pine, B.J. and Gilmore, J.H. (1999). *The experience economy*. Cambridge: Harvard University Press.
- Pingel, F. and Steensen, T. (2004). Auf freiem Grund mit freiem Volke stehn. Die Nordfriesische Geschichte als Gegenstand von Mythen. In Lundt, B. (ed.), *Nordlichter. Geschichtsbewußtsein und Geschichtsmýthen nördlich der Eibe*, 299-319. Cologne: Böhlau-Verlag.
- Programma Rijke Waddenzee (2016). PRW Programmaplan. Retrieved August 2, 2017 from https://rijkwaddenzee.nl/wp-content/uploads/2016/04/PRW_Programmaplan_1.pdf.
- Programma Rijke Waddenzee (2017a). Belevingskaart interactief. Retrieved August 2, 2017 from https://rijkwaddenzee.nl/wp-content/uploads/2017/07/Belevingskaart-interactief-170629_DEF.pdf
- Programma Rijke Waddenzee (2017b). Beleving van het werelderfgoed. Retrieved August 2, 2017 from <https://rijkwaddenzee.nl/strategie/beleving-van-het-werelderfgoed/>.
- Programma Rijke Waddenzee (2017c). Deense Nationalpark Vadehavet op werkbezoek. Retrieved August 2, 2017 from <https://rijkwaddenzee.nl/nieuws/deense-nationalpark-vadehavet-op-werkbezoek/>
- Provincie Friesland. Buro Voorlichting (2007). *Fryske Fiersichten: Ideeën en projecten voor Fryslân in 2030 : eindrapportage Provincie Fryslân*. The Hague: SMO.
- Radboud de Film (2017). Retrieved August 3, 2017 from <http://www.radbouddefilm.nl/verhaal>
- Ragherrie (2015). Into The Forest 2015: Het verslag. Retrieved August 16, 2017 from <http://ragherrie.com/live/2015/into-the-forest-2015/>
- Santema, P.A. (2017, August 16). Fantasiefestival in Tytsjerk heeft met bohurt Nederlandse primeur. *Leeuwarder Courant*, 2.
- Spanninga, H. (2012). *Gulden vrijheid?: politieke cultuur en staatsvorming in Friesland, 1600-1640*. Hilversum: Verloren.
- Spickard, P.R. (2013). *Multiple identities migrants, ethnicity, and membership*. Bloomington: Indiana University Press.
- Steensen, T. (2010). *Nordfriesland und die Friesen*. Bräist: Nordfriisk Instituut.
- Tielke, M. (2003). Der Upstalsboom als Gedächtnisort. In Van Lengen, H., Driever, R. and Koppers, W.J. (eds.), *Die Friesische Freiheit des Mittelalters: Leben und Legende*, 436-61. Aurich: Ostfriesische Landschaft.
- Timm Knudsen, B. and Waade, A. M. (eds.) (2010). *Re-investing authenticity: Tourism, place and emotions*. Bristol: Channel View Publications.
- Vries, O. (2012). *De taal van recht en vrijheid. Studies over Middeleeuws Friesland*. Gorredijk: Bornmeer.
- Vries, O. (2015). Frisonica Libertas: Frisian Freedom as an Instance of Medieval Liberty. *Journal of Medieval History* 41(2), 229-48.

Waddenzee (2017a). Beheerraad. Retrieved August 2, 2017 from <http://www.waddenzee.nl/overheid/waddenzeebeheer/beheerraad>

Waddenzee (2017b). Opdrachtgeverscollectief Beheer Waddenzee. Retrieved August 2, 2017 from <http://www.waddenzee.nl/beheren/opdrachtgeverscollectief-beheer-waddenzee/>

About the author

Prof. Goffe Jensma is the Chair of Frisian Language and Culture at the University of Groningen. Educated as a philosopher and historian, his research encompasses the cultural history of the Frisian territory from 1550 onwards, on which he has published extensively.

11 Maritime death, memory and landscape

Examples from the North Sea coast and the islands

Norbert Fischer

Abstract

In the landscape of the North Sea coast, maritime death is reflected in numerous artefacts and relicts from different historical periods. These are cultural symbols that together can be seen as a distinctly maritime ‘memory landscape’. This maritime memory landscape is based on the historical experience of shipwrecks, storm surges and inundations. As the experiences of death and grief were passed on, reflected upon and materialised in memorials, they gained historical importance. Under these conditions, the coastal landscape has been repeatedly reconfigured through the interaction of culture, mentality and society. Taken together, the different stages have produced a maritime memory landscape, which can be seen as a specific cultural heritage.

Keywords: Maritime death, North Sea coast, memory landscape, cultural heritage

Maritime death has left symbolic traces in the coastal landscape: monuments and reliefs, flood marks and shipwrecks recall the effects of disasters. Through such sites, the history of the coast is inscribed into the landscape. They are placed at central locations, for example at the harbour, on the promenade or on viewing points. They are narratives of a very specific regional history. On the one hand, historical relics (e.g. wrecks or part of them) persist as testimonies of the past. On the other hand, objects of remembrance (e.g. memorials) are intentionally created and placed in the landscape. Some recall the tragic consequences of maritime disasters.

Maritime relics and memorials both describe and reflect on the regional past. The objects appear along the coast in such density that they can be seen as a 'memory landscape': a social consensus has been established about the symbolic meaning of relics concerning maritime disasters as a self-interpretation of the region's past and culture, and thus can be seen as a symbolic condensation of the tragic past and as part of the cultural heritage of the coast. Dieter Richter wrote: 'The history of the sea touches... the most important human forms of dealing with nature... The history of the sea is part of the history of human culture' (Richter 2014: 9; see also Holbach & Von Reeken 2014; Berner et al. 2016; Döring et al. 2005).

What is a memory landscape? From the perspective of the humanities, the concept of landscape is dominated by a subjective-aestheticised perception of selected areas that are perceived as homogeneous in themselves and mostly shaped by nature: landscape as a beautiful countryside. Art historian Karin Wendt argues that we use the term landscape when we examine something with an interest in its particular formation, design or organisation and, in doing so, describe it at the same time from a distance; to see landscapes means, first of all, to get an idea of something (Wendt 2009).

Landscape thus represents both a substantive material heritage and a rich source of ideas and perceptions. Landscapes have a specific meaning for particular social groups in their respective environment. This meaning is usually both culturally and socioeconomically founded. It changes and evolves in the course of historical change.

In the humanities, the production and projection aspect is stressed (L. Fischer 2004; N. Fischer et al. 2007). In history, the changing concept of landscape is interpreted as representing social, economic and political structures — for example, the growing mastery of nature as an expression of growing national self-confidence and political power aspirations (Blackbourn 2004).

This contrasts with the new, particularistic concept of landscape, which rejects both an ontologically framed concept of cultural landscape and the classical notion of self-contained, homogeneous spaces. A pioneer of a new understanding of landscape is the American landscape researcher John Brinckerhoff Jackson, the founder of Cultural Landscape Studies. He incorporates the temporary, particular and 'ugly' into the concept of landscape. With his 'vernacular landscapes', Brinckerhoff Jackson has opened up the landscape concept to the spatial particularity of modern and postmodern worlds (Brinckerhoff Jackson 1994).

Finally, there is a concept that incorporates the collective knowledge associated with the idea of landscape from a cultural and historical perspective:

the concept of 'memory landscape'. In more recent studies, this draws on Pierre Nora's concept of *Lieux de mémoire* (Nora 1990), Simon Schama's groundbreaking study 'Landscape and Memory' (1995) and Aleida Assmann's work on memory and space (1999).

This concept can be extended to the maritime sphere. In the coastal landscape of the European seas, regionally specific experiences of death are reflected in numerous artefacts from different historical periods (Knöll et al. 2012). As the experiences of death and grief were passed on, reflected and materialised in memorials, they gained historical importance and this ultimately made them perceptible as a memory landscape. How this memory was sedimented in the coastal landscape depended on the changing ways in which the experience of the threatening sea was being dealt with, which in turn was fed by different social needs. Under these conditions, the coastal landscape has been repeatedly reconfigured through the interaction of culture, mentality and society. Taken together, the individual stages have produced a maritime memory landscape, the historical layers of which are anchored as a palimpsest in public space (N. Fischer 2007).

The beginnings of a maritime memory landscape can be seen mostly after the midnineteenth century. From a social, mental and historical perspective, it is an expression of upheaval. In the nineteenth century it was on the one hand the emergent and expanding seaside resorts that demanded a self-assurance of identity within the coastal and island communities. On the other hand, this upheaval was accompanied by an increasing loss of political autonomy of the previously relatively autonomous territories or communities on the North Sea coast and its islands. With the gradual expansion of tourism and state influence since the nineteenth century, the fear of a loss of identity grew in parts of the population.

The ever-expanding interactions with urban-bourgeois discourses, which included both economic and social-political thinking and action, as well as culture and mentality, meant a break with their own past. Life could not go on as it was. This was a reason to reaffirm the identity of the maritime past. In a distant-reflected retreat, one saved one's own experience of menacing, deadly water from external discourses, materialising them in the public space, as it were, 'showing' them. Normally, the actors were local dignitaries: pastors, representatives, captains or associations of local interest groups (e.g. fishing and dike organisations).

Looking at several examples of maritime memory landscape along the North Sea coast and the tidal rivers — at first in remembrance of storm surges and inundations (Kempe 2007), a large number of memorials are normally seen as flood marks in the coastal landscape. Flood level indicators

Figure 11.1 Memorial to the flood of 1962 in Hamburg-Wilhelmsburg, near Reiherstieg-Hauptdeich.



Photo by author

and markers can be found in many harbour towns and coastal resorts, many of them several metres high. Some examples are particularly integrated into the coastal landscape, like the flood level indicators on the river Weser promenade of Bremerhaven, in the sea resorts of St. Peter Ording and on the beach of Dangast (Jadebusen), one of the first sea resorts on the German North Sea coast.

In particular, the flood of 1962 is still anchored in collective memory. The memory of this disaster is mediated by many objects. Very impressive are two memorials to the storm flood in the Wilhelmsburg district of Hamburg (figure 11.1). In this tidal area, more than 300 people died. Wilhelmsburg and many other places commemorate this event annually. The social bearers are, among others, dike associations, committees and local stakeholders.

The extreme landscape of the North Sea coast and social identity are here in a narrow, even indissoluble relationship: floods play a decisive role in collective consciousness. Therefore, specific places of remembrance are created. These places of remembrance are one of the 'special places' (*besondere Orte*) of a region, as sociologist Detlev Ipsen calls it: 'Special places are always regarded as historic, they are charged with meaning' (Ipsen 1993: 12). This sort of reconstruction of the past through a special place can work because it builds on historically developed interpretations within traditional worlds of life and because it creates a consensus on the ciphers to be used: 'Interpretations of a regional culture also have to make sense to the social-cultural patterns of a region' (Flender et al. 2000: 25). Thus, dealing with water is the decisive element in the understanding of regional history. Therefore, one can speak of a 'hydrographic society' — hydrographic in British historian Simon Schama's sense, who applied the term to the Netherlands of the seventeenth century. 'Hydrographic societies' are defined by their interaction with the water (1988).

Moving on to memorials erected after shipwreck, let us take the example of the high, widely visible cross erected for the victims of the *Annemarie* tragedy on the island of Memmert near Borkum. It commemorates the destruction of the vessel — a local disaster, that is still regarded as a turning point in Borkum's history. The tragedy occurred in the night of 12 September 1931 before the island of Memmert; fifteen islanders lost their lives. Two years after the tragedy, a wooden memorial cross with the inscription 'Think of death! Annemarie Tragedy 22.9.1931' was erected here, now known as the Cross of Memmert (Smidt-Juist 2005).

Spectacularly situated in the landscape are sculptures, most portraying emotions of waiting, grief and mourning. The Madonna of the Seas memorial in Hamburg in front of the harbour side of St. Paul's is dedicated to all

Figure 11.2 *Waiting Woman: Sculpture near Brake Harbour.*



Photo by author

those who lost their lives at sea. It was erected in 1985 by the seafarers association Cap Horniers. The expressive *Waiting Woman* is situated on the Weserpromenade in Brake. The sculpture was created in 1990 by the Westerstede sculptor Norbert Marten and is now among the sights of Brake, a small harbour town and capital of the district of Wesermarsch (figure 11.2).

These memorials represent a distant-reflected recapture of the experience of the drowned from external discourses by materialising them in public space. Here, human experience of the coast as a narrative is almost fixed. Almost always they tell a story of local or regional importance. These are based on the 'regionalisation' of their own past and history. It is precisely because of the ever-widening interactions with urban-bourgeois milieus, which have been constantly widening since the nineteenth century, that the substance of the maritime past has been assured. Social geographer Benno Werlen uses the term regionalisation in the sense of a re-anchoring of man in a rapidly changing society, thus alienating him from his own traditions (2007). In the present case, regionalisation of one's own past means that it is not seen as part of a superior national history but rather is delimited from it. This identity-defining demarcation, however, requires a consensus on the ciphers and symbols to be used, and thus a certain self-understanding about one's own past and own region.

In particular, specially marked burial places for the unknown are characteristic for the memory landscape (Hasse 2005, 2016; N. Fischer 2005, 2016; Zander 2005). An early example comes from the North Sea shore near Cuxhaven. In 1864, a memorial stone was erected with the inscription: 'Here rests an unknown seaman, 1864.' A local peasant family's chronicle records the following: 'On the edge of the dunes was a small cemetery of the homeless. On 8.5.1864 a sailor's corpse was washed by the floods. ... However, as none of the relatives reported, our ancestors could bury him there' (*Chronik der Thalmänner* 1803-1926).

The earliest example on the German North Sea coast is situated on the island of Neuwerk, which belongs to Hamburg and was dedicated to securing the mouth of the River Elbe. Even the first historical maps of the island clearly identify the 'cemetery of the nameless'; a sixteenth-century description of it can be found in Balthasar von Meinssen. A land ordinance from the late seventeenth century states that a tomb with a wooden cross made of driftwood must be laid for the unknown found ashore. Even today, graves on the Neuwerk burial place are marked by simple wooden crosses recording only the date of finding. Since the early twentieth century, this place has become a place of interest for the emerging tourism on the island. After Neuwerk became a seaside resort in 1905, the burial place was redesigned with a monument. The initiative and financial resources to redesign the area came from spa guests (Dannmeyer et al. 1952/1982: 129-132).

Moving to the island of Sylt, the churchyard at Keitum has a monument with the inscription 'the unknown'. This memorial can also be seen on photos from around 1930 as well as on a painting by the Keitum painter

Magnus Weidemann (1880-1967). The painting dates from 1933 and bears the title *Seemannsgräber*. The memorial stone can be seen with nine wooden crosses, which are no longer present today (N. Fischer 2016).

Keitum's graveyard is a site of tourist interest on the island of Sylt. Once sailors and captains from Sylt were hired in Danish, Dutch and German harbours on ships for whaling on the Greenland Sea, and later for maritime trading to the colonies in Asia and America. Since many died abroad or at sea, the dangers of the sea and losing life at sea were deeply engrained in the mentality (Schmidt 2016).

Keitum was the main town of Sylt until the late nineteenth century, before it was supplanted by the resort town of Westerland. Westerland is home to a burial place for the unknown that still exists today. It was historically closely linked to the emergent sea baths tourism on Sylt. Hygienic aspects also played an important role, in that dune burial of the corpses washed ashore was not practised after the 1850s; beginning from 1854, such unknown sailors were buried on a specially demarcated place on the edge of the Westerländer dunes. Historical photos from the nineteenth century show the gradual development of this place to its present form (N. Fischer 2016; Voigt 1976).

Another burial place for the nameless is on the East Frisian island of Spiekeroog. It commemorates one of the most serious and famous shipwrecks on the German coast: the *Johanne* tragedy of 6 November 1854. Three days after the disaster, 28 dead were found on the beach and buried in this special place. Five years later, after a collection campaign, the place was marked with a wooden cross and designated as a *drinkeldodenkarkhof*, a cemetery of the nameless (Meyer-Deepen 1979; see also Pötter 1986 in reference to the island of Borkum).

In the meantime, the musealisation of these places is an ongoing process. For reasons including, not least, tourism marketing, the memorials in places like Westerland and Keitum were redesigned and presented to the public. An outstanding example is Nebel on the isle of Amrum (figure 11.3). The bodies of those who were buried here were found along the Amrum Kniepsand, a broad beach, which is situated west of the island. The Amrum burial place was donated by Amrum Captain Carl Jessen. The first burial here took place on 23 August 1906, and the last in 1969. In 2012 the space was redesigned and gifted with art objects by the Nebel Parish of St. Clemens. Three sculptures were erected. They are ship symbols, including *The Falling Ship*, which commemorates the disasters that occurred off Amrum.

With these old and new facilities, the coast-specific experience of shipwreck in the public space was materialised. These burial and

Figure 11.3 Cemetery of the Nameless, Nebel, Island of Amrum.



Photo by Karin Gröwer

commemorative places point to the importance of maritime disasters in the region's culture. The memorials of maritime death are based on the historical experience of extreme nature and disasters, characterised by storm surges, inundations and shipwreck. This has resulted in manifold patterns of remembrance. With these relics and memorials, the past and

people's reflection on it are both inscribed into the landscape. Memory landscapes can be regarded as a palimpsest. They are the product of a social process that reinvents collective memory in every historical period. They do not claim any historical objectivity. Rather, it is a recurring and selective experience that produces specific adaptations of past events. The memorials became a form of identity-creating in the face of maritime death. The positioning of the memorials at central locations also underscores their highly symbolic significance. The initiators are mostly representatives of local and regional associations like fishing, boating and dike associations, church communities or other local stakeholders. Most of the artists involved are local. Maritime relics and memorials both describe and reflect on the region's past. This memory landscape can be seen as a symbolic condensation of the tragic past. It is part of the cultural heritage of the North Sea coast.

References

- Assmann, A. (1999). *Erinnerungsräume. Formen und Wandlungen des kulturellen Gedächtnisses*. Munich: Beck.
- Berner, A. et al. (eds.) (2016). *Das Mittelmeer und der Tod. Mediterrane Mobilität und Sepulkralkultur*. Paderborn: Schöningh.
- Blackbourn, D. (2006). *The conquest of nature. Water, landscape and the making of modern Germany*. London: Pimlico.
- Brinckerhoff Jackson, J. (1994). *Discovering the vernacular landscape*. New Haven: Yale University Press.
- Chronik der Thalmänner zu Arensch (1803-1926). Unpublished. Archive City of Cuxhaven, B-5106.
- Dannmeyer, F. et al. (1952/1982). *Ein Turm und seine Insel. Monographie der Nordseeinsel Neuwerk*. Reprint Cuxhaven: Rauschenplat.
- Döring, M., Settekorn, W. and Storch, H. (2005). *Küstenbilder, Bilder der Küste. Interdisziplinäre Ansichten, Ansätze und Konzepte*. Hamburg: University Press.
- Fischer, L. (ed.) (2004). *Projektionsfläche Natur. Zum Zusammenhang von Naturbildern und gesellschaftlichen Verhältnissen*. Hamburg: University Press.
- Fischer, N. (2007). Gedächtnislandschaft Nordseeküste. In Fischer, N., Müller-Wusterwitz, S., and Schmidt-Lauber, B. (eds.), *Inszenierungen der Küste*, 150-83. Berlin: Reimer.
- Fischer, N. (2005). Tod am Meer – Die Namenlosen-Friedhöfe an der Nordseeküste. In Fischer, N. and Herzog, M. (eds.), *Nekropolis – Der Friedhof als Ort der Toten und der Lebenden*, 147-59. Stuttgart: Kohlhammer.

- Fischer, N. (2016). 'Den Unbekannten' – Zur Geschichte von Strandleichen, Seemannsgräbern und Namenlosen-Friedhöfen auf Sylt. In Fischer, N., Helbig, S., Pfaff, S. and Schmidt, C. (eds.), *Friedhof am Meer: Der St. Severin-Kirchhof in Keitum und der Tod auf Sylt*, 80-93). Husum: Husum Druck- und Verlagsgesellschaft.
- Flender, A. et al. (2000). *Regionale Identität zwischen Konstruktion und Wirklichkeit. Eine historisch-empirische Untersuchung am Beispiel des Siegerlandes*. Baden-Baden: Nomos.
- Hasse, J. (2005). Friedhöfe für ertrunkene Seeleute. Ein Beispiel zur sepulkral-kulturellen Bedeutung räumlicher Grenzen auf Friedhöfen. *Emder Jahrbuch für historische Landeskunde Ostfrieslands*, 85, 120-135.
- Hasse, J. (2016). *Versunkene Seelen. Begräbnisplätze ertrunkener Seeleute im 19. Jahrhundert*. Freiburg: Herder.
- Holbach, R. and Von Reeken, D. (eds.) (2014). „Das ungeheure Wellen-Reich“ – Bedeutungen, Wahrnehmungen und Projektionen des Meeres in der Geschichte. Oldenburg: BIS.
- Ipsen, D. (1993). Regionale Identität. Überlegungen zum politischen Charakter einer psychosozialen Raumkategorie. *Raumforschung und Raumordnung*, 1, 9-18.
- Kempe, M. (2007). Mind the next Flood! Memories of natural disasters in Northern Germany from the sixteenth century to the present. *The Medieval History Journal* 10, 1 + 2, 327-354.
- Knöll, S., Overdick, M., Fischer, N. et al. (eds.) (2012). *Tod und das Meer: Seenot und Schiffbruch in Kunst, Geschichte und Kultur*. Handewitt: Leupelt.
- Leisner, B. (2015). Das Thousla-Denkmal auf der Isle of Man. *Zeitschrift für Trauerkultur*, 131, 7-8.
- Meyer-Deepen, J. (1979). *Schiffstragödie vor Spiekeroog. Die Strandung des Auswandererschiffes „Johanne“ am 6. November 1854*. Jever: self-published.
- Nora, P. (1990). *Zwischen Geschichte und Gedächtnis*. Berlin: Wagenbach.
- Pötter, W. (1986). Das Tal des Todes – Der Borkumer „Drinkeldoden-Karkhof“. Unpublished. Archive, Island of Borkum.
- Richter, D. (2014). *Das Meer. Geschichte der ältesten Landschaft*. Berlin: Wagenbach.
- Schama, S. (1995). *Landscape and memory*. New York: Knopf.
- Schama, S. (1988). *Überfluss und schöner Schein. Zur Kultur der Niederlande im Goldenen Zeitalter*. Munich: Kindler.
- Schmidt, C. (2016). Zeugnisse des maritimen Todes auf dem Keitumer Friedhof und in den Kirchenbüchern. In Fischer, N., Helbig, S., Pfaff, S. and Schmidt, C. (eds.), *Friedhof am Meer: Der St. Severin-Kirchhof in Keitum und der Tod auf Sylt*, 55-75. Husum: Husum Druck- und Verlagsgesellschaft.
- Smidt-Juist, P. (2005). *Das Kreuz von Memmert*. Bearbeitet von Hans und Renate Kolde. Juist: Alt Juist.

- Voigt, H. (1976). Die Toten des Sylter Strandes – Poesie und Wirklichkeit. Ein Beitrag zur Geschichte des Bestattungswesens der Strandleichen. *Nordfriesisches Jahrbuch*, 12, 131-150 .
- Wendt, K. (2009) Worin wir leben – Landschaften, Tà katoptrizómena. *Das Magazin für Kunst, Kultur, Theologie, Ästhetik* 62. Retrieved from <http://www.theomag.de/62/kw64.htm>
- Werlen, B. (2007). *Globalisierung, Region und Regionalisierung. Sozialgeographie alltäglicher Regionalisierungen*. Band 2. Stuttgart: Steiner (second edition).
- Zander, S. (2005). Von Schinderkühlen und Elendenecken. Das unehrliche Begräbnis vom 16. bis ins 19. Jahrhundert. In Fischer, N. and Herzog, M. (eds.), *Nekropolis. Der Friedhof als Ort der Toten und der Lebenden*, 109-124). Stuttgart: Kohlhammer.

About the author

Prof. Norbert Fischer holds an master's degree in cultural anthropology from the University of Hamburg and has a PhD in social history. He was appointed associate professor at the University of Hamburg in 2007 and now works as a guest professor at the University of Vienna. His research interests include landscape history and theory, studies of coastal societies on the North Sea and Baltic Sea, spatial change and urbanisation, the history of death, and the development of cemeteries and funeral culture. His publications include *Inszenierungen der Küste* (2007 ed. with B. Schmidt-Lauber and S. Müller-Wusterwitz); *Flüsse in Norddeutschland – Zu ihrer Geschichte vom Mittelalter bis in die Gegenwart* (2013 ed. with O. Pelc); *Von Seedeichen und Sturmfluten* (2016); *Gedächtnislandschaften in Geschichte und Gegenwart – Kulturwissenschaftliche Studien* (2016); and *Nutzung gestaltet Raum* (2017 ed. with O. Auge).

Part 4

History and archaeology

12 Waddenland

From early modern prosperity to relegation to the periphery

Meindert Schroor

Abstract

In studying the cultural history of the Waddenland, some basic recurrent socio-economic themes stand out. As such, characteristics like insularity, individualism, a high degree of mobility, decentralisation and marginalisations are often cited, but are they actually valid and if so, to what extent? Are they only applicable as far as the southwestern parts of the Wadden Sea region are concerned, or do they apply in the same way to its northeastern parts? It is a fact that since the second half of the nineteenth century, the area as a whole has lost importance from an economic and demographic viewpoint. A century-old area of attraction turned into an area of emigration. How far have these age-old cultural-historical traits survived and how far are they still visible? Is determining a common past – nowadays mostly forgotten – useful for the future of Waddenland? The paper elaborates on these characteristics as potential subjects for further research, among which some themes even seem to exhibit similarities – though not elaborated upon — with the contemporary ecological and socio-cultural crises in Europe and the Western world in general.

Keywords: basic characteristics, perception of the past, from area of attraction to area of contraction, research themes

The coastal lands around the Wadden Sea — the Waddenland — are now reckoned among the less prosperous regions of northwestern Europe. Since 1880, large parts of this area have been characterised by relative decline, having experienced substantial emigration at least into the early 1960s. Moreover, the recent economic crisis seems to have hit these peripheral

regions harder than their inland counterparts, thereby fuelling already existing perceptions and images of backwardness and decline. These ideas differ greatly from the actual historical development of Waddenland until the late nineteenth century: a Waddenland of which roughly two-thirds once belonged to so-called Frisia, a rather loose, more socio-cultural than political collection of regions between Alkmaar and Cuxhaven (West and East Frisia) in the west and between Tönning and Tønder (North Frisia) in the north.

Setting the scene: Demographic developments as indicators of marginalisation

Demography is an obvious first gauge to measure the social and demographic developments in the different parts of the Wadden Sea region. Some preliminary figures — derived from a number of statistical sources — seem to support the relative decline of the region as a whole (Statistisk Tabelværk 1835; Ramaer 1931; Aagesen 1952-53; Uelschen 1961; Statistisches Landesamt SH 1972; Schroor 2008; CBS 2010; LSKN 2011; Statistikamt Nord 2011). Whereas the population of the Netherlands between 1795 and 2010 grew by a factor of 8.0, the population of the province of Fryslân grew by only a factor of 3.9, and Northwest Fryslân (i.e., the triangle Hallum-Leeuwarden-Harlingen) by a mere 2.3 (i.e., +129 percent). Not everywhere in the Wadden Sea region has population growth been this low, but there are nevertheless many demographic similarities. The coastal areas around the German Bight from Northern Frisia down to the town of Den Helder saw their population increase from some 800,000 inhabitants in 1815/1821 to 3,020,000 inhabitants in 2010. The population of the Northern Netherlands (including the Top of Holland, that is, the northernmost part of the province of North Holland together with the island of Texel), containing the Dutch part of the Wadden Sea region, saw its share of the population of the Netherlands decline between 1815-2010 from 14.8 percent to 8.0 percent. Whereas the Danish marshes are still practically uninhabited — except for the Danish Wadden Islands, where population has grown from 3,300 inhabitants in 1880 to 4,000 nowadays — their margins have seen substantial population growth in the past 150 years up to about 200,000 inhabitants today. The bulk of the growth, though, is accounted for by Esbjerg, which was founded only in 1868.

Making a similar comparison for the German part of Wadden Sea region is not as simple due to frequent, often drastic territorial changes since 1821. In that year, the area's share of population in the area of the German Zollverein

as it was before 1871 amounted to 1.6 percent, while its population share in the German Federal Republic today amounts to some 2.1 percent. However, taking into consideration the loss of Silesia, Posen, East Pomerania, West and East Prussia and excluding Luxembourg and Northern Schleswig, the growth figure of the German marshes was far less impressive.

A comparison can also be made between the Dutch and German Wadden marshlands (that is, the Dutch and German parts of Waddenland) over the past two centuries. The population of the Dutch marshes grew from 201,000 in 1815 to 615,000 in 2010 — a growth of more than 205 percent. At the beginning of the nineteenth century, they accounted for 62 percent of the population of the Northern Netherlands, whereas this percentage has now declined to 46 percent. Again the population of the German marshes is more difficult to reconstruct in view of their manifold administrative changes. In Lower Saxony the ten districts containing marshes (apart from other landscape types) experienced only a slight decrease in their portion of the total population from 1821 to 2010 (from 17.6 percent to 15.9 percent), as the population grew by 282 percent. Based on 13 of 21 *Samtgemeinden* (enlarged municipalities) in the marshes west of the river Elbe, the area's population grew by only 152 percent since 1821 (from 80,704, to 203,702 inhabitants).¹ At the same time, their share in the population of northwestern Germany (Lower Saxony and Schleswig-Holstein) declined from 3.6 percent to 1.9 percent. The relative decline seems all the more dramatic considering the fact that since 1821, at least two initially non-existent important population centres have developed in the marshes: Wilhelmshaven (pop. 84,586) and Bremerhaven (pop. 118,276). Though offsetting much of the loss, they have not been included in these figures that nevertheless contain two older urban centres in the marshes: Emden (pop. 51,445) and Cuxhaven (pop. 52,876). Presenting more exact figures exceed both the scope and space available for this contribution, but at first glance the similarities are evident.

Lagging behind demographically can be considered an indicator of a steady and profound decline of Waddenland in relation to their regions at the national level or even in the context of northwestern Europe. On the face of it, this occurrence throughout the area presumes a certain socio-economic and cultural unity of the Wadden Sea region as well as an earlier state and appearance of prosperity. This chapter will attempt to gain insight into the supposed wealth of old to address some structural characteristics of its society and economy by means of five recurrent and interdependent

¹ The 13 *Samtgemeinden* consist of Jemgum, Emden, Krummhörn, Jade, Butjadingen, Lüste, Wursten, Nordholz, Cuxhaven, Hadeln, Nordkehdingen, Drochtersen and Jork.

themes: insularity, individualism, high degree of mobility, marginalisation and decentralisation. The focus will be mainly on the areas west of the Elbe river, considering the knowledge and research experience of the author and then again especially on the Dutch part of Waddenland, though every now and then the scope will broaden to the whole of the Wadden Sea region. Finally, this contribution is meant as a first step towards a research agenda, for most of these themes seem interesting enough to deserve further critical investigation into their validity in general and their applicability regarding the cultural-historical and societal dimension of the entire Wadden Sea region or parts thereof.

Insularity

We start with the geography of Waddenland. Anyone who takes a glance at a map of the coasts of the German Bight cannot but have strong maritime associations, seeing the chain of Frisian islands as well as their continental counterpart: a mainland heavily indented by bays, river mouths and inlets. The more we turn to the past, the more these littoral lands seem to be dismembered from each other and from the mainland. Especially up to the sixteenth century, they more or less had the appearance of a continental archipelago, consisting of real islands in the North Sea and marshy peninsulas on the mainland. The extent of the marshes in themselves is proof of the maximum and direct influence of the sea, as a rule formed through steady sedimentation under normal tidal conditions, now and again incidentally and briskly, owing to catastrophic storm surges. Lying on the western edge of the Eurasian continent at about 54° N, the region has a mild maritime climate with a mean annual precipitation of about 750 millimetres.

From the fifth century BC onwards, the high fertility of the soil as well as the wealth of fish and waterfowl attracted colonists from elsewhere (Pentz 2000) not only during Roman times but more so in Carolingian and Ottonian times (not to mention the occupational gap during the transition from Antiquity to the Middle Ages). In these times the Frisian coastal districts along the German Bight were among the most densely populated areas in Western Europe. Between 800 and 1200 AD, a combination of wealth and threatening overpopulation — probably aggravated by the threat of Viking raids — resulted in a massive wave of *Innere Kolonisation*. This colonization movement – starting somewhere between Harlingen and Texel – diffused to the central parts of Holland and from there spread eastward through the then-impenetrable peat-moors fringing Friesland, into the marshes and bogs

Figure 12.1 Map of the Frisian coastal districts between Vlie and Jade by Pieter van der Keere, 1617.



Courtesy of Tresoar, KvF 59c

alongside the Weser and Elbe rivers (Borger 2007). Apart from Old Frisian law texts referring to the cultivation of new lands, we find traces of this massive and mostly decentralised colonisation movement in our landscape as well as in the names on the maps: from, for instance, Exmorra, Eemswoude and Schildwolde west of the river Ems to Simonswolde, Altenbruch, Francop and Blankenmoor to the east of it.

The cultivation of the bogs, which had until then worked as sponges, and climatic change (higher temperatures, more storm surges and precipitation) jeopardised an already delicate balance between man and nature. The building of dikes as a necessary answer to the advancing waters caused higher water levels and thereby new flooding, and created an environment studded with numerous lakes. Then there was the destruction of the coastal peat-landscape in the Western Wadden Sea (in the twelfth and thirteenth centuries) and Northern Frisia (in the fourteenth century), and high mortality levels caused by endemic malaria over the whole area — a result of the mixing of salt and fresh waters, sluggish drainage and periodical flooding by inland waters often in combination with incidental flooding by seawater. Except for the Frisian Islands, the rule for centuries was that the nearer to

the sea you were, the higher the mortality levels were (Knottnerus 2002; Schroor 2014).

At the end of the Middle Ages, Frisia west of the Elbe was more than ever a society on its own; a fragmented archipelago of nuclear regions, engaged in environmental challenges and occupied with its so-called Frisian freedom, seemingly cut off from mainstream developments in Western Europe. This more or less blocked its development into a viable and separate political unit. All in all a consistent story, told by various historians, but how did this geographical environment affect the social and economic development of the Wadden Sea country? Was it really the geography? And in what ways does opportunity make the thief, as seems to be the case with the immense popularity of skating in at least the western parts of these wetlands, to name but one trivial example? What was the position of the intermediate moors? Did they really act as barriers, or were they links between the coastal zone and the hinterland? Are there any differences in this respect with the North Elbian, especially Danish part of Waddenland, where sand and clay mostly were adjacent to each other?

Individualism

Along the coast from Holland to East-Friesland, Butjadingen and further towards Denmark, the so-called nuclear family at least from the Late Middle Ages onwards was standard in coastal North-western Europe (Page Moch 1992). This stood in stark contrast to adjacent and more distant inland areas of Waddenland, like Overijssel, Brabant or Westphalia. There, extended families prevailed, generally consisting of households of three generations or even more, often with cohabitating unmarried uncles, aunts or even cousins. Cohabitations like these imply limited risks of poverty and destitution to their individual members, whereas in nuclear families only the two parents — or worse, the widowed — had to bear all the burdens. A direct link can be assumed between the widespread nuclear families (husband, wife and children) on the one hand and the proliferation of so-called *cameren* (one-room dwellings) in at least Friesland and Groningen. By 1500, one-quarter of all dwellings in Leeuwarden already belonged to this category of poor people's home. An interesting question would be if there is any connection between the development of the nuclear household on the one hand and the relative isolation of the Frisian districts towards their hinterlands. There seem to be some other clues, such as the commercial success of farming in a fertile environment, or a nigh-constant struggle against the elements

in hazardous surroundings — factors that, put together, may have created an atmosphere of independence and self-support among the population, presumably with the outcome that even pre-modern Friesland was a rather autonomous and individualistic society. An example may shed some light on this assumption.

In 1850, the West Frisian lawyer and later burgomaster of Leeuwarden Johan Hendrik Beucker Andreae (1811-1865), condemned in an essay on poverty the widespread Frisian custom of thoughtless marrying at an early age, very often without any prospect of a decent livelihood (Beucker Andreae 1851). Half a century later (1899) — when census data for the first time offered a reliable insight into Dutch national housing conditions — Fryslân and Groningen counted by far the highest percentage of one-room residences (*éénkamerwoningen* or *cameren*) referred to above (more than 50 percent of all dwellings). These were spread evenly over rural districts and towns (Faber 1904). This form of housing was suited to early economic independence of young adults and the aforesaid practice of wedding at an early age, and also seems to underlie Frisian individualism, expressed furthermore in the extreme proliferation of private polders (up until 1970), in inland shipping on one's own account, and in the densest concentration of mediaeval church villages (often tiny) in Europe. The roots of early marrying at least seem to me as being essentially economical. In the marshes of Fryslân and Groningen — as well as in the Fen Colonies (in the raised bog area of Friesland, Groningen and East Frisia) — labouring on a temporary base (that is, irregular work) was a widespread phenomenon in the brickworks and in the fields. And although parts of the Geest and Fen Colonies were to become infamous as pockets of poverty and socio-political unrest at the end of the nineteenth and the first half of the twentieth century, Beucker Andreae furthermore stressed another essential difference between Marsch and Geest: in the marshes, poverty was harsher because, whereas in the sandy areas squatters and day labourers could get their hands on wood, sods and an allotment to cultivate their own food and build their own shelter, in the clay districts just about every square metre had been registered and had its official owner. Similar conditions seem to have existed on the East Frisian peninsula (Krömer 1991; Schroor 1992).

Overpopulation and high degree of mobility

Because of their fertility and wealth in all kinds of fish and fowl, the marshes attracted quite a few people and, considering colonisation movements inland

(the cultivation of the moors) and towards Northern Frisia, from Carolingian times at least must have been relatively overpopulated. Not everyone was able to find work in primary activities. Most of the labour surplus found its way into other non-agricultural activities like trade and commerce, usually associated with urbanisation as a phenomenon. However, during the Late Middle Ages and Early Modern era, the Frisian districts could hardly be called urbanised compared to places like Northern Italy, Île de France, Flanders, Holland or the Rhineland. In large parts of the Waddenland, non-agricultural activities were rather decentralised, inland navigation and rapidly expanding commercial peat-digging being the main ones. Originating in Northern Flanders and the Campina, commercial peat-cutting (to be sold to the great towns in Flanders and Brabant) advanced northwards and entered Fryslân (Heerenveen) about 1550. From here, it expanded into the province of Groningen, where the town of the same name became owner, originator, organiser and model of the Fen colonies, which subsequently (from 1633 onwards) diffused into northwestern Germany.

Both activities — inland shipping as well as peat-digging — imply a high degree of mobility. In the lower parts of the Netherlands, in the Wadden provinces *a fortiori*, the role of inland shipping up to the Interbellum can hardly be overstated (Verslag 1911). Mobility is the obvious result of the mobile nature of shipping itself. Furthermore, the gradual depletion of the peat and a consequent need to open up new areas for peat-cutting involved moving home. Small wonder that the population of Fryslân and Groningen — from the moment for which we have reliable figures available, i.e., between 1750 and 1920 — proved to be the most mobile and moving-inclined part of the Dutch population, ignoring the seasonal workforce flowing in every year from the Westphalian hinterland. Though this picture has changed since, it seems interesting enough to be analysed and compared to other parts of Western Europe and the Waddenland in particular.

Economic and political marginalisation

Some two centuries ago, the Waddenland was one of the wealthiest parts of Europe. Trading, overseas and inland shipping, and commercial farming were the cornerstones of wealth in Early Modern Fryslân and Groningen. In and around towns, manufacturing industries flourished. Although less rich and urbanized than adjacent Holland or Flanders, the northern provinces — especially the marshes — nevertheless attracted many seasonal as well as permanent migrants from the Westphalian and Hessian as well

Figure 12.2 Brickmaking, a traditional activity in the marshes. Female workers at a brickworks near Harlingen, about 1900.



Courtesy of Museum Hannemahuis

as the Upper Saxonian and Prussian hinterlands. They came to work as mowers, brickmakers, fishermen, boatmen, textile workers, peat diggers or whalers, or else they tried to sell their homemade textiles as hawkers and often settled down in the towns as small tradesmen and shopkeepers. For example, C&A, a worldwide name in clothing retail today started by the Brenninkmeyer family, was established in 1841 by Westphalian textile traders from Mettingen in the Frisian town of Sneek (Lucassen 1984).

As stated before, the demographic developments since have been characterised by stagnation and relative contraction and are an expression of a steady economic and political marginalisation.

Together with workers from the area itself, the migrants played an essential role in developing the adjacent moorland into the fen colonies of Friesland, Groningen and Ostfriesland that became a model for fen colonies elsewhere in Western Europe. Before 1800, the Frisian Islands and the mainland opposite them were themselves the main providers of skippers and other crew to the Baltic trade that was dominated by Amsterdam shipowners.

The cultural heritage of the area in many ways mirrors its history as an Early Modern society, firmly based upon a modern, commercial agricultural economy of dairy farming, cattle breeding and cereal production and other commercial activities such as inland shipping, fisheries, brick and tile-making, the production of ceramics and textiles, luxury goods or peat cutting, as well as the processing of local or imported primary products like cheese, butter, salt, sweets, sugar, coffee and tea. The wealth of the area was reflected in its architecture, its extensive production of luxury goods like embossed silver and glass, clocks, pottery, majolica and even books and atlases. After 1750, the Dutch Republic — of which Fryslân and Groningen were politically and economically a part — marginalised these two provinces. While Fryslân from 1860 onwards lost importance, developments in some parts of Groningen followed a different course. In this province, the political emancipation, the development of a merchant fleet and a process of industrialisation in the 'city jurisdictions' of Groningen, especially the Fen Colonies, experienced a growth spurt. The traditional Ommelanden, however, which mostly belonged to the marshes, developed like Friesland.

The outbreak of the great agricultural crisis in 1878 hit the Frisian areas doubly hard. For a start, they were impeded by the fact that they were not connected to the main consuming markets (Randstad Holland, Belgium/Northern France, Ruhr/Rhine). There was, moreover, hardly any base for industrialisation apart from the existing arts and crafts, and as far as other ways of employment were concerned their irregular and often seasonal character did not fit into modern ways of producing. Another constraint was the traditionally high wage levels, which acted as a brake on innovation. Mass products from the marshes like brick and salt were no match for the mechanised brickworks alongside the great rivers using reverberator kilns fired by cheap Ruhr coal instead of the Frisian rotary kilns fired by expensive English coal. Also, the market for traditional Frisian luxury goods like clocks, silver and glasswork, all relatively fragile, faced pressures as a result of a shrinking home market and even more through competing mass fabrication.

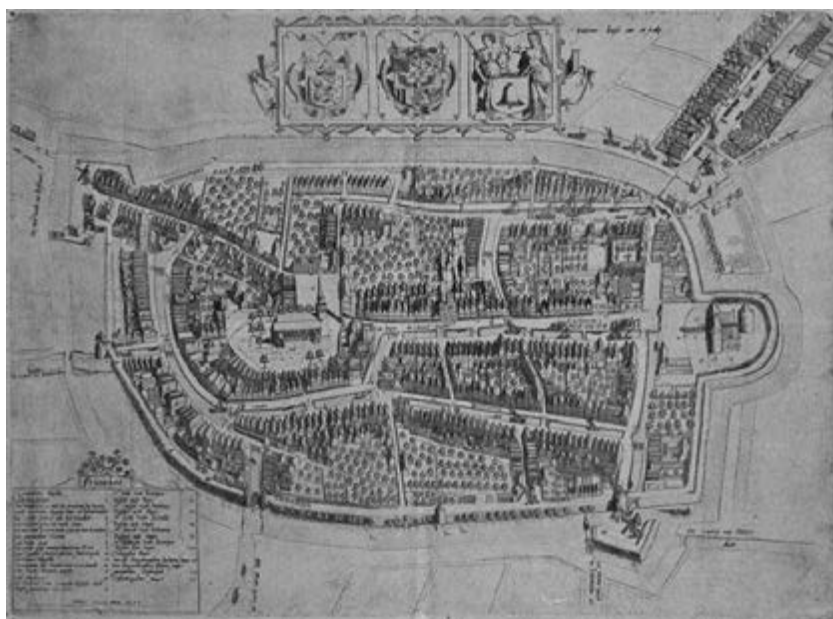
All in all, between 1880 and 1960, more than 400,000 inhabitants of Friesland and Groningen left their province in search of employment and a better life, one-fifth of them migrating to overseas destinations. This new, more externally oriented mobility must have had its impact on the economy and mentality of the population and on the landscape, especially in the marshes, which were on balance the biggest losers by far. Did the same mechanisms and developments occur in the German and Danish parts of the Waddenland? And if so, to what extent and how? And what were the effects on the existing social structures and mentalities caused by large-scale emigration?

Decentralisation

Apart from the preciously named aspects of Frisian society, another specific trait aggravated the problem of keeping pace with economic developments in Western Europe in general: the historically decentralised character of the province of Friesland. This goes beyond the geographical fragmentation mentioned as the first theme. Nowhere in the heavily urbanised Dutch Republic (1579-1798) did towns possess so little political power as was the case in Friesland. It's true enough that the eleven towns were represented in the Provincial Estates, but together they only formed one quarter as compared to the three rural quarters of Oostergo, Westergo and Zevenwouden. The supposed cultural unity of Friesland as seen through the eyes of fellow Dutchmen and many Frisians themselves seems at odds with its decentralised character but is in fact still one of the most striking characteristics of Frisian culture and society (Schroor 2007).

Decentralisation has a long tradition in Fryslân and seems to be one of the main characteristics of the Waddenland as a whole, though not everywhere! As such we find the most striking differences between neighbouring Fryslân and Groningen. The eleventh-century Frisian districts west of the Weser numbered twelve or so minting centres and marketplaces. In 1234, the Premonstratensian abbot Emo of Wittewierum mocked about 'gens a quator monetis a Stavria usque Lavicam' (i.e. Fryslân), considering four minting places too much for an area of barely 3,000 square kilometres. (Jansen et al. 1991). Various authors stress the proliferation of dozens of towns and hundreds of villages. (Emmius 1616; Gratama 1795). The result was a striking differential urban development between Fryslân with its eleven towns and 'vlecken' on the one hand and Groningen on the other, with one dominating town forming more or less a city-state. This latter example is the exception to the almost Frisian rule that not a single town in the Frisian districts could rise to dominance. Until recently, this decentralised character was replicated widely among the representatives in the States of Fryslân. Frisian resentments against towns were not, it should be noted, limited to Fryslân, but reigned supreme in the German Frisian districts too, e.g. towards Bremen (Prüser 1951). However, by regularly ignoring Leeuwarden's position as the best place in Fryslân in maintaining or reaching minimum threshold values in matters of employment and services, successive provincial authorities can be held responsible for the loss of economic weight, wealth and political influence that has continued up until virtually the present day. The establishment of a university in Franeker (1585) instead of in the capital and largest town Leeuwarden is perhaps the oldest and most telling example of this anti-urban distributive policy.

Figure 12.3 Historical map of Franeker, birds-eye map of Franeker by Pieter Bast (1598). Note the industrial suburb in the southwest (upper right) and the ships in the canals. The university was housed in the quadrangle at #3.



Courtesy of Tresoor KvF 285

There are reasons to believe that more mixed conditions existed on the East Frisian peninsula (e.g. Emden versus the other towns, especially Aurich and Norden; Marsch versus Geest and Moor) and probably elsewhere along the coast. (Kappelhoff 1994). The case of city-state Groningen illustrates that decentralisation does not seem to be the necessary political outcome of the aforementioned geographical fragmentation (Schroor 2007). Was it a different factor then? And how did political unity/disunity affect the history and fragmentation of Waddenland?

Epilogue

In this chapter we have discussed some peculiar characteristics of Frisian society in the Wadden Sea region and its immediate hinterlands, thus providing a provisional framework for further and more substantial scientific research into the cultural-historical essentials and character of this highly

fragmented region. The experience of the Dutch Wadden (and East Frisian) marshes does not seem to be applicable unequivocally to the other parts of the Wadden Sea region. However, in view of the corresponding geographical and economical structure of the German and Danish parts of the Wadden Sea, at least some socio-economic similarities may be expected.

In this contribution we have tried to formulate research questions based on supposedly common socio-economic and cultural traits that can be useful as workable hypotheses in order to gain insight into the character of Wadden society on the islands as well as on the mainland. They all require a broad, profound and critical analysis based on a multitude of different sources and a regional and sometimes even local approach, which apart from demography and economy extends to behavioural and social sciences as well. So far it appears a lot of dynamics have indeed passed by the marshes across the North Sea and through the Weser and Elbe rivers in their vicinity as well as through the great rivers such as the Rhine, the Meuse and the Scheldt to the south. It seems clear that the area was better at harnessing such dynamics before 1880, and nowadays this seems forgotten by its population. Research, while in the first place necessary to get a better idea of the socio-cultural characteristics and possible cohesion of the area, can at the same time be helpful in putting an end to the almost amnesic, widespread idea of a long-standing backwardness of Waddenland among its population. The outcome, potentially, is that the Waddenland will come to be seen as at least as valuable in cultural-historical terms as the Wadden Sea is from an ecological point of view.

References

- Aagesen, A. (1952-53). A geographical study on the population of the Danish Northfrisian Islands. *Geografisk Tidsskrift* 52. Retrieved from <https://tidsskrift.dk/index.php/geografisktidsskrift/article/view/10338/19580>
- Beucker Andreae, J.H. (1851). Rapport betreffende een onderzoek naar den materiëlen toestand der arbeidende bevolking ten platteland. In *Tijdschrift voor Staathuishoudkunde en Statistiek* VI, 156-200.
- Borger, G. (2007). *Het verdwenen veen en de toekomst van het landschap*. Amsterdam: Universiteit van Amsterdam.
- CBS (2010). *Gemeente op maat*. Retrieved from www.cbs.nl/nl-nl/dossier/nederland-regionaal/gemeente-op-maat 2010
- Emmius, Ubbo (1616). *Rerum Frisicarum Historiae*. Lugduni Batavorum (Leyden): Elsevier.

- Faber, J.H. (1904). *Sprekende cijfers. Woningtoestanden in Nederland*. Zwolle: Erven J.J. Tijl.
- Gratama, S. (1795). *De gelukkige toestand van Friesland*. Harlingen: Van der Plaats.
- Jansen, H.P.H. and Janse, A. (1991). *Kroniek van het klooster Bloemhofte Wittewierum*. Hilversum: Verloren.
- Kappelhoff, B. (1994). *Geschichte der Stadt Emden von 1611 bis 1749. Emden als quasi-autonome Stadtrepublik*. Leer: Verlag Gerhard Rautenberg.
- Knottnerus, Otto S. (2002). Malaria around the North Sea: A Survey. In Gerold Wefer et al. (eds.), *Climatic Development and History of the North Atlantic Realm: Hanse Conference Report*, 339-353. Berlin Heidelberg: Springer-Verlag.
- Krömer, E. (1991). *Kleine Wirtschaftsgeschichte Ostfrieslands und Papenburgs*. Norden: Soltau-Kurier.
- LSKN (Landesbetrieb für Statistik und Kommunikationstechnologie Niedersachsen) (2011). *Statistische Berichte Niedersachsen Bevölkerung der Gemeinden am 31. Dezember 2010*. Hannover.
- Lucassen, J. (1984). *Naar de kusten van de Noordzee: trekarbeid in Europees perspectief 1600-1900*. Gouda.
- Page Moch, L. (1992). *Moving Europeans. Migration in Western Europe since 1650*. Bloomington: Indiana University Press
- Pentz, P. et al. (2000). *Kings of the North Sea, 250-850*. Leeuwarden: Fries Museum.
- Prüser, F. (1951). Die Herkunft der mittelalterlichen Bevölkerung Bremens. In: *Zeitschrift des Vereins für Hamburgische Geschichte* 41, 125-154. Hamburg.
- Ramaer, J.C. (1931). *Het Koninkrijk der Nederlanden 1815-1931*. The Hague: Martinus Nijhoff.
- Schroor, M. (1992). Divergentie en convergentie. Twee eeuwen sociaal-economische ontwikkeling in de Eems Dollard Regio (1815-1990). In O.S. Knottnerus et al. (eds.), *Rondom Eems en Dollard/Rund um Ems und Dollart. Historische verkenningen in het grensgebied van Noordoost-Nederland en Noordwest-Duitsland/Historische Erkundungen im Grenzgebiet der Nordostniederlande und Nordwestdeutschlands*, 370-395. Groningen/Leer. REGIO PROjekt/Schuster Verlag.
- Schroor, M. (2007). De Januskop van Casper de Robles. Gemeenebest versus Stadstaat: Friezen en Groningers door de eeuwen heen. In *Historisch Jaarboek Groningen 2007*, 85-104. Groningen: Vereniging Stad en Lande.
- Schroor, M. (2008). *Waddenzee. Waddenland. Historische verkenningen rond de geografische identiteit van het internationale waddengebied*. Leeuwarden: Raad voor de Wadden.
- Schroor, M. (2014). *Rurale metropool. Bevolking, migratie en financiën van de stad Groningen ten tijde van de Republiek (1595-1795)*. Groningen.
- Statistikamt Nord (2011). *Bevölkerung der Gemeinden in Schleswig-Holstein am 31.12.2010*. Hamburg.

Statistisches Landesamt Schleswig-Holstein (1972). *Die Bevölkerung der Gemeinden in Schleswig-Holstein 1867-1970*. Kiel.

Uelschen, G. (1961). *Die Bevölkerung in Niedersachsen 1821-1961*. Hannover.

Verslag der Staatscommissie tot het nagaan van den toestand waarin het binnenschip-perijbedrijf verkeert (State Commission on inland-shipping) (1911). The Hague: J. & H. van Langenhuysen.

About the authors

Dr. Meindert Schroor is a freelance geographer and historian at his own Bureau Varenius in Leeuwarden. Active since 1976 in researching and writing on the landscape, urban history, demography, water management and cartography of Fryslân (Friesland) and Groningen, he has developed into the most prolific researcher and writer on cultural history in the Northern Netherlands. Schroor received his PhD in 2014 on the demographic and economic history of the town of Groningen and is editor-in-chief of the *New Encyclopaedia of Fryslân* (published on paper in 2016). Since 2014 he has been a member of the board of the Waddenacademie responsible for the cultural history and society portfolio.

13 Local communities and regional economies with a global touch

Contacts along the Danish Wadden Sea coast in the eighteenth century

Mette Guldberg

Abstract

In the seventeenth and eighteenth centuries, Amsterdam was one of the most important towns for the coastal communities of the northernmost part of the Wadden Sea – the present Danish part of the Wadden Sea. They were relatively poor communities that delivered manpower, raw materials and coarsely manufactured products to the metropolis, importing products such as exotic spices and secondhand goods in return. The local skippers and merchants functioned as a link between the communities and the world market. In the latter part of the period, Hamburg took over as the dominant city. Considering the Wadden Sea as a highway of contact gives new insight into historical everyday life in the Wadden Sea region and contributes to qualifying the interpretation of the present cultural landscape.

Keywords: Amsterdam, coastal communities, Danish Wadden Sea, skippers, cultural landscape

Shipping in the Danish parts of the Wadden Sea in the seventeenth and eighteenth centuries

Looking at Denmark with its more than 7,000 kilometre coastline, the Wadden Sea coastal area on the southwest coast of Jutland is only a small part of Denmark. And likewise, looking at the Wadden Sea, the Danish part of the Wadden Sea is only a small part of the whole Wadden Sea coastline.

Thus the Danish Wadden Sea coast can be said to be on the outskirts of both Denmark and the Wadden Sea. Throughout its history, this has affected the area in different ways.

The Danish Wadden Sea coast offered good possibilities for ships to reach the coast. Just north of Varde, the dangerous Horns Reef challenged shipping, and it was therefore convenient for ships coming from the south to use one of the Wadden Sea harbours in order to avoid passing the Reef. North of the Reef, the sandy west coast of Jutland offered only poor options for ships to reach the coast. Thus the Wadden Sea coast was well-situated for trade on the German and Dutch coasts and the cities of Amsterdam and Hamburg — the former experiencing its Golden Age in the seventeenth century, with its colonial trade and flourishing economic life, and the latter gaining importance over the course of the eighteenth century. This article will focus on shipping from the Danish parts of the Wadden Sea in the eighteenth century as it is reflected in customs accounts, an activity of which very few traces are visible in the landscape today.¹

Until the mid-nineteenth century, trade, crafts and shipping in Denmark were based in the towns, which as a rule of thumb (but not without exceptions) had privileges on these activities. Three old towns were situated on the current Danish Wadden Sea coast: Varde and Ribe, which were part of the Kingdom of Denmark, and Tønder, which belonged to the Duchy of Schleswig, also under the Danish crown. All of the three towns were built on the mainland along rivers — Varde Å, Ribe Å and Vidå — where the landscape conditions allowed ships to navigate the river north-south as well as to gain access to the sea to the west. The deeps Graadyb, Riberdyb and Listerdyb secured the passage from the rivers through to the Wadden Sea, between the barrier islands and into the North Sea.

Though the towns had privileges on shipping, this did not mean that the shipping was limited to the towns only. Many minor harbours or places of embarkation were put into service to compensate for the difficulty in

1 This article is part of the research project: 'Trade and social life: A research and communication project based on Danish-Dutch contacts in the seventeenth and eighteenth centuries' carried out in 2015-2018 by the Fisheries and Maritime Museum, the University of Southern Denmark and Museum Sønderjylland and supported by VELUX FONDEN. The project consists of seven subprojects: 1. Asger Nørgaard Christensen: Maritime-cultural exchange between Denmark and the Netherlands; 2. Max Pedersen: The forgotten emigrants; 3. Mette Guldborg: Shipping and harbour structure; 4. Christina Folke Ax: Danish dress customs and Dutch influences; 5. Elsemarie Dam-Jensen: The import of Dutch tiles; 6. Martin Rheinheimer: A seaman's family's contact with Amsterdam; 7. Asbjørn Holm: Interpretation of life-stories at museums and in the landscape.

Figure 13.1 Towns that imported goods from Holland via Varde/Hjerting in the eighteenth century.



Customs Accounts Varde, Danish National Archives. Graphic by Claus Smedegaard

reaching the quay at the town centre due to growing ship sizes and the silting of waterways — and perhaps also to avoid eager customs officers (Guldberg 2010).

The destination of the shipping from the three towns was predominantly Norway and Dutch and German harbours. It was not common for smaller ships from this area to sail the dangerous way north of the Skaw, so until the opening of the Eider Canal in 1784 it was very unusual for a ship from the Danish Wadden Sea coast to go to the eastern towns of Denmark — including the capital Copenhagen — and even more unusual

for such ships to venture to the Baltic. So whereas the main part of Danish shipping outside of Copenhagen was oriented towards destinations in the eastern part of Denmark and in the Baltic, shipping on the Danish Wadden Sea coast was oriented more towards the German and Dutch areas. And whereas the towns in the eastern part of Denmark received their foreign goods to a large extent through Copenhagen, the skippers from the Danish Wadden Sea coast maintained direct contact with the large towns of Amsterdam and Hamburg/Altona. Very few other Danish harbours had direct contact with Dutch harbours. This fact makes the shipping of the Danish Wadden Sea coast somewhat different from the rest of Denmark.

Exports

The export goods over sea from the three towns on the Wadden Sea were a variety of local or regional agricultural products supplemented by the specialties of each town. From Varde, black pots (*Jydepotter*) were a very typical commodity. They were unglazed, black-fired earthenware produced by women in the rural parishes northeast of Varde, and they were exported to all of Denmark and to neighbouring countries. Though the pots seemed very old-fashioned even at that time, the heyday of their production was the seventeenth and eighteenth centuries. Their advantage was that they were cheap and well-suited for cooking over open fire and for storing food. The pots from Varde went first and foremost to 'the Elbe' but also to Norway and to Holland (Guldberg 1999)

From Ribe, fish was a predominant (albeit seasonal) commodity, while Tønder's main export was local crops grown with arable farming. A recurrent export cargo from this part of the Wadden Sea was workforce: every spring, when the sailing season started, many ships for Holland would bring sailors looking for work.

Imports from Norway were first and foremost various different cuts of timber and lumber, while the Dutch and German harbours brought over a broad variety of goods available in the larger towns.

Customs accounts from Varde/Hjerting

Well-preserved customs accounts allow us to take a closer look at the shipping of the northernmost town of the Wadden Sea, Varde, and its vicinity. In

Figure 13.2 Varde's main harbour Hjerting was an important harbour for importing goods from Holland to large parts of Jutland. Nevertheless, being a harbour in the Wadden Sea, there were no built structures. Hjerting in the 1760s.



Source: Pontoppidan, E. (1769). *Danske Atlas*.V:2. Copenhagen

the customs records one can find information about the ships, the names and home bases of the skippers, their destination, their cargoes and the owners of the goods.² Varde was situated in contact with Graadby, a deep that allowed passage between Fanø and the mainland from the North Sea into the Wadden Sea and further up Varde Å to Varde. The destination of ships passing the Varde Customs House in the eighteenth century was primarily Øster Risør (Risør, Aust-Agder) in Norway as well as the Elbe and Holland.

As early as the seventeenth century, the conditions of Varde Å made it harder for larger ships to access the town of Varde, so the Varde Customs House was moved to Hjerting on the coast. Other minor harbours were also used. The area was also referred to as Graadby Harbour — a name that is also found in the archives of Amsterdam as the place where people

² Complete customs books from Varde are preserved from the years 1731, 1733, 1761, 1763, 1767, 1769 and 1798. Danish State Archive.

from the northernmost part of the Wadden Sea referred to as their port of origin — reflecting the fact that to the maritime world, the deep was more important than the actual locality on land.

What is striking about the imports to Varde/Hjerting is the relatively large volume of exotic goods, spices, additives, drugs, dyes, etc. Whereas the types of items for export from Varde amounted to about 20, the types of items for import was over 200. At first glance, Hjerting seemed to be the place with the best assortment of exotic goods. A second glance, however, reveals that only a tiny fraction of it went to the town of Varde, with most of it going to merchants in the towns of Jutland from the Limfjord in the north to the Kongeå (the boundary river between the Kingdom and the duchies) to the south. Merchants from the whole of Jutland used Varde as a 'gateway to Holland', which they saw as a wholesale store with access to goods from all over the known world, and as such a gateway to the world market. Neither Varde nor Hjerting had any notable population growth in the period but remained small places. Varde, with only 670 inhabitants in 1769, was one of the smaller towns in Jutland.

Typical import items from Holland were spices, the most important being cinnamon, nutmeg, mace, cardamom and cloves. In addition there were other colonial goods that were imported such as dyes and drugs, luxury food products, textiles, salt, lime and bricks as well as small tools for home use and urban crafts. Some recycled goods also found their way to the harbour in Hjerting: metal, medical jars for drugs, used clothes and old, used clay pipes — the latter two clearly indicating that the consumers of the Danish coast were not as fastidious as the Dutch consumers.

In 1731 and 1733, two of the years for which well-preserved customs books survive, most of the foreign goods came from Holland. The later books from the 1760s show a shift in focus from Amsterdam to Hamburg as the main supplier of exotic goods, not least because of the lifting of a Danish economic boycott of Hamburg. Many of the commodities imported from Hamburg were the same as those from Amsterdam — except for the aforementioned typical spices from Holland. But from Hamburg also came more ready-made things and more luxury goods. It is clear that if you were a follower of fashion, Hamburg was the place to go. By the end of the eighteenth century, when Amsterdam had lost its former glory, only very few and very traditional goods came from Amsterdam, whereas most of the exciting new goods came from Hamburg — and from Copenhagen as well, which had become accessible through the Eider Canal.

Details from personal documents

The customs accounts from the eighteenth century are a good source for finding out more about the trade from Hjerting when it comes to the nature of the goods, the ships and the skippers, the destinations and the actors in the import and export trade. But they leave open many questions. Every now and then, however, you are lucky to find one of the rare personal accounts from the era, such as the one written by the East Jutland merchant Rasmus Toxen (1716-1786), who worked as a merchant in Vejle at the end of the 1730s and in Horsens from 1740 until his retirement in 1785. The rich detail of the memoirs of Rasmus Toxen supplements the information from the customs accounts. Toxen relates how, as a young merchant in Vejle, he made his first trip to Amsterdam in 1737:

I rented a coach for Hjerting and came with the late Knud Riisbøl's widow's vessel to Amsterdam. We were at sea and the travel from Hjerting 3 weeks. We were with the ship in Enkhuizen; it lies 7 hours or miles before we came to Amsterdam. (Behrend 1906-08: 579)

Knud Riisbøl's ship — a smack of 13 *læster* (approximately 26 tonnes) — can be found in the customs accounts, but they give no hint of the fact that the merchants themselves went with the ship. Furthermore, the accounts always state that the ships went to 'Holland'. Here we learn that the actual destination is Amsterdam. We also learn that the sailing time is three weeks — but throughout the record we can see that travel time differs from four days as the fastest to several weeks for an unfortunate journey. Once in Amsterdam, the skipper introduced Toxen to a commission agent who helped him sell his goods so he got money to buy goods to take back home — on this first journey, it was silk cloth that he bought from 'the Jews'. On one of the journeys the ship ran aground, and the sailors on board on their way to work in Amsterdam had to help it afloat. The customs account only relates that there were 'some sailors' on board on a boat. Here we learn that there were more than fifty. The first trip in the spring on the relatively small ships must have been quite lively with fifty sailors aboard, all excited to get to Amsterdam and to find work.

Amsterdam's attraction

It was not only goods from Amsterdam that were attractive to the population of the northern part of the Wadden Sea. The city itself had a huge

attraction to many people, and every year hundreds of men and women went to Amsterdam. Thus from the mid-eighteenth century, the following is related about the conditions in West Jutland:

...In the coastal parishes, their inclination is mainly to go to sea, and many leave for the Netherlands, some with permission, but a large number stow away. Some do come back, but many are never seen again, not only because many die on the voyage to either India or Greenland, where they go fishing, but also because many settle in Amsterdam or other places. Many young women from the western part go to Amsterdam as servant girls, and many of these settle there and do not return. (Nielsen 1894: 54)

Many of the men were sailors, who went to man the ships in Amsterdam, not least the ships for East India and the whalers for Greenland. A survey of the Waterschout Archives in Amsterdam shows that in 1780, 1800 sailors in Amsterdam came from Denmark and Schleswig-Holstein, and of these, 78 percent were from the Wadden Sea coast.³ Others were more permanent migrants of a wide range of professions seeking new opportunities abroad. They can be found in the marriage banns of Amsterdam, which reveal that in the period 1578-1812 some seven thousand immigrants from present-day Denmark married in Amsterdam, 25 percent of whom originated from the Wadden Sea coast.⁴

It is not surprising that Amsterdam made an overwhelming impression on the people from the northern Wadden Sea coast. Many of them came from small towns of a few thousand inhabitants or less, and what did they find? A town of between 225,000 and 240,000 inhabitants, merchants from all over the world trading exotic goods, flourishing shipping, trade and craft. The town had beautiful streets and impressing buildings — just think of the town hall, now the royal palace, built as early as 1648 — paved streets with footpaths on each side, and public street lightning since 1650. In 1689, 2,400 lights were lit in the streets of Amsterdam every night. In 1779, the town of Ribe had *one* streetlight — for its population of 2,000.

This shows there was close contact between the northernmost part of the Wadden Sea and Amsterdam. Many must have known either sailors or merchants who came there regularly, while others would have had friends or relatives who had gone there and not returned. It is remarkable, however, that

3 Kindly related by Asger Nørlund Christensen, PhD student in the project 'Trade and social life'.

4 Kindly related by Max Pedersen, researcher in the project 'Trade and social life'.

Figure 13.3 Loading and unloading on the tidal flats. The ewer Ane Cathrine unloads hay, Niels M. Gerald, 1901.



Courtesy of Fiskeri- og Søfartsmuseet

the memory of the close contacts has almost disappeared and that people in the area nowadays are often surprised to learn about the former close ties. Even the few, very subtle traces in the landscape are difficult to recognise.

Traces in the landscape

Like many other elements of the landscape of the Wadden Sea, you have to have some background knowledge in order to be able to interpret what you see. This holds true for the traces of shipping in the Wadden Sea. Built harbours were mainly found in the towns, whereas few if any of the more modest harbours and embarkation places had built structures that are

recognisable in present times. Due to the conditions in the Wadden Sea, the flat-bottomed ships were able to load and unload on the tidal flats, leaving only very few traces in the landscape. Almost all of these places have gone out of use. Since the construction of Esbjerg harbour in 1868-74, all commercial shipping in the Danish part of the Wadden Sea has been concentrated in Esbjerg with the exception of the small ferry harbour at Nordby on the island of Fanø and the ferry and fisheries harbour at Havneby on the island of Rømø.

Likewise, the traces in the landscape have changed when you look at the route the people from the northern part of the Wadden Sea followed when they were going to Amsterdam. At that time, the seaway to Amsterdam went between the barrier islands and through the Zuiderzee. This route was definitively blocked with the building of the Afsluitdijk (1927-1932), which also turned the salt water Zuiderzee into fresh water IJsselmeer — a dramatic change in the structure of the landscape. Zuiderzee is, literally, the 'South Sea' (as opposed to the North Sea), and you can see it described as 'a shallow bay of the North Sea' or as 'a branch of the Wadden Sea'. It is not entirely unlikely that the people of the Danish Wadden Sea coast used to consider Amsterdam the southernmost harbour of the Wadden Sea, whereas today the Wadden Sea officially ends at Den Helder.

The present harbour structure at the Danish Wadden Sea coast leaves long stretches of the coast unaffected by maritime activities, and the maritime activities of the early modern period have left very few traces in the present landscape. In many places, only the trained eye is able to detect the signs of former maritime activities. It is crucial to tell the stories of the activities in the past in order to secure the preservation of the few surviving traces in the landscape.

References

- Behrend, C. (1906-08). En Horsenskøbmands Optegnelser fra det 18de Aarhundrede. In *Samlinger til Jydsk Historie og Topografi* 3. række, V. bind., 577-597. Aarhus: unpublished.
- Guldberg, M. (1999). *Jydepotter fra Varde-egnen. Produktion og handel ca. 1650-1850*. Kerteminde: Landbohistorisk Selskab.
- Guldberg, M. (2010). Vadehavets havne og ladesteder. In *Sjæklen 2009, Årbog for Fiskeri- og Søfartsmuseet*, 9-21. Esbjerg: Fiskeri- og Søfartsmuseet.
- Guldberg, M. (2013). De varer, som bonden aldrig ser? Importen over Hjerting fra Holland i 1700-tallet. In *Sjæklen 2012, Årbog for Fiskeri- og Søfartsmuseet*, 66-81. Esbjerg: Fiskeri- og Søfartsmuseet.

- Guldberg, M. (2014). Købmanden, skipperne og hollandsfarten. Varer fra Holland til Jylland i 1700-tallet. *Kulturstudier* 1, 75-102.
- Guldberg, M. (2015). Vadehavets nordligste havn. Hjerting som havneby i 1600-1700-tallet. In *Sjæk'len 2014. Årbog for Fiskeri- og Søfartsmuseet*, 9-19. Esbjerg: Fiskeri- og Søfartsmuseet.
- Guldberg, M. and Dam-Jensen, E. (2017). Skibstrafikken ved Tønder Toldsted 1713. In *Sjæk'len 2016. Årbog for Fiskeri- og Søfartsmuseet*, 92-104). Esbjerg: Fiskeri- og Søfartsmuseet.
- Nielsen, O. (1894). Bondestandens Kaar i det sydlige Jylland i Midten af det attende Aarhundrede. In Bjerger, P. (ed.), *Aarbog for dansk Kulturhistorie 1894*, 30-54. Aarhus: Jydsk forlags-forretning.
- Pedersen, M. (2013). Fra Vadehavet til Amsterdam. *Sjæk'len 2012. Årbog for Fiskeri- og Søfartsmuseet*, 82-103. Esbjerg: Fiskeri- og Søfartsmuseet.
- Pontoppidan, E. (1769) *Danske Atlas.V:2*. Copenhagen.

Unpublished sources

Danish National Archive, Copenhagen

Customs Accounts Varde 1697-1798

Rentekammeret og Generaltoldkammeret Reviderede Regnskaber

Vardes regnskaber for Told og Konsumtion m.v. Pakke 8-15

Customs Accounts Ribe 1731-42

Rentekammeret, Reviderede Regnskaber

Ribes regnskaber for told og konsumtion m.v. Pakke 12-13

Customs Accounts Tønder 1684-1794

571 Reviderede regnskaber Slesvig-Holstenske toldregnskaber, Tønder m.m.

Pakke 1-4

About the author

Dr. Mette Guldberg is a historian and ethnologist and works as the head of Research & Collections of the Fisheries and Maritime Museum in Esbjerg (Denmark) and as senior researcher at the Centre for Maritime and Business History at the University of Southern Denmark. She has dealt with aspects of the cultural history of the Wadden Sea area since 1994, among others in the WADCULT/LANCEWAD-projects. Between 2015 and 2018, she was the leader of the research project 'Trade and Social Life' on Danish-Dutch contacts in the seventeenth and eighteenth centuries.

14 Was there a maritime culture in Bremen in the nineteenth century?

Ethno-historical notes on coastal societies

Jan C. Oberg

Abstract

In the first half of the nineteenth century, the North German trading city of Bremen experienced an unprecedented boom in its maritime economy. In this article, the author retraces the cultural effects of this development and examines the thesis of the particular character of coastal societies by using an ethnological, actor-oriented approach. The ethno-historical view of everyday life in Bremen suggests that Bremen's maritime culture was complex, often contradictory, speckled with certain cultural representations. It varied significantly from ideas of cultural homogeneity and cultural interconnectedness, which frequently prevail in the concept of coastal societies. In Bremen, the quality of dealing and exchanging with foreign people and cultures was characterised by forms of domination, questions of economic profitability, and social and cultural practices of distinction and exclusion. In nineteenth-century Bremen, cultural stereotypes of cosmopolitan Hanseats contrasted with that of strange sailors, and the construct of a civilised merchant town with a vulgar harbour colony arose, which is part of Bremen's self-image to this day. Thus the idea of coastal society, as expressed in the concept of the North Sea as a cultural unity with a certain 'maritime culture', can also be interpreted as a mental map and a product of national and global/local historiographies.

Keywords: Bremen, ethno-historical view, coastal society

In the port city of Bremerhaven in October 1833, a division of the police dragoons attacked the Spanish frigate *Habanera*, crying 'Hurrah!'. The

Figure 14.1 Bremerhaven 1844. Lithographic print by G. Weinhold after a sketch by F.W. Kohl.



Focke Museum. Published in Focke Museum Bremen (ed.) (1922). *Das alte Bremen* (no. 85). Leipzig: Insel

crew were insulted and beaten with sabres. The Spanish flag was used to 'wipe backsides' — an 'offence', complained the Spanish captain.¹ The scene was preceded by a fight in a pub. After the opening of Bremerhaven in 1830, reports concerning disturbing encounters between Bremen and foreign visitors in the young harbour colony accumulated. Foreign sailors who violated or overstepped Bremen behavioural standards received strict punishment on Bremen territory.

However, there were close trade contacts with the countries of origin, and in the bourgeois clubs of Bremen foreign journals were displayed. There, Bremen's merchants got into the 'English way of life', consumed 'original beef rounds' (Lewald 1840/2007: 318), drank Bordeaux wine and read English and American newspapers. Language teachers from England were respected men in Bremen. However, among the 'hundreds of foreign sailors' in Bremerhaven, the English were considered to be the 'roughest'.² Also Jews and other strangers were hardly welcome in Bremen. Even the emigrants,

1 Quotation from a report of the bailiff of Bremerhaven: Staatsarchiv Bremen (StAB) 2-Q.9-170

2 Bailiff Gröning 1855, StAB 2-Q.9-433.vol.2.

one of the most important sources of income for nineteenth-century Bremen, were suspiciously scrutinised and kept separate (Oberg 2014: 149).

It seems that Bremen's history cannot be imagined without this ambivalent attitude towards strangers. In this chapter, I deal with this issue within the context of a theoretical discussion about so-called coastal societies. This analytical concept is based on the assumption that the sea can stimulate the emergence of a 'common culture' on its coasts and that it can constitute even a 'cultural entity' that is largely homogeneous in itself (Heerma van Voss 1996: 31). The line of argument proposed by this concept is that living by the sea automatically leads to economic, social and cultural linkages between the inhabitants of coasts (e.g. Roding & Heerma van Voss 1996). The proximity to the inhabitants of other coasts, the voyages of sailors and merchants as well as commercial relations are assumed to have produced cultural interconnectedness and mutual adaptation. This reasoning frequently ends in the conclusion that shipping and sea trade connections lead to cultural exchange in general and to the development of a cultural pluralism in the form of a 'maritime culture'. My aim is to show that this conclusion cannot be confirmed in every respect. By using the example of Bremen, I demonstrate that increasing economic linkage between societies does not automatically result in cultural interweavement between societies. If we investigate more closely the conditions for intercultural encounters, if we ask who was involved and in what way, the image of the coastal society becomes much more differentiated and complex. Ideas and images of multiculturalism, of maritime cultural openness and of homogeneity, however, consistently persist in the perception and descriptions of coastal societies. In the example of Bremen, I take a look at the historical emergence of such representations of 'maritimeity' and outline how these are passed on and fostered in scientific discourse and academic knowledge production.

The conception of a maritime culture was first introduced by Fernand Braudel in a 1949 thesis on a uniform culture of the Mediterranean and has since been applied to other coastal regions. Braudel concentrated his studies on those economic, social and cultural structures that according to him hardly changed or did not change at all, depending on environmental conditions. Many historians followed him in his preference. On this structural layer of the long *durée*, people would be involved in a 'fate' that they could 'hardly shape themselves' (Braudel 1992: 460).

The ocean and its power are regarded as a stimulus for the formation of a homogeneous 'maritime culture' in studies such as Charles King's work on the Black Sea World (2004), or others on the Baltic Sea (e.g. Kirby 1990), the Indian Ocean (e.g. McPherson 1993), the Mediterranean (in addition

to Braudel 1949 also Horden/Purcell 2000; Harris 2005; and most recently Abulafia 2013), or the North Sea (Roding/Heerma van Voss 1996; Heerma van Voss 2005).

In this discussion, Bremen is assigned to the North Sea region, including the Wadden Sea area, which as a 'cultural entity' has 'common cultural features', according to some historians (Heerma van Voss 1996: 31): some sort of 'modernizational perspective' (*ibid.*: 39), 'egalitarian thinking', 'cultural openness', 'common cultural attitudes', maritime orientation (Price 1996: 81) and 'cosmopolitanism par excellence' (Blockmans & Heerma van Voss 1996: 16).

I examine the thesis of the particular character of coastal societies with a specific maritime culture using the example of the city of Bremen in the first half of the nineteenth century. How did seafaring and sea trade leave their marks on Bremen?

Bremen in the first half of the nineteenth century is well suited for such an investigation. After the opening of the Bremerhaven dock in the 1830s, Bremen's shipping industry and its overseas trade grew at an unprecedented speed. The transatlantic trade in particular was responsible for the city-state's economic boom (see Oberg 2014: 31ff.). At that time, Bremen's shipping companies were leading in the emigration business in Germany, Bremen's shipping had surpassed other German maritime states, and the number of foreign sailors who were temporarily in Bremen's ports had grown enormously. In parallel, numerous sailors on Bremen ships travelled much more frequently and for longer periods to coasts and ports in and outside Europe than ever before. Until the middle of the nineteenth century, Bremen's shipping companies owned more ships and more tonnage than their counterparts in any other place in Northern Germany.³ The import of goods from overseas and the export of emigrants made Bremen the destination of international merchant shipping, the transit point of thousands of emigrants and the home port of a commercial fleet of considerable proportions. These economic preconditions for the development of a coastal society had certainly existed in Bremen as early as in the late 1780s. But what traces did the maritime trade leave behind in the everyday culture of that time? Did shipping and trading connections, and thereby encounters with foreigners, lead to cultural exchange and the development of a cultural pluralism — a 'maritime culture' in nineteenth-century Bremen?

3 In 1840, the Bremen merchant fleet contained 212 ships. In 1859, it had 279 — a number that, according to some local historians, even surpassed the size of the complete merchant fleet of France (Entholt 1928; Löbbe 1989; Peters 1899).

In this chapter, I start with a few comments on my methodical approach. I then present some of my results and finish my contribution with a few notes on the debate on coastal societies.

The ethnographical eye on history as theoretical and methodological framework

Theoretically and methodically, I will not directly tie in with the works of the coastal theorists. I do not want to simply verify the hypothesis of the coastal society in the case of Bremen. Instead, I prefer to approach the historical sources with an 'ethnographical eye on history' (Reinhard 2004: 10). My focus is on the different historical actors in Bremen, the diversity of their perspectives and practices and the disjunctions and ruptures. In this respect, I follow the paradigm of historical anthropology, which regards large-scale theories rather distantly, especially those that contain normatively charged modernisation theories. These, according to Lüdtke (2001), conceal the shaping of history through the historical actors. In Bremen as well as anywhere else, history never actually happened in given structures but was rather designed by actors who appropriated or blocked such structures. I have followed their practices on different sites and in different contexts. In this way, my study has become a 'reconstruction' of historical practices on multiple 'sites' in the city state of Bremen, as anthropologist George Marcus (1995) calls it. In the manner of a 'multi-sited ethnography', I have followed the traces of transcultural 'exchange' to the port and to the bourgeois residential districts, also into the publications of local historians and into the representations of the 'maritime', the images and discourses that are of importance for the research field.

The relationship between citizens and strangers, city and port was not one of cultural exchange on all of these physical and diffuse sites. In fact, on different sites in Bremen, the extent and quality of exchanges with foreigners and foreign cultures were quite variable and governed by forms of domination, by economic strategies and by mechanisms of social and cultural differentiation. Concerning Bremen, I present *two* research results that contrast the site of the port with the one of the bourgeois residential areas and their respective cultural features, which were attributed to the actors on both of these sites.

1. In the nineteenth century, a new bourgeois model was established in Bremen. It centred around the ideal of the well-to-do, educated, socially committed and cosmopolitan Hanseats with their social and cultural

Figure 14.2 Kaufmann G.J. Bechtel. Photography, 1849.



Published in Görgens, H. and A. Löhr, A. (1985). *Bilder für alle. Bremer Photographie im 19. Jahrhundert*. Focke Museum, Hefte, 68 (p. 37, no. 26).

practices, living in the bourgeois residential districts of Bremen and well-positioned in exclusive networks. Cultural exchanges between Bremen and the dominant trade partners in the Netherlands, England and America can be found on this site without any doubt. Cosmopolitanism, language skills and other ‘intercultural competencies’ became status symbols of the upper class.

2. Parallel to this, a modern, separate port district was established in Bremerhaven, where the ‘rabble from all sirs countries’ was to be found:⁴ a port with the social infrastructure that seemed necessary to generate maximum profits in the overseas trade. There, a culturally negative stereotype was located: the strange, foreign, foolish and dangerous sailor. This stereotype was associated with an aggressive culture that

4 Quotation of a boatman, Bremerhaven. StAB 2-Q.9-433.vol.2.

was regarded as a threat to bourgeois Hanseatic society. Encounters between seafarers and Hanseatic citizens, which could have facilitated a cultural exchange between them, were prevented as much as possible by a policy of separation and by the isolation of the port.

As should be the case in actor-related research, I would actually have to provide many examples of both strands of my results. We will have to suffice in this section with only a few examples:

1. Cosmopolitan Hanseats in a civilised sea trade city

Demonstrating a pragmatic cosmopolitanism in Bremen was the hallmark of the local bourgeoisie. The leading figures of this Hanseatic cosmopolitanism were, of course, merchant shipowners (for example the famous Bremen families Kulenkampf, Iken, Wätjen, Oelrichs, Melchers and the Delius brothers, whose fortune was unmatched in Bremen). They lived with their families in the residential areas of the old trade city, where everything was 'quiet and bourgeois, modest and decent', as journalist Eduard Beurmann depicted Bremen everyday culture in 1836 (see Kasten 1946: 132ff.). In the summer, they moved to their country residences in the rural villages around Bremen, and during the winter they met for social events in their gentleman's clubs and unions (see Oberg 2014: 120ff., 258ff.). The discourse about the positive influence of the trade of these merchant shipowners on Bremen culture and their humanity, tolerance and wealth can be traced in numerous sources of Bremen's history (see Oberg 2014: 47). The 'modern taste' of this milieu was 'very British'. Contemporary travel reports tell of encounters with senators who appeared in the latest English fashion and entertained wide, transatlantic networks with America (ibid.). Modern foreign languages were highly valued but only taught in private schools for high fees (Müller 1787: 8).

Quite a few sources from this period even tell of a true Anglomania among Bremen's citizens, e.g. Hermann Henrich Meier, a famous Bremen shipowner and founder of the *Northern German Lloyd*, who had been educated in the USA and who insisted on pronouncing his initials only as 'H.H.' in English. Meyer and other Bremen Hanseats corresponded to the idealised 'hanseatic character', the components of which were declared by *Hanseatisches Magazin* to be citizenship, success, courage, prosperity, habitualised modesty, and cosmopolitanism or 'intercultural competence' (1800, p. 252ff.). Today, we could call him a 'global player'. By demonstrating these features and competencies, he presented himself as a member of the local bourgeoisie. Squeezing in an appearance in a gentlemen's club, with an

Figure 14.3 Sailors in Bremerhaven. Watercolour painting, 1840.



Focke Museum. Published in Schwarzwälder, H. (1977). *Bremerhaven und seine Vorgängergemeinden. Veröffentlichungen des Stadtarchivs Bremerhaven* (p.121, no. 181), Bremen: Hauschild

American business journal under the arm, and chatting with an American consul in his supposedly native language (even if both conversation partners were born in Bremen) was the appropriate way to present the cultural habitus of a real *Hanseat*.

The gradual end of an estate-based society and the rise of the merchant bourgeoisie, however, had not brought about a society of equals, neither in Bremen nor elsewhere, but rather the practice of 'fine distinctions' so aptly described by Pierre Bourdieu (1982). One of the main functions of this bourgeois culture was to express one's own social status and to mark its difference from other members of society. In Bremen, this difference was habitualised in the bourgeois ideal of the *Hanseat*. This concept of the perfect gentleman, representing the (maritime) culture of the three North-German sea trade cities of Bremen, Hamburg and Lübeck, had indeed originated around the late eighteenth and early nineteenth centuries. In using the term 'Hanse', a myth was invented. In recalling or rather inventing the successful past of the old trade league, it permitted the elite of these towns to develop a specific form of civil pride: 'Hanseatic' morals and customs, habits and forms of sociability were explained in writing in the 'Hanseatic Magazine'. The *Hanseat* was destined to become the cosmopolite of the sea trade city. Due to his capital and his competence, he established himself at the heart of

culture and society, and whoever wanted to demonstrate that he possessed these Hanseatic qualities had to make use of criteria of social distinction.

2. Strange sailors in a vulgar harbour colony

An individual who was short of cultural, social, and material capital and who had no education, no connections and no fortune to show, had no chance of attaining the ideal of the Hanseat. In the mid-nineteenth century, this was true of almost 70 percent of the population of Bremen (according to Schulz 2002: 162). Those whose work was just as essential for the sea trade boom — the sailors — were ‘placed’ apart from the milieu of the Hanseats.

In the nineteenth century, the modernisation of the shipping industry increased the prosperity of Hanseats, but it took certain rights and traditional practices away from sailors. There was a whole package of economic modernisation strategies aimed at maximising profits by reorganising the shipping industry. In order to adjust seafaring to economic conjunctures on the market for sea transport, many traditional practices of the ships’ crews were forbidden (see Gerstenberger & Welke 1996).⁵ Small trading by sailors was declared to be smuggling. The practice of seasonal shipping disappeared, hiring contracts obliged sailors to commit themselves more and more often to uncertain and long periods, and the turn-around time in ports was shortened considerably (ibid.). Consequently, sailors no longer had the opportunity to regularly go to their home communities to see their families.⁶ Seamen came to be excluded from social life ashore.

Clearly, the consequences of this isolation had to be compensated. In Bremerhaven, the seamen had access to all sorts of practices — many of them officially prohibited — designed to assuage their loneliness. Archival sources describe a place that ‘seems to consist only of pubs’ without concession. Even the tailor served schnapps to sailors. Innkeepers functioned illegally as employment agents (*Heuerbaase*) and as pimps, arranging contacts with their barmaids. Prostitution was forbidden in reformed Bremen. Nevertheless, there were brothels in the middle of Bremerhaven, a number of which even belonged to well-known inhabitants. The ‘barmaids’ working there were tolerated as long as they offered themselves secretly (Oberg 2014: 203, 208, 218).⁷

5 Furthermore, the captain’s competence was extended and an official control-regime was produced ashore (Gerstenberger/Welke 1996).

6 Moreover, the access to the municipal areas was restricted by severe port orders, prohibiting the sailors from leaving their ships at night (StAB 2-Q.9.-32, 2-Q.9.-245 & 2-P.13).

7 Sources: StAB 2-Q.9-411, StAB 2-D.17.c.7. Bd. 5, 2-D.20.k.2.

These open and tacit policies created an isolated zone where the transgression of common morality was condoned, thereby providing compensation for the fact that the modernised sea transport had separated the transport workers from their families. Their disembedding from everyday life ashore was expressed spatially and socially in the emergence of the modern, isolated port district, the place 'where the rabble from all sirs' countries was to be found'.⁸

In contrast to the positive image of foreign merchants, the image of the foreign sailor deteriorated. Sailors were considered to be ruffians, addicted to drink and sex, especially when they came from abroad. This applied particularly to English and American sailors. Somehow, this seems to be a reversal of the positive image of English and American merchants in Bremen.

In 1832, the bailiff of Bremerhaven railed at the 'nauseating' smelliness and the 'light-hearted and awkward' character of English-speaking mariners.⁹ Shipowners like Friedrich Adolph Delius declared the sailor to be 'helpless and at a loss like a child'; they demanded that sailors be put under control in order to protect them from their own stupidity — thereby securing his manpower for Bremen's economy.¹⁰ So in Bremen it was argued that seamen had to be separated from society because of their dangerous otherness and strangeness. This discourse about the sailor's strange character and his peculiar culture, which was very much foreign to bourgeois society, supported the physical and social segregation of seafarers through a practice of cultural othering (Oberg 2014: 286).

Conclusions: Cultural differentiation and the representation of 'maritimeity'

Thus, in the great period of overseas trade, the supposed urban, coastal society had by no means become a homogenous socio-cultural unity. Bremen's society was in fact deeply fractured and extremely heterogeneous, and side by side there existed two, completely different pictures of the 'stranger', of the foreigner. In the context of political-economic strategies, foreignness gained a different meaning than at the level of Hanseatic self-presentation. As soon as it came to foreigners of lower class, whether they were sailors or barmaids, the image of the stranger got a negative connotation, thereby

8 Quotation of a boatman, Bremerhaven. StAB 2-Q.9-433.vol.2.

9 (StAB 2-Q.9-169).

10 (StAB 2-R.11.1.10)

legitimizing authoritarian control practices. A foreign sailor was more alien to Bremen's bourgeois society than a foreign merchant.

On the basis of these results, let me formulate three preliminary conclusions on the study of coastal societies and maritime culture:

1. Ideas of homogeneous cultural spaces or 'scapes' often tend to level and conceal actual social conflicts and cultural practices of differentiation and domination.
2. Any study of a hypothetical maritime culture should therefore refrain from taking its potential homogeneity as a starting point but rather investigate its special mixture of mechanisms of socio-cultural inclusion and exclusion.
3. Representations of 'maritimeity' with all its connotations were also taken up and reproduced in the academic discourse, as can be proven for Bremen. An academic tradition like this can also be retraced for the whole idea of the North Sea culture. Finally, I will interpret this with the help of the concept of mental maps.

In psychology, the term mental map refers to the subjective image of the spatial environment. Historical research pays attention to the collective representations, the 'drafts... of spaces', which are mapped 'in texts, on maps and in images' (Schenk 2002: 495).

All of these representations do not reflect objective truths but rather 'the world the way people believe, people are sure it is' (Downs & Stea 1982: 23). They are highly selective assessments of the world. Cultural-spatial units such as the North Sea or the world of the Mediterranean may exist in many facets, but they are selective too. They come into being through the process of perception when the 'inhabitants of a space experience this space as a particular one and identify with it' (Reulecke 1997: 25) or when other people in other places need these spatial constructions as a counterpart, differentiating them from their own cultural-spatial identity, for example, in the construction of the Orient as described by Edward Said (1979): an invention of the Occident, reflecting Western interests.

Historians and cultural anthropologists are involved in such processes of cultural spatialisation, as I call it, following European ethnologist Konrad Köstlin (1980). We define cultural spaces, construct places of remembrance and make offers for identification. We do what postcolonial theorists call 'identity politics' (Conrad 2002).

In the discussion of coastal societies, it is claimed that a certain form of maritime culture can only be found on the shores of a particular sea. The question is whether the idea of the coastal society itself carries the traits of a

cultural spatialisation, for instance of the North Sea or even the Waddenland. We historians and anthropologists implicitly reproduce existing motifs of perception: cosmopolitanism or egalitarian thinking can already be found in the cultural and identity discourses of Western European elites in the eighteenth century. If these ideals are considered to be the characteristics of an essential North Sea culture, what has been negotiated and defined by lectures and cultural practices by bourgeois elites in Hanseatic Bremen and elsewhere is now regarded as a cultural and historical fact. What the bourgeoisie has constructed a few centuries earlier, we now reconstruct in a history as it 'really' was.

Cultural openness and cosmopolitanism, however, are hardly essential beings but rather cultural, moral or political models by which parts of the north-west European population have oriented themselves over a certain period of time — let us call it the 'Occident'. This discourse of Occidentalism, in which ideas of Western identity are produced and reproduced, is regarded by anthropologists as a 'silent partner' of the producers of cultural knowledge about non-Western societies (see e.g. Carrier 1995). Nonetheless, it is also a silent companion of our works on Western societies themselves.

The concept of the North Sea culture contains something of this latent Occidentalism and a particular self-image: the representation of a common North Sea culture with a 'modernization perspective', as represented by Blockmanns and Heerma van Voss (1996), gives the idea of Western civilisation a concrete place. This is localised or spatialised on the coasts of the North Sea, with England and the Dutch Republic at its centre — depending on the period. There we find the guiding themes of Western civilisation: egalitarianism, cosmopolitanism and modernity. The occasionally irritating North Sea centrism in some studies is also a textual expression of the identity discourse in which the self-image of the Occident is reproduced and told continuously. The 'essence' of the West on the North Sea becomes alive in this narrative.

The sea, however, is the mythical landscape in the narration of the North Sea region, written by the burghers of its coast then and now, by enlightened scholars, Hanseats, maritime historians, anthropologists and local folklorists. The historical ethnographer Greg Denning (2003) suggested that instead of historicising the seas, one would do better to reflect on the way in which certain actors historicise their sea and create cultural identities. This occurs, in particular, discursively through language. Language and speaking encompass all the forms that make symbols from words: speech, voice, gesture, silence, but also colours or paintings and scientific treatises or other forms of academic knowledge production (conferences, congresses, etc.). Each study about a coastal society participates in this process of creation.

By historicising their oceans, the authors write the narration of these seas and create 'cultural landscapes' or 'seascapes', respectively.

The narrative of the North Sea is such a narration about cultural and social interaction and interdependencies; it is also a story of competition for economic and political power, and one of efforts to attain cultural and social differentiation, and it is probably also a history of competing national historiographies as well.

However, if the reality of a cultural space depends on whether people experience this space as being a particular one, identify with it and discover it as their reference frame, then the narrative of this space would indeed provide proof of its existence. Hence, of course, there was indeed a maritime culture in Bremen in the nineteenth century.

References

- Abulafia, D. (2013). *Das Mittelmeer. Eine Biographie*. Frankfurt/Main, Germany: Fischer.
- Blockmans, W., & Heerma Van Voss, L. (1996). Urban networks and emerging states in the North Sea and Baltic Areas: a maritime culture? In J. Roding, J., & L. Heerma Van Voss (eds.), *The North Sea and Culture* (pp. 10-20). Hilversum: Verloren.
- Bourdieu, P. (1982). *Die feinen Unterschiede. Kritik der gesellschaftlichen Urteilskraft*. Frankfurt am Main: Suhrkamp.
- Braudel, F. (1949). *La Méditerranée et le monde méditerranéen à l'époque de Philippe II*. Paris: A. Colin.
- Braudel, F. (1992). *Das Mittelmeer und die mediterrane Welt in der Epoche Philipps II*. Vol. 2. *Kollektive Schicksale und Gesamtbewegungen* & Vol. 3. *Ereignisse, Politik und Menschen*. Frankfurt am Main: Suhrkamp.
- Carrier, J. (1995). *Occidentalism. Images of the west*. Oxford: Clarendon Press.
- Conrad, C. (2002). Vorbemerkung. In C. Conrad (Ed.), *Mental Maps. Geschichte und Gesellschaft, Zeitschrift fuer Historische Sozialwissenschaft* 28 (pp. 339-342). Goettingen: Vandenhoeck & Ruprecht.
- Denning, G. (2003). Tiefe Zeiten, tiefe Raume. Die Zivilisierung der See. In B. Klein & G. Mackenthun (eds.), *Das Meer als kulturelle Kontaktzone. Raume, Reisende, Repraesentationen* (pp. 17-48). Konstanz: UVK.
- Downs, R.M., & Stea, D. (1982). *Kognitive Karten. Die Welt in unseren Koepfen*. New York: UTB Harper & Row.
- Entholt, H. (1928). Bremens Handel, Schiffahrt und Industrie im 19. Jahrhundert 1815-1914. In O. Mathies (ed.), *Die Hanse und die Staedte Hamburg, Bremen und Luebeck* (pp. 129ff.) Gotha: Flamberg.
- Focke Museum Bremen (ed.) (1922). *Das alte Bremen* (no. 85). Leipzig: Insel.

- Gerstenberger, H., & Welke, U. (1996). *Vom Wind zum Dampf. Sozialgeschichte der deutschen Handelsschifffahrt in Zeitalter der Industrialisierung*. Muenster: Westfaelisches Dampfboot.
- Görgens, H., and A. Löhr, A. (1985). *Bilder für alle. Bremer Photographie im 19. Jahrhundert*. Focke Museum, Hefte, 68.
- Hanseatisches Magazin (1800). Briefe eines Hanseaten. Unknown author. *Hanseatisches Magazin* 4, pp. 234ff.).
- Harris, W.V. (ed.) (2005). *Rethinking the Mediterranean*. Oxford, England: Oxford University Press.
- Heerma Van Voss, L. (1996). North Sea culture 1500-1800. In J. Roding, J. & L. Heerma Van Voss (eds.), *The North Sea and Culture* (pp. 21-40). Hilversum: Verloren.
- Heerma van Voss, L. (2005). When was the North Sea? In D. Starkey & M. Hahn-Pedersen (eds.), *Bridging Troubled Waters. Conflict and Cooperation in the North Sea Region since 1550. 7th North Sea History Conference, Dunkirk* (pp.83-111). Esbjerg: Fiskeri og Sefartsmuseets Studieresie.
- Horden, P., & Purcell, N. (2000). *The corrupting sea: A study of Mediterranean history*. Oxford: Oxford University Press.
- Kasten, H. (1946). *Bremen in der Erzählung*. Bremen, Germany: Bremer Schlüssel Verlag.
- King, C. (2004). *The Black Sea: a history*. Oxford: Oxford University Press.
- Kirby, D. (1990). *Northern Europe in the early modern period: The Baltic world 1492-1772*. London: Longman.
- Köstlin, K. (1980). Die Regionalisierung von Kultur. In K. Koestlin, O. Brunner, & R. Koselleck (eds.), *Heimat und Identitaet. Probleme regionaler Kultur* (pp. 25-38). Neumuenster: Wachholtz.
- Lewald, A. (1840). Neue Aquarelle aus dem Leben, 2 Teile. Stuttgart. In H. Schwarzwaelder (ed.) (2007), *Bremen in alten Reisebeschreibungen. Briefe und Berichte von Reisenden zu Bremen und Umgebung (1581-1847)* (pp. 316-321). Bremen: Edition Temmen.
- Löbbe, Karl (1989). *Seeschifffahrt in Bremen. Das Schiff gestaltete Hafen und Stadt*. Bremen: Hauschild.
- Lüdtke, A. (2001). Alltagsgeschichte, Mikrohistorie, historische Anthropologie. In H.-J. Goertz (ed.), *Geschichte. Ein Grundkurs* (pp. 557-578). Reinbeck: Rowohlt.
- Marcus, G. (1995). Ethnography in/of the World System: The Emergence of Multisited Ethnography. *Annual Review of Anthropology* 24, 95-117.
- McPherson, K. (1993). *The Indian Ocean. A history of people and the Sea*. Oxford: Oxford University Press.
- Müller, W.C. (1787). *Nachricht von meinem Erziehungsinstitut*. Bremen.
- Oberg, J.C. (2014). *Gab es in Bremen im 19. Jahrhundert eine maritime Kultur? Von kosmopolitischen Hanseaten und absonderlichen Seeleuten. Ein ethnohistorischer Beitrag zur Debatte über Küstengesellschaften*. Frankfurt am Main: Peter Lang.

- Peters, M. (1899). *Die Entwicklung der deutschen Rhederei seit Beginn des Jahrhunderts*. 1. Bd. Jena: Verlag v. Gustav Fischer.
- Price, J.L. (1996). Regional identity and European culture: The North Sea region in the Early Modern Period. In J. Roding, & L. Heerma Van Voss (eds.), *The North Sea and Culture* (pp. 79-95). Hilversum: Verloren.
- Reinhard, W. (2004). *Lebensformen Europas. Eine historische Kulturanthropologie*. München: Beck.
- Reulecke, J. (1997). Regionalgeschichte heute. Chancen und Grenzen regionalgeschichtlicher Betrachtungsweise in der heutigen Geschichtswissenschaft. In K.-H. Pohl (ed.), *Regionalgeschichte heute. Das Fluechtlingsproblem in Schleswig-Holstein nach 1945* (pp. 23-32). Bielefeld: Verlag fuer Regionalgeschichte.
- Roding, J., & L. Heerma Van Voss (eds.) (1996). *The North Sea and Culture (1500-1800)*. Hilversum: Verloren.
- Said, E. (1979). *Orientalism*. New York: Pantheon.
- Schenk, F.B. (2002). Mental Maps. Die Konstruktion von geographischen Raeumen in Europa seit der Aufklaerung. In C. Conrad (ed.), *Mental Maps. Geschichte und Gesellschaft*. Zeitschrift fuer Historische Sozialwissenschaft 28, vol. 3 (pp. 493-514). Goettingen: Vandenhoeck & Ruprecht.
- Schulz, A. (2002). *Vormundschaft und Protektion: Eliten und Buerger in Bremen 1750-1880*. Munich: Oldenbourg.
- Schwarzwälder, H. (1977). *Bremerhaven und seine Vorgängergemeinden. Veröffentlichungen des Stadtarchivs Bremerhaven*. Bremen: Hauschild.

All archival sources are taken from Staatsarchiv Bremen (StAB).

About the author

Dr. Jan C. Oberg is a cultural anthropologist and ethnologist. His main research interests are maritime ethnology, historical anthropology and the anthropology of the uncanny and the monstrous. He has done research on childhood and migration in Southern Italy, on Bremen as a sea trade city, and on maritime cultures. Furthermore he is working on a study on the monstrous and the uncanny in societies and culture. Oberg is a member of the Bremen Institute for Cultural Research. He received a scholarship from the Bremen Research and Cooperation Centre for Navigation and has held lectures in the cultural studies programme in Bremen. He currently works as a lecturer in the department of anthropology and cultural research at the University of Bremen.

15 Yeoman capitalism and smallholder liberalism

Property rights and social realities of early modern
Schleswig marshland societies

Carsten Porskrog Rasmussen

Abstract

Like marsh areas west of the Elbe, the North Frisian marshlands experienced a development towards an agrarian capitalism in the early modern period. It remained a special 'yeoman capitalism' where large farms developed but mainly remained in the hands of those who farmed them. It was based upon liberal property rights and communal societies. Such institutions did not, however, necessarily lead to agrarian capitalism. They prevailed to a large degree also on the North Frisian islands and the brink of marsh and geest, but here agrarian capitalism did not take hold. It was closely connected to the fertile marshlands that both merited and required a continuous investment in dikesdike.

Keywords: agrarian capitalism, property rights, marshes, yeomen

The Dutch historian Otto Kottnerus has argued that the marshlands bordering the Wadden Sea underwent a gradual transformation to agrarian capitalism from the fifteenth to the nineteenth century. He sees in this a specific path to agrarian capitalism — one not founded in reformed feudalism, which many historians see as the main path, but rather in a free yeomanry (Kottnerus 2004: 21-25).

To a considerable degree, the northern part of the region — the marshlands of the Duchy of Schleswig, or North Frisia — confirm this picture. The economy of the region was undoubtedly more market-oriented and capitalised than the economy of nearly all other regions of the Duchy

throughout the period, and large-scale farming and intensive capitalisation came to dominate much of North Frisia. But this chapter will show that such a development only happened in certain parts of the area. In other parts we see not the termination but an increased predominance of small-scale farming. The former path appears to confirm Knottnerus' general theory, while the latter path instead supports the common assumption that societies of free peasants tend to produce many petty farms.

Both developments occurred in largely autonomous communal societies of 'free' peasants and yeomen, but personal freedom, communalism and the absence of feudalism were not the only characteristics separating these societies from the rest of Schleswig. Equally striking is the early predominance of liberal and individual property rights at a time when consolidated farms, regulated villages and the division of property rights between lords and peasants prevailed in the greater part of the Duchy (Rasmussen 2013a: 25-32, 35-48 and 84-90). It is easy to see how liberal property rights could further agrarian capitalism. It is less obvious why they could also lead to very different social realities. The Schleswig cases strongly points to the importance of environmental conditions. Agrarian capitalism prevailed in the rich marshlands but much less so in areas of other natural conditions.

Large-scale farming in the deep marsh

As in other parts of the greater region, settlement in North Frisia in the late Middle Ages consisted partly of settlement on the edge of the Geest (inland Pleistocene, mostly sandy soils) and partly of settlement on the marsh itself. From the late Middle Ages, however, these two types were rather sharply separated geographically and administratively.

Areas with settlements directly on the marshes included above all Eiderstedt, Nordstrand and Wiedingharde, which were all protected by dikes in the late Middle Ages. The marsh islands of Eiderstedt, Everscop and Utholm were first diked separately and later joined to form the landscape of Eiderstedt, which was further joined to the mainland, turning it into a peninsula. It was the largest of the purely marsh areas, measuring ca. 45,000 demat or ca. 225 square kilometres in the late sixteenth century. Nordstrand remained an island with a size of ca. 40,000 demat or 200 square kilometres around 1600. Nordstrand was severely ravaged by the flood of 1634, and the surviving inhabitants only managed to reclaim a smaller part, which was the island of Pellworm, ca. 5,000 demat or 25 square kilometres. The central

part of Wiedingharde was behind dikes by 1436. It covered roughly 11,000 demat or 55 square kilometres. Wiedingharde was joined to the mainland in the 1560s.

Eiderstedt, Nordstrand before 1634, and Pellworm after that year had the status of *Landschaften* with considerable communal autonomy. In the early modern period, Wiedingharde was part of the *Amt* of Tønder but nonetheless had to a large extent comparable autonomy and communal structure. The communal organisation was based on the *Landschaft* and the parish. Its most important task was the upkeep of the dikes, but it comprised an extensive system of legal and economic self-governance (Schlaber 2007: 180-210).

In these areas, early modern property rights behind the dikes were completely individual, covering all rights of use, income and transfer. Land could freely be sold, mortgaged and leased. Only the foreland had the character of commons (Rasmussen 2013a: 46-48). There has been substantial debate over the origins of this system. The conclusions are not clear, but liberal rights prevailed from the late middle ages (Sering 1909: 41-47).

This liberal regime of property rights had produced a highly uneven social reality. Information about land distribution in the eighteenth century has been gathered for the whole of Pellworm and Wiedingharde and the parish of Kating in Eiderstedt. Knottnerus argues that farms over 20 hectares in the marsh regions may be seen as large farms, where hired labour outweighed family labour, while farms over 40 hectares may be regarded as very large (Knottnerus 2004: 6-7). Measured in this way, large farms held 75 percent of all land in Wiedingharde and no less than 84-85 percent in Kating parish and Pellworm in the early eighteenth century. Over 50 percent of the land in Wiedingharde, over 60 percent in Pellworm and nearly 80 percent in Kating belonged to very large farms. This pattern of uneven land distribution and concentration under large farms goes back as far as we can follow developments but had become more marked over time. In 1575, half of all landholders of Eiderstedt held five to 30 hectares. In Kating parish in 1720, it was less than a third, whereas the numbers of both large landowners and smallholders had increased relatively (Rasmussen 2013a: 332; Prange 1988: 59).

At least from the sixteenth century, farming in Eiderstedt and Nordstrand/Pellworm was highly intensive and market-oriented. In Eiderstedt, dairy farming was combined with cereal production, mainly oats and barley, and much of the produce was exported via the Wadden Sea to Hamburg, Bremen or other cities of the region. Old tradition dates the rise of dairy farming to the sixteenth century and links it to the immigration of Dutch specialists. In the eighteenth century, dairy farming partly gave way to cattle breeding on the larger farms, but market-oriented agriculture was further intensified

with the introduction of wheat and rape on a large scale. Pellworm in the seventeenth century had predominantly arable farming, whereas farming in Wiedingharde remained somewhat more extensive, with cattle feeding playing a central role (Rasmussen 2013a: 59, 61, 69-70, 340-346; Chamisso 1986: 201). From the late eighteenth century, the production of oxen gradually came to dominate the whole region, particularly when the area became part of the protected market of the *Kaiserreich* in the late nineteenth century (Rasmussen 2013a: 522; Hansen 1994: 54, 125-132, 150-158).

The development of large-scale, intensive, market-oriented farming resembles what happened on the coast between the Weser and the IJsselmeer, but one difference appears to have persisted in terms of the ownership of the land. In the marshlands of the Netherlands and East Frisia, a substantial number of farmers had been tenants from an early date, and tenancy further increased to a point where most farmers leased their land. In North Frisia, leasehold mattered but never dominated. In 1575, a quarter of all the farmers in Eiderstedt were tenants. By the end of nineteenth century, a third of the land was leased out, which would seem to have been a peak, so even then most land was farmed by those who owned it (Knottnerus 2004: 18).

There may be several reasons for this. The North Frisian marsh lands had been brought under the loose lordship of the Danish king before 1200 and was later mostly transferred to the dukes of Schleswig, but this affected the internal situation very little. The area paid certain collective dues, but the land remained freehold, and neither dukes nor other nobles from the hinterland ever gained much land in the marshes of Schleswig. The nobility started investing in marshlands around 1600, which was stopped by a ducal ban. The dukes of Schleswig-Holstein-Gottorp did acquire a number of large farms and land for lease, but these never comprised more than a tiny fraction of the land. Church institutions outside the marshes never owned much land in them (Rasmussen 2013a: 18-25; Rasmussen 2003: 252-257). Urban influence was limited due to the absence of major towns.

Capitalist polders

For long, even the right to reclaim new land beyond the dikes remained in the hands of the societies behind them. In the seventeenth century, the princes appropriated the right of the foreland and granted diking rights to investors. A number of new polders were created by external investors. Here, agrarian capitalism was not a later development but the point of departure, just as it was in many polders in the Netherlands.

The capitalist showcase was the reclamation of the south-eastern part of Nordstrand after the flood of 1634. As the surviving islanders failed to reclaim the area, the duke declared their rights forfeited and granted them to investors from the Low Countries and France. The investors created a purely capitalist society where land was owned by a few investors and farmed as very large farms, mostly leased out. In the mid-eighteenth century, however, many of the private investors were hit by a series of bankruptcies, which started a movement towards local ownership and smaller farms. Freehold farmers did not fully prevail until the twentieth century, though the development did not lead to more tenants but to more yeomanry (Rasmussen 2013a: 336-340; Kuenz 1978: 276-289, 298-317 and 344-345).

None of the other new polders were as large as Nordstrand. In many of those established in the seventeenth and early eighteenth centuries, much of the land was sold in rather small parts to farmers in the hinterland. The most purely capitalist project after Nordstrand was the *Reussenköge*, established in the mid to late eighteenth century largely by one very rich family. When the land was put up for sale, two different outcomes emerged alongside each other: a small number of large farms in the polders and a large number of small plots bought by hinterland farmers. This development was furthered by rules preventing owners of smaller plots from settling in the polders (Rasmussen 2013a: 338-340).

These cases are telling. In the pure marsh areas of North Frisia, large-scale farming, liberal land ownership and paid labour prevailed. So far, it was agrarian capitalism. More than most other marshlands along the Wadden Sea, it epitomised an agrarian capitalism of local yeomen farmers. The tripartite model separating land ownership from active farming was not unknown but never became dominant. In this matter, the marshlands of North Frisia resembled the adjacent Schleswig hinterland fully as much as they did the marshlands to the west of the Elbe.

Small-scale subsistence farming on the islands

Not everywhere did Frisian communal autonomy and liberal property rights lead to agrarian capitalism. On the North Frisian Islands of Sylt, Föhr and Amrum, natural conditions were not favourable for large-scale farming. These islands, protecting the Wadden Sea against the might of the North Sea, consisted of a core of higher land with dunes to the west and marsh to the east (or north in the case of Föhr). Settlement consisted of villages on the high ground. Close to them were small arable fields that were very

intensively used. Marshes were mainly used for haymaking, while the rest of high ground — the grain fields after harvest and the marshes after haymaking — were used for grazing. Generally, the rights to arable fields and hay meadows were liberal, permitting the free division and alienation of single plots, while grazing was collective with quota rights similar to those in villages in the rest of Schleswig and reserved for residents. In this way, the islands were not a fully individual and liberal system, though they were more so than the greater part of Schleswig.

Rather than consolidating large farms, the islanders had split their land into many tiny holdings due to a practice of rigorous land division among heirs. This system prevailed throughout the early modern period, leading to ever smaller holdings. On eastern Föhr there were only eight farms over 20 hectares in 1613, but in the so-called Langdorf (actually several adjacent villages) in western Föhr in 1800 there was only one (!) – that of the vicar. The average holding was less than 10 hectares in the eastern part of the island in 1613 and less than three in the western villages in 1800.

These tiny plots were used for a subsistence-oriented agriculture, while the islanders earned their money at sea. Almost all the men went to sea, mainly on whaling boats from Hamburg and the Netherlands. The land at home was a base and to some extent an insurance against hard times, but not a means of cash income. That permitted the extreme parceling of land (Rasmussen 2013a: 354-358; Roeloffs 1986: 105 and 156-161).

Similar conditions of extreme parcelisation prevailed in the marshes of the West Frisian islands of Terschelling and Ameland with a similar sea-oriented economy. On the last island, this led to the first land consolidation scheme in the Netherlands in 1916 (Schroor 2001; Smit 1971; De Vooy 1953).

Societies on the brink

No other part of Schleswig was as densely settled as the brink of marsh and geest from Husum to Højer and east of Husum. The brinks are low but still offered security from floods and a position of access to the resources of both geest and marsh. On the brink, rather large villages dominated. North of Højer, this was not the case to the same degree, but even there we see a concentration of settlements close to the brink. Similar settlements were hardly known west of the Elbe, where a band of peatland separates marsh and geest.

Early modern agriculture in much of this area — including the northern parts — had many common characteristics. Farming was multifunctional,

combining arable farming, dairy farming, sheep and cattle breeding, but the latter was the principal source of cash income, particularly for the larger farmers. Different types of land each played a distinctive role in this economy. On the geest land, close to the villages, there were grain fields that were used intensively. In the northern parts, they were often sown annually without fallow periods, while a rotation between grain and fallow was common in the southern parts. Further to the east were grazing commons. The use of the marshland differed. Where it was behind dikes and relatively high, some of the marshland closest to the brink was used for arable farming, but otherwise it was used for haymaking and grazing. The amount of marshland held by individual farmers differed greatly and was of great importance for their wealth (Rasmussen 2013a: 58, 63-64, 216-217, 227-229, 500-522).

Observers of the nineteenth century refer to the free right of division and alienation for almost the entire area (Sering 1908: 49-52). This was, however, after the period of agrarian reform. Information from before 1770 presents a somewhat different picture. What we see is rather the clash of two systems: a traditional village system of proportionate rights on the geest and the liberal ownership of single plots in the marsh. But the relative strength varied considerably.

Closest to the property rights system of the marshes was Husum Norder Harde, comprising seven villages and a settlement in the marsh itself north of the town of Husum. Administratively, it was a legal district under Husum Amt, but there are references to an earlier use of Frisian law, and even though the area never counted as part of the Frisian *Utland* hundreds, it was Frisian in language.

From this Norder Harde, a very thorough description of agriculture from 1710 survives. At that time, land ownership was almost completely liberal. There were two kinds of land: geest land and marsh land. There was no systematic relation between the amounts of the two kinds of land held by each farmer. There are some indications of an earlier regime of more regulated farms, but what remained of it were grazing rights on rather modest commons. In the Norder Harde, the outcome of liberal ownership rights had been neither large capitalist farms nor small supplementary plots, but mainly modest family farms. Of the 353 houses in the area, over 300 were titled 'Staven' and only a fifth held less than a hectare, ca. 30 percent held one to five hectares each, one-half held five to 20 hectares, while a mere 12 farmers had more than 20 hectares. Holdings larger than five hectares were clearly farms with horses and sufficient cattle and arable farming to support a family, while those of one to five

hectares were smallholdings but still large enough to provide at least a partial subsistence.

The 1710 cadastre gives information about the movement of land for the last generation. Some 80-85 percent of the land had been inherited together with the farms, but the rest had been acquired by marriage, purchase or lease. This reflects a situation in which children who did not inherit the farm could inherit minor plots, but it did not constitute a system of rigorous division among heirs. Centrifugal and centripetal forces largely offset each other. There were both large and small farms that had been enlarged through marriage and purchase, and large farms where this was not the case. In the long run, the tendency had been subdivision, as the number of farmers had grown since the sixteenth century, but only slowly. It seems at least partly to have been at the cost of the larger farms. In the sixteenth century, the area had housed a relatively large number of affluent farmers. By 1710, the number was small (Rasmussen 2013b: *passim*).

A system much like Husum Norder Harde also prevailed in Langenhorn and Bordelum some kilometres further north. In this area, which was also Frisian-speaking, we have clearer indications that an older system of more regular farms had been abandoned for a more liberal right of subdivision. The social outcome was much like in Husum Norder Harde: a society mainly consisting of small family farms (Rasmussen 2013a: 349-350).

Further north still, in the western parishes of Karrharde, a cadastre from 1613 reveals a system in which the brink between marsh and geest was the brink of social organisation. The geest lands were organised much like villages in the rest of Schleswig. Farm sizes followed regular units of 'full', 'half' or 'quarters' determining both the size of arable land and the quota of grazing rights. All 'half' farms in the same village had the same geest land and the same grazing rights. The marshlands, on the other hand, were liberally owned and substantially different in size from farm to farm. A 'half' farm could hold more marsh land than an adjacent 'full' farm. Even here, there are local differences. The northernmost — and Danish-speaking — parishes had seen less subdivision of farms than the southern, Frisian-speaking parishes. That left rather large farms with good hay and grazing rights along the streams and rivers plus a varying amount of marshlands. Later, this area was known for its cattle barons. The southernmost parishes had seen more subdivision, resulting in small farms, and to the far south, in Enge and Stedesand, the system of regulated farms seems to have been dissolving. These two parishes were both those with the strongest dominance of the Frisian language and the greatest proportion of marsh versus geest (Rasmussen 2013a: 48-50 and 349).

Ribe and Ballum marshes: unaffected by the marsh principles

If we move further north, to the purely Danish-speaking areas north of Højer, agriculture did not change very much, but the system of property rights did. Around the outlets of the rivers of Ribe Å and Ballum Å, there were quite substantial marshes. Just like further south, there was a concentrated settlement of villages on the brink of the geest and a farming system based upon often intensive arable farming on the geest close to the village and the use of the marshes for hay and grazing, enabling a cattle breeding economy.

The marshes there, however, were not diked before the twentieth century, and no individual landownership developed on the marshes before the nineteenth century. Here, traditional village systems with consolidated farms prevailed. The marshes were a sort of commons used according to a quota system, like the land outside the dikes further south. This is highly remarkable in comparison to the intensive activity south of Højer. As late as the nineteenth century, it was argued that diking would be unfavourable, but it is not obvious why it should be so different from the areas further south. Apparently, the local farmers with a *de facto* hereditary tenure did not have the capital or courage to venture on a project (Fabricius & Dragsbo 1996: 22-24, 41-54).

We can add that the island of Rømø had an economy and natural conditions much like Sylt to the south but never the same property rights system. Here, regulated farms and tenure prevailed. Farms were considerably subdivided in the sixteenth and seventeenth centuries, but when this stopped, the resulting farms, though not large, were larger than most of the tiny plots on the islands further to the south. They were *de facto* hereditary, but one heir acquired the farm and the other heirs the money and moveables (Kelm 1998: 42, 164-168, 235-243).

Conclusions

The development of the pure marsh areas largely follows the paths encountered further south and west along the Wadden Sea, but not completely. The outcome was a weaker — or different (?) — type of agrarian capitalism. Possible explanations have already been offered. What remains to be discussed are two other results.

First, it is striking that the tendency towards liberal property rights was strongest in the areas that were culturally and legally Frisian. Is this the outcome of a stronger cultural influence of such ideas in the Frisian-speaking areas, or should we see it as the consequence of strong communalism and

weak lordly regulation? It is not easy to distinguish, since these differences largely occur in parallel.

Second, we must explain why liberal property rights produced such very different social realities as we see in for example Eiderstedt, Husum Norder Harde and the islands. That capitalism and large-scale farming failed to prevail in areas resting on a geest basis may partly be explained by the fact that these geestlands were less attractive for investors but also by the fact that traditional peasants were better able to hold on to their land due to a lower level of the capitalisation of property.

It is striking that agrarian capitalism in this region was so strongly linked to marshlands behind dikes. Geest areas without access to marshland did not even develop liberal property rights before the agrarian reforms around 1800 or later still. Liberal property rights did to some extent expand to geest land on the brink of the marsh, but agrarian capitalism did not prevail there. On the one hand, the highly fertile marshland merited large investments; on the other, investments were needed, as dikes were costly to build and maintain. Indeed, the continuous need for such investment may have been a reason why smaller farmers found it more difficult to cling to their plots in the marsh than on the geest. At the same time, the cases of North Schleswig indicate that only a capitalised society with investors able and willing to take massive risks could secure diking and thus produce marshlands fit for intensive use. What did not happen at Ribe and Brede Å confirms the old distinction between the high land as God's creation and the marshland as man's making.

References

- Chamisso, D. (1986). *Pellworm im Jahrhundert der grossen Flut. Überlebenskampf einer Insel im Wattenmeer*. St. Peter-Ording: Lühr & Dircks.
- Fabricius, N. and Dragsbo, P. (1996). *Ballum – et sogn ved Vadehavet*. Bredebo: Lokalthistorisk Samling.
- Hansen, H.S. (1994). *Det sønderjyske landbrugs historie 1830-1993*. Aabenraa: Historisk Samfund for Sønderjylland.
- Kelm, B. (1998). *Rømø – et vesterhavspræget samfund*. Aabenraa: Historisk Samfund for Sønderjylland.
- Knottnerus, O.S. (2004). Yeomen and Farmers in the Wadden Sea Coastal Marshes, c. 1500-c. 1900. In: P. Hoppenbrouwers and B. van Bavel (eds.), *Access to land in the North Sea area from the Middle Ages to the 19th century*, pp. 149-186. Turnhout: Brepols.

- Kuenz, K. (1978): *Nordstrand nach 1634. Die wiedereingedeichte Nordfriesische Insel*. Singen am Hohentwiel: private publication.
- Prange, W. (1988). Der schleswigsche Bauer als Urteiler im Gericht. In: Lange, U. (ed.), *Landgemeinde und Frühmoderner Staat. Beiträge zum Problem der gemeindlichen Selbstverwaltung in Dänemark, Schleswig-Holstein und Niedersachsen in den frühen Neuzeit*, pp. 45-69. Sigmaringen: Jan Thorbecke.
- Rasmussen, C.P. (2003). *Rentegods og hovedgårdsdrift. Godsstrukturer og godsøkonomi i hertugdømmet Slesvig 1524-1770*. Aabenraa: Institut for grænseregionsforskning.
- Rasmussen, C.P. (2013a). *Det sønderjyske landbrugs historie 1544-1830*. Aabenraa: Historisk Samfund for Sønderjylland.
- Rasmussen, C.P. (2013b). Eine Kleinbauerngesellschaft zwischen Marsch und Geest. Die Norderharde des Amtets Husum 1710. In: D. Kraack et al. (eds.): *Aus der Mitte des Landes. Klaus-Joachim Lorenzen-Schmidt zum 65. Geburtstag*, pp. 159-173. Neumünster: Wachholtz.
- Roeloffs, B.C. (1984). *Von der Seefahrt bis zur Landwirtschaft. Ein Beitrag zur Geschichte der Insel Föhr*. Neumünster: Wachholtz.
- Schlaber, G.L. (2007). *Hertugdømmet Slesvigs forvaltning. Administrative strukturer og retspleje mellem Ejderen og Kongeåen ca. 1460-1864*. Flensburg: Studieafdelingen ved Dansk Centralbibliotek.
- Schroor, M. (2001). Ballumer Mieden: De eerste ruilverkaveling in Nederland. *Noorderbreedte* 2A, 8-10.
- Sering, M. (1908). *Erbrecht und Agrarverfassung in Schleswig-Holstein auf geschichtlicher Grundlage*. Berlin: P. Parey.
- Smit, G. (1971). De agrarisch-maritieme structuur van Terschelling omstreeks het midden van de negentiende eeuw (doctoral dissertation). Groningen: Sasland.
- Vooy's, A.C. de (1953). De bevolkingsspreiding op het Hollandse platteland in 1622 en 1795. *Tijdschrift van het Koninklijk Nederlands Aardrijkskundig Genootschap*, 316-331.

About the author

Prof. Carsten Porskrog Rasmussen worked as a researcher at the Institute of Regional Studies in Aabenraa from 1987 to 1995. He was assistant/associate professor of early modern history at the University of Aarhus from 1995 to 2013 and head curator of Museum Sønderjylland from 2013. Since 2015, he has been a visiting professor at the University of Aarhus. He has worked extensively on subjects concerning manors, agriculture and rural history in Schleswig, Denmark and Scandinavia.

16 Drowned by the Grote Mandrenke in 1362

New geo-archaeological research on the late medieval
trading centre of Rungholt (North Frisia)

*Hanna Hadler, Dennis Wilken, Tina Wunderlich,
Annika Fediuk, Peter Fischer, Michaela Schwardt, Timo
Willershäuser, Wolfgang Rabbel and Andreas Vött*

Abstract

The coastal region of North Frisia has been subject to constant environmental changes. During the high and late Middle Ages, strong storm surges repeatedly affected the coastline and turned wide areas of formerly cultivated and settled land into tidal flats. Inundated like many other settlements during the First Grote Mandrenke in 1362 AD, the medieval trade centre of Rungholt became a well-known symbol of the devastating consequences of man-environment interactions in coastal North Frisia. Today, after more than six centuries, many cultural remains are still preserved in the Wadden Sea. Yet very little is known about how the medieval landscape and the settlements looked and how they were accessible from the sea.

Although the present-day tidal flats are difficult to access, they hold a key position for geoarchaeological reconstructions of the coastal palaeolandscape in the context of early North Frisian land reclamation measures. A better understanding of today's tidal flat environment and their development will also help to detect and reconstruct potential harbour sites from the high Middle Ages and their environs within the former marshland. The recently initiated research project 'Geoarchaeological investigations of North Frisian harbour sites of the twelfth and thirteenth centuries AD along the river Hever based on the trading centre Rungholt', funded by the German Research Foundation DFG, therefore aims to improve our knowledge on potential locations and

palaeogeographical contexts of harbour sites or anchorages within the cultivated medieval marshland.

The investigations presented in this paper concentrate on the remnants of two large tide gates. Compared to recent tide-date-associated harbours (*Sielhöfen*), the Rungholt tide gates provide a promising candidate for a potential medieval harbour site.

Keywords: Rungholt, North Frisia, geoarchaeology, tidal gate, storm surges

Introduction

Like no other coastal landscape worldwide, the tidal flats of North Frisia — part of the Schleswig-Holstein Wadden Sea National Park — are a result of anthropogenic impacts and natural disasters since medieval times. In North Frisia, the medieval trading centre Rungholt became a symbol for the many settlements at the interface between land and sea that were destroyed by the impact of storm surges.

Throughout the late Holocene, the area of the present-day Wadden Sea appeared as an amphibian landscape with brackish to freshwater environments with abundant reed, low-lying marshland and intersecting tidal creeks (Bantelmann 1966). From the twelfth century onwards, the building of dikes allowed an extensive reclamation of marshland for agricultural purposes, turning wide areas into cultivated land (Kühn 1992). By restricting the area originally prone to flooding, these embankment measures caused a significant increase of the tidal range. At the same time, the dewatering of the cultivated marshes caused a subsidence of the ground surface to below mean high tide (Newig 2014).

During the late Middle Ages, strong storm surges like the First Grote Mandrenke (also known as the Second St. Marcellus' flood) in 1362 destroyed the protective dikes. With immense water masses inundating the low-lying marshland as far as 25 kilometres inland, the North Frisian coastal landscape dramatically changed within a short period (Bantelmann 1966). With the cultivated marshland suddenly turned into a semi-aquatic, tide-influenced environment, the unique coastal landscape of the North Frisian Wadden Sea was born (Hoffmann 2004).

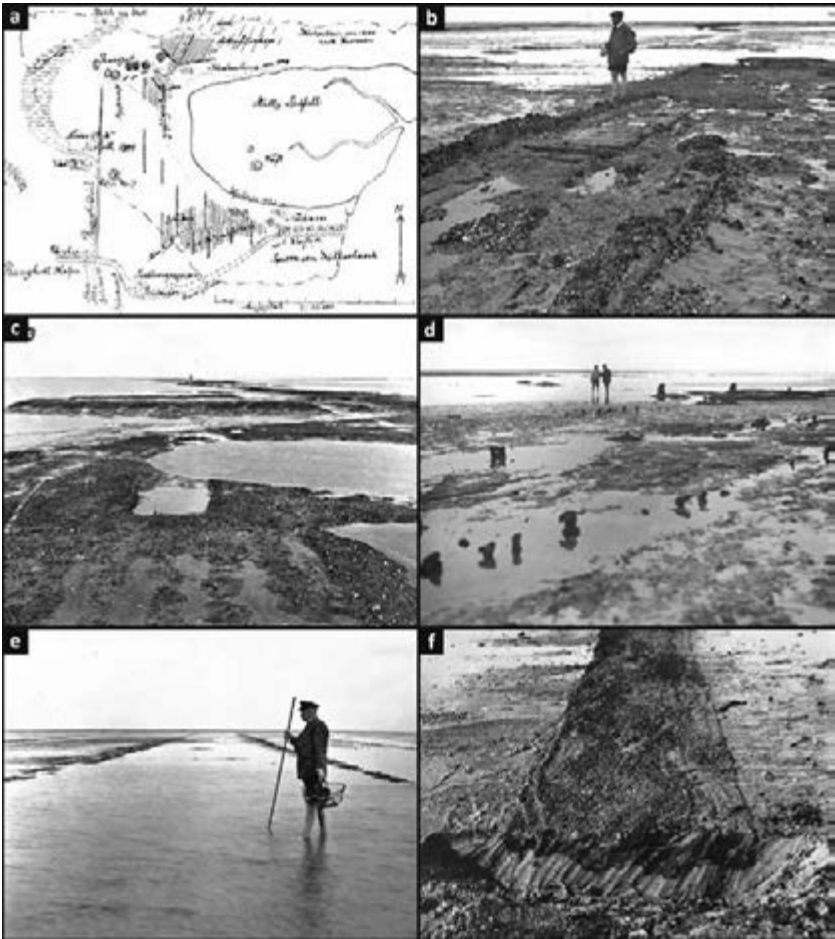
Cultural remains in the North Frisian Wadden Sea: Rungholt and Andreas Busch

Even after more than six centuries under the influence of tidal dynamics, remnants of the medieval cultural landscape are still preserved in many parts of the Wadden Sea. In the course of major tidal inlets such as the Norderhever or Rummelsloch, most remains have been irrevocably lost due to strong erosion (Higelke et al. 1982; Reineck 1982), but in tidal flats less affected by erosion, their preservation potential appears to be quite high, especially when covered by younger sediments (Gade & Kohlus 2015; Siegloff 2016).

Abundant cultural traces are known from the area around Hallig Südfall (Kühn 2016a). In the early 1920s, they were widely exposed and well-documented by local farmer Andreas Busch (figure 16.1a, Busch 1923). These remains of medieval marshland are generally associated with the historical district called Edomsharde and its main settlement of Rungholt (Kühn 2016a). On many occasions, Busch observed features like the remains of dikes (figure 16.1c-d), a dense network of drainage ditches (figure 16.1e-f) and even traces of ploughing that provide evidence of a once intensively managed land. He also noticed numerous terps and wells to the northwest and also south of Südfall (Busch 1923). These terp assemblages belong to the largest settlements known in North Frisia in late medieval times (Kühn 2016b).

Another remarkable feature preserved in the Wadden Sea are the remnants of two wooden structures, either tide gates or sluices, southwest of Hallig Südfall, both observed and described in detail by Busch (1923, 1961, 1963). The first tide gate is ca. 3.2 metres wide, 20.5 metres long and — according to Busch's observations — associated with a large channel approaching the structure from a northern direction. This channel most likely represents the remains of a main drainage ditch (*Hauptsiehlzug*). The course of the channel, originally leading towards the first tide gate, was at some point diverted towards the west. At its end and approximately 40 metres away from the first tide gate, Busch (1923, 1963) observed a second and even larger structure, 5.36 metres wide and 25.50 metres long. Based on his observations of sheet pile walls sealing the smaller tide gate, Busch argued that the larger gate must be younger, built after the older one fell out of use. So far, however, only the age of one structure has been determined by dating. For a wooden beam recovered from the outer part of the larger tide gate (Busch 1962), dendrochronological analyses dated the object to no earlier than 1331, indicating a construction or repair just before the First

Figure 16.1 Historical map and historical photos showing remnants of cultivated medieval marshland destroyed by the First Grote Mandrenke in 1362 that are still preserved in the tidal flats around Hallig Südfall, North Frisian Wadden Sea. In the 1920s, cultural traces were widely exposed and mapped by Andreas Busch (a) (Busch 1923). Remains of a two-chambered wooden sluice were discovered southwest of Hallig Südfall (b). At that time, remains of a medieval dike are still traceable over several hundreds of metres in the tidal flats (c). Close to the sluice, several wooden posts found in the course of the dike likely indicate repaired damage (d). Drainage ditches, partly filled with storm surge deposits (Hadler and Vött 2016) are widely preserved in the tidal flats (e, f).



Map modified after Busch (1923); all photographs from unpublished albums of Andreas Busch

Grote Mandrenke in 1362. Radiocarbon dating of another wooden beam provided a time span of 1047–1257 cal AD (2 sigma, radiocarbon age: 862 ± 33 BP; p.c., Dr. U. Haupenthal, NordseeMuseum Husum), thus confirming the medieval age of the structure.

Today, most remnants of the medieval landscape around Hallig Südfall are concealed by recent tidal flat deposits. Sediments up to 1.5 metres thick cover the cultural remains including both tide gates. Several wooden posts sticking out of the tidal flats were last seen in the 1990s, but their exact location is presently unknown (Henningsen 2000).

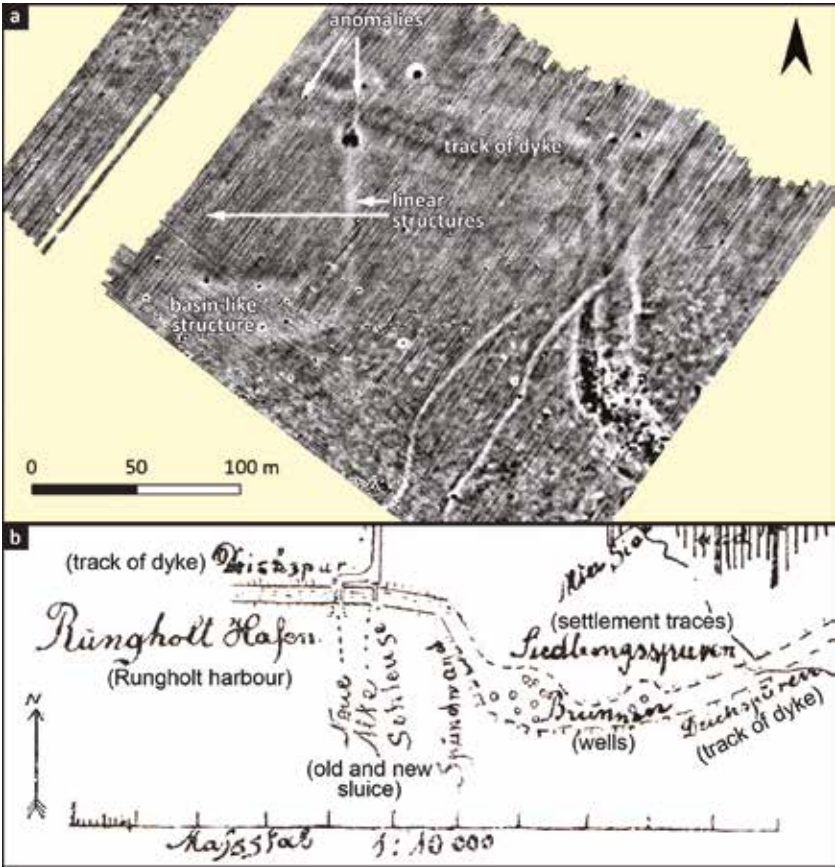
Recent geoarchaeological research: the RUNGHOLT Project

From historical tradition, but also based on historical and archaeological evidence, it is known that the Edomsharde district was characterised by a certain prosperity, most likely based on maritime trade. Besides imported goods found in the Wadden Sea, historical documents attest to well-established trading activities with Flanders (in Belgium) and the Hanseatic cities of Hamburg and Bremen (Kühn 2016b; Panten 2016). However, almost nothing is known about the accessibility of the Edomsharde from the waterside or associated potential harbour sites. Several place names as well as the old church on Pellworm, likely serving as a landmark at the mouth of the river, point to the former river Hever being a significant waterway and navigable connection with the open North Sea (Degn & Muus 1965; Henningsen 1998; Rauterberg 2000; Kühn 2007).

As a major settlement, Rungholt might have served as a central harbour site and place of trade within the Edomsharde. From his observations in the tidal flats, Busch (1964, 1968) suggested two potential harbour sites — one associated with the group of terps northwest of Hallig Südfall and the other related to the tide gate remains, since such structures commonly represent the landward end of a larger and likely navigable watercourse. So far, however, there is no historical, cartographical or archaeological evidence to confirm the existence, location or type of any harbour sites due to the major losses of land since late medieval times (Henningsen 2000).

The recent research project ‘Geoarchaeological investigations of North Frisian harbour sites of the twelfth and thirteenth centuries along the river Hever based on the trading centre Rungholt’, funded by the German Research Foundation DFG, therefore aims to improve our knowledge of potential locations and palaeogeographical contexts of harbour sites or anchorages

Figure 16.2 Geophysical survey in the tidal flats southwest of Hallig Südfall within the Rungholt project. Preliminary results of the magnetic prospection (a) are comparable with cultural remains already observed by Busch (b) (Busch 1923). Apart from the track of the dike and supposed re-localization of the two sluices, geophysical investigations revealed two possible channels leading towards a wide, probably basin-like structure outside the medieval dike.



Map modified after Busch (1923)

within the cultivated medieval marshland of the former Edomsharde (Hadler & Vött 2017; Jöns et al. 2017).

Within the Rungholt project, geoarchaeological investigations are carried out in the tidal flats of the Wadden Sea in order to reconstruct the coastal palaeolandscape in the context of early North Frisian land reclamation measures (Hadler & Vött 2016). The initial investigations focused principally

on the tidal flats southwest of Hallig Südfall where the remains of the tide gate offer a place to start when looking for a potential harbour site or anchorage. Due to the recent sediment cover, geo-referencing of maps showing cultural traces (e.g. Busch 1923, 1962, 1963) was an essential first step to prepare fieldwork and to delimit a target area where the tide gate remains were most likely located.

Subsequently, geophysical investigations were carried out in the tidal flats by means of geomagnetic prospection, marine reflection seismic measurements and electrical resistivity tomography. The preliminary evaluation of the geophysical survey revealed promising results (figure 16.2a). Magnetic prospection and seismic measurements helped to detect the former course of a dike, also mapped by Busch (1923) about one century ago and still preserved underneath the more recent sediment cover. Along the course of the dike, the magnetic survey further revealed two noticeable anomalies. Compared to the observations made by Busch (1923), they might indicate the location of the tide gates. Preliminary results also show two linear structures leading from the dike further south towards a wider minimum anomaly (figure 16.2a).

The Rungholt tide gates: A potential harbour site?

Considering the Rungholt tide gates as a potential harbour site, a much-debated issue is whether they were navigable by small ships or boats. As for the older tide gate, the array of planks observed by Busch (1963) indicates a subdivision in two parallel chambers that was certainly non-navigable and merely served for drainage purposes (Kühn 2016b).

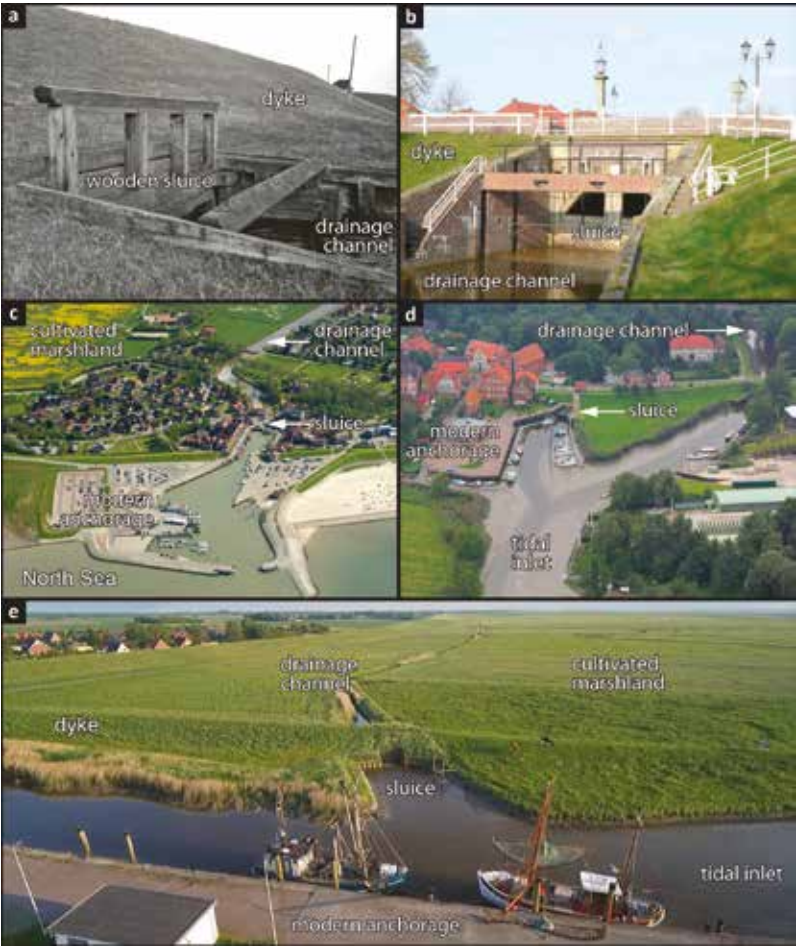
Compared to the size of contemporary historical hydraulic structures found along the German and Dutch coastal areas (figure 16.3a) or even present-day tide gates (figure 16.3b), the second and younger tide gate, however, represents a unique and exceptionally large construction (Busch 1963; Kühn 1992; Kühn 2016b). For the lock chamber, Busch (1963) determined an inner clear width of about 4.40m. Yet, it is still a matter of debate whether the structure acted as a mere outlet at the end of an extensive drainage network draining inland waters away from the cultivated marshland (*Siel*, Kühn 1992) or also represented a tide lock or sluice in the modern sense, providing a navigable passage for ships (*Schiffsschleuse*). Busch (1923, 1963) was convinced that he had identified imprints of (unpreserved) specific wooden beams below tidal flat deposits, from which he deduced a further separation into three narrow sub-chambers, each less than 1.5 metres wide.

It is further assumed that the tide gate was also closed towards the top, forming a large culvert across the dike (Henningsen 2000). Both features would almost certainly prevent passage even by small boats. A navigable tide gate would have also posed a considerable threat to the stability of a medieval dike. So far, along the North Sea coast such navigable tide locks are only known from the end of the fifteenth century onwards (Barmeyer 1975). Compared to the smaller and older tide gate, the younger one probably owed its considerable size to the fact that areas of marshland to be drained for agricultural purposes had increased in size.

Summarising our present knowledge, the navigability of the younger Rungholt tide gate can neither be confirmed nor definitively excluded (Kühn 2016b). Either way, the Rungholt tide gates are suitable candidates for some kind of medieval harbour site or anchorage. Their exceptional size already implies a connection to major watercourses both inside and outside the dike. As mentioned above, a distinct channel-like structure leading water towards the sluices from a northern direction was observed by Busch as early as 1923. The archaeological structures so far observed to the southwest of Hallig Südfall conform quite well to the characteristic layout of historical and present-day tide-gate-associated harbour sites along the southern North Sea coast, the *Sielhöfen* (figure 16.3, Barmeyer 1975). As is still typical in our time, such harbours generally feature a major drainage channel on the landward side of the dike, leading towards a tide gate or tide lock (figure 16.3b) and turning into a natural tidal inlet outside the dike (figure 16.3c).

Even into the early twentieth century, wide areas of embanked marshland were best accessed from the waterside due to bad road conditions. Tidal inlets leading from a tide gate towards the open sea often represented the only navigable routes outside the dike, as outflowing inland water prevented the waterway from silting up (Barmeyer 1975; Behre 2008). The main drainage channel leading from a tide gate towards inland served as another important way of transportation (Behre 2008). Although originally built for simple drainage purposes and thus non-navigable, tide gates thus constituted the most landward point accessible by boat from a seaward direction (figure 16.3e). Associated harbours were usually situated outside the dike (figure 16.3c, d) but obtained a significant role as interface between maritime and inland trade (Wiegand 2005). The fact that they provided a possibility of bringing maritime trade goods towards inland — either by means of portages (Vogel 1973) or by being transferred to smaller boats — further supports the idea of trading bases in relation with hydraulic structures initially built for drainage purposes.

Figure 16.3 Examples of historical and modern harbour-associated tide gates and/or tide locks. Like the Rungholt tide gate, the structure at Bongsiel (North Frisia) was constructed using wooden beams and is not navigable for ships (a). The lateral dimensions of the brick-built (non-navigable) tide gate at Hooksiel is almost identical to the dimensions of the younger Rungholt tide gate (b). Even today, tide-gate-associated harbours are commonly located outside the dike (e.g. Neuharlingersiel) (c). During low tide, the so-called ‘Sielh fen’ (tide-gate-associated harbours) may fall dry; at Neuhaus/Oste, the harbour is only accessible during high tide (d). The structure of the small harbour at Spieka-Neufeld, situated at the landward end of a tidal inlet, resembles the structure found associated with the Rungholt tide gate (e).



Photos by A. Busch (a), A. V tt (b), M. Nolte (c), W. Rademacher (d) and H. Mester (e)

Compared to recent tide-gate-associated harbours, the area south of the Rungholt tide gates thus is a promising candidate for a harbour site or anchorage, for example at the landward part of a natural tidal inlet. Preliminary results of the geomagnetic survey within the Rungholt project indicate two linear features, both leading towards what could be a basin located outside the dike. These features are candidates for drainage channels and associated anchorage (figure 16.2). However, further geophysical investigations and geoarchaeological investigations of the local stratigraphy are required to verify this hypothesis.

Outlook

Although major medieval storm surges like the First Grote Mandrenke in 1362 inundated wide areas of once-cultivated marshland, a considerable amount of remains of this cultural landscape are still well preserved within the tidal flats of the present-day North Frisian Wadden Sea (Hadler & Vött 2016, 2017). Geoarchaeological investigations carried out within the Rungholt project have proved that some remnants of the cultivated marshland are still traceable below recent tidal flat deposits by geophysical prospection. Preliminary results further revealed new aspects of medieval palaeogeographies in the immediate surroundings of the Rungholt tide gates.

In a next step, geomorphological investigations based on vibracoring will be conducted in areas of interest chosen on the basis of geophysical prospection results. Subsequently, multi-proxy analyses will be carried out on sediment cores retrieved from the central part of the basin-like structure, the linear structure in front of the presumably sluice-related anomalies and from different sites outside and inside the dike. Sedimentary, geochemical and microfaunal analyses will help to provide the base for detailed palaeogeographical landscape scenarios. The geochronological framework will be based on radiometric dating methods.

Acknowledgements

We gratefully acknowledge funding of the research project by the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG, HA 7647/1-1, VO 938/21-1).

Digital copies of historical photographs from the photo albums of Andreas Busch as well as the results of dendrochronological analyses and radiocarbon

dating were kindly provided by Dr. Uwe Haupenthal and Tanja Brümmer of the NordseeMuseum Husum.

Aerial images of recent harbour sites were kindly provided by Hartmut Mester, Martina Nolte and Walter Rademacher.

Further thanks are due to Cornelia Mertens, who introduced us to the mudflat geographies around Hallig Südfall, and to Gunda and Gonne Erichsen, who supported us greatly during fieldwork.

This contribution is dedicated to the memory of our friend and colleague, the late Prof. Jürgen Newig, initiator of the Rungholt Project.

References

- Bantelmann, A. (1966). Die Landschaftsentwicklung im nordfriesischen Küstengebiet. Eine Funktionschronik durch fünf Jahrtausende. *Die Küste* 14 (2), 5-99.
- Barmeyer, H. (1975). Die Sielhafenorte in der oldenburgisch-ostfriesischen Küstenmarsch zwischen Weser und Ems. *Deutsches Schifffahrtsarchiv* 1, 11-23.
- Behre, K.E. (2008). *Landschaftsgeschichte Norddeutschlands. Umwelt und Siedlung von der Steinzeit bis zur Gegenwart*. Neumünster, Schleswig-Holstein: Wachholtz Verlag.
- Busch, A. (1923). Die Entdeckung der letzten Spuren Rungholts. *Jahrbuch des nordfriesischen Vereins für Heimatkunde* 10, 1-32.
- Busch, A. (1961). Reste der Rungholter Schleusen sind schon seit 80 Jahre beobachtet. *Die Heimat* 68 (5), 118-121.
- Busch, A. (1962). Die Bergung der Schleusenreste in Rungholtwatt. *Die Heimat* 69 (1), 8-10.
- Busch, A. (1963). Zur Rekonstruktion der Rungholter Schleusen. *Die Heimat* 70 (6), 163-168.
- Busch, A. (1964). Wo lag vor 1200 die Schiffsanlegestelle von Grote Rungholt, und warum wurde sie nach Lütke Rungholt verlegt? *Die Heimat*, 71 (3), 74-78.
- Busch, A. (1968). Wie konnte im heutigen Wattenmeer die Hafensiedlung Rungholt entstehen? *Die Heimat* 75 (6), 153-157.
- Degn, C., Muus, U. (1965). *Luftbildatlas Schleswig-Holstein*. Neumünster, Schleswig-Holstein: Wachholtz Verlag.
- Gade, M., Kohlus, J. (2015). SAR imaging of archeological sites on dry-fallen intertidal flats in the German Wadden Sea. *Geoscience and Remote Sensing Symposium*, 1905-1908.
- Hadler, H., Vött, A. (2016). Das Rungholt-Watt im Fokus aktueller geoarchäologischer Forschungen. In: Newig, J., Haupenthal, U. (eds.), *Rungholt. Rätselhaft und widersprüchlich*. Husum, Schleswig-Holstein: Husum Druck- und Verlagsgesellschaft mbH u. Co. KG, 118-120.

- Hadler, H., Vött, A. (2017). Der Handelsplatz Rungholt und seine Zerstörung durch die 1. Grote Mandrenke im Jahr 1362. *Geographische Rundschau* 09/2017, 20-25.
- Henningsen, H.-H. (1998). *Rungholt. Der Weg in die Katastrophe* (1). Husum, Schleswig-Holstein: Husumer Druck- und Verlags GmbH.
- Henningsen, H.-H. (2000). *Rungholt. Der Weg in die Katastrophe* (2). Husum, Schleswig-Holstein: Husumer Druck- und Verlags GmbH.
- Hoffmann, D. (2004). Holocene landscape development in the marshes of the West Coast of Schleswig-Holstein, Germany. *Quaternary International* 112, 29-36.
- Higelke, B., Hoffmann, D., Müller-Wille, M. (1982). Das Norderhever-Projekt. Beiträge zur Landschafts- und Siedlungsgeschichte der nordfriesischen Marschen und Watten im Einzugsbereich. *Offa* 39, 245-270.
- Jöns, H., Hadler, H., Segschneider, M., Vött, A. (2017). Mittelalterliche Häfen im südlichen Nord- und Ostseeraum. *Archäologie in Deutschland* 04/2017, 22-25.
- Kühn, H.J. (1992). *Die Anfänge des Deichbaus in Schleswig-Holstein*. Heide, Schleswig-Holstein: Verlagsanstalt Boyens & Co.
- Kühn, H.J. (2007). Jenseits der Deiche. Archäologie im nordfriesischen Wattenmeer. In: V. Carnap-Bornheim, C., Radtke, C. (eds.), *Es war einmal ein Schiff*. Hamburg: Marebuchverlag.
- Kühn, H.J. (2016a). Die Warften des 'Acht-Warften-Gebietes'. In Newig, J., Hauptenthal, U. (eds.), *Rungholt. Rätselhaft und widersprüchlich*. Husum, Schleswig-Holstein: Husum Druck- und Verlagsgesellschaft mbH u. Co. KG, 56-59.
- Kühn, H.J. (2016b). Die archäologischen Funde aus dem Rungholt-Watt. In Newig, J., Hauptenthal, U. (eds.), *Rungholt. Rätselhaft und widersprüchlich*. Husum, Schleswig-Holstein: Husum Druck- und Verlagsgesellschaft mbH u. Co. KG, 125-167.
- Newig, J. (2014). Nordfrieslands Küste zwischen Landgewinn und Landverlust. *Geographische Rundschau* 66 (3), 4-12.
- Panten, A. (2016). Der Reichtum der Rungholter: Sage oder Wirklichkeit? In Newig, J., Hauptenthal, U. (eds.), *Rungholt. Rätselhaft und widersprüchlich*. Husum, Schleswig-Holstein: Husum Druck- und Verlagsgesellschaft mbH u. Co. KG, 41-45.
- Rauterberg, C. (2000). Alte Kirchen in Nordfriesland. In Steensen, H. (ed.), *Das große Nordfriesland-Buch*. Hamburg: Ellen & Richter.
- Reineck, H.E. (1982). *Das Watt. Ablagerungs- und Lebensraum*. Frankfurt, Hessen: Verlag Waldemar Kramer.
- Siegloff, E. (2016). Auch heute noch im Kampf gegen Urgewalten. Denkmalschutz und archäologische Denkmalpflege im nordfriesischen Wattenmeer. In Newig, J., Hauptenthal, U. (eds.), *Rungholt. Rätselhaft und widersprüchlich*. Husum, Schleswig-Holstein: Husum Druck- und Verlagsgesellschaft mbH u. Co. KG, 115-117.

- Vogel, W. (1973). *Geschichte der deutschen Seeschifffahrt Bd. 1. Von der Urzeit bis zum Ende des XV. Jahrhunderts*. Berlin: DeGruyter.
- Wiegand, C. (2005). *Spurensuche in Niedersachsen*. Hannover: Schlütersche Verlagsgesellschaft.

About the author

Dr. Hanna Hadler is a physical geographer and currently works as a research assistant at the Institute of Geography at the Johannes Gutenberg University Mainz. Her work focuses on natural hazard and geoarchaeological research in a coastal context, especially ancient harbour sites. Together with Prof. Andreas Vött she is in charge of geoarchaeological investigations in the Wadden Sea of North Frisia, carried out since 2015 within the research project 'Geoarchaeological investigations of North Frisian harbour sites of the twelfth and thirteenth centuries along the river Hever based on the trading centre Rungholt', funded by the German Research Foundation DFG.

17 Reinterpreting nature

A brief environmental history of trilateral conservation in the Wadden Sea region

Anna-Katharina Wöbse and Hans-Peter Ziemek

Abstract

In the early twentieth century, the Wadden Sea coast witnessed the arrival of new stakeholders: nature lovers and ornithologists started to be concerned about the status and vulnerability of the regional avifauna. This was just the start of a new social movement that was to become one of the driving forces behind the debate of how to frame the Wadden Sea – as a region to be developed or as the ‘last European wilderness’? Now, at the beginning of the twenty-first century and considering the joint World Heritage Site, it seems clear who ‘won’ the debate: over the last four decades, issues surrounding the unique natural values of the Wadden Sea have gained widespread public and political awareness. This paper focuses on a more recent chapter in the long history of relations between humans and the Wadden Sea by revisiting sites and actors of environmental history along the coast. It explores the emergence of trilateral cooperation in order to explain the multi-layered texture of the environmental discourse in the ‘era of ecology’.

Keywords: environmental history, civil society, trilateral diplomacy, political awareness, environmental discourse

Introduction

A long divide seems to run through today’s popular conception of the Wadden Sea region. The dikes separate the dry from the wet land, safety from danger, cultivated landscapes from wilderness, culture from nature. However, the Wadden Sea as a prototype of an area in a constant state of

flux offers a rich field for rethinking the concepts not only of land and water but also of the transnational sphere that the specific environment as such constitutes. With that constant transition in mind, one can easily detect a certain hybridity and ambivalence in the many human relations with the Wadden Sea and Waddenland, which deserve a more interdisciplinary and multidimensional approach (Gillis 2011). Environmental history offers such a diverse approach to analyse the many entanglements of space, culture, ecology and politics of the region. It studies the human interaction with the natural world over time and challenges the national frame at both the subnational and supranational levels — the local and the global (Blackbourn 2011). This perspective might help us to understand the dynamics of the fundamental changes that have taken place in the region over the last 50 years. One such fundamental change relates to the public perception of the Wadden Sea.

Today, hardly anyone would dare to challenge its spatial coherence, its European dimension, its global uniqueness, its ecological vulnerability and distinctiveness, its economic value or its transnational character. UNESCO acknowledged and emphasised its 'natural' entity when inscribing it on the World Natural Heritage List. The World Natural Heritage rhetoric seems to tell a simple and predictable story of the rise of ecological awareness and reason. However, when looking at this commonly cited rhetoric of natural heritage from a historical perspective, we find that it is only fairly recently that the narrative of the Wadden Sea received such 'green' attributions. For most of the twentieth century, it was instead perceived as a threatening, poor and neglected sphere fragmented by use and national demarcation (Reise 2013). Given today's image of the Wadden Sea as a transnational and somehow boundless space, it is illuminating to take a closer look at the process of changing the narrative. How did that conversion from a peripheral into a global sphere come about? In this paper, we focus on a recent chapter in the long history of relations between humans and the Wadden Sea by revisiting the sites and actors of the environmental discourse along the Wadden Sea coast. As there is no coherent historical account of the environmental 'globalisation' of the Wadden Sea yet, this paper seeks to outline some cornerstones of that process. For understanding the multi-layered texture of the environmental discourse in the 'era of ecology' (Radkau 2011) and the prevalence of today's ecological reading of the Wadden Sea, it is worth surveying the emergence of international cooperation and networking.

Changing perceptions of the Wadden Sea in the early twentieth century

The term 'Wadden Sea' as such only emerged in the course of the nineteenth century, signifying the intertidal zone in the southeastern part of the North Sea. Perhaps the most interesting traveller to have described the area was Johann Georg Kohl, a geographer and writer from Bremen. In 1846, he published an account on a journey along the coast in which he described the *Wadden World* as reaching from Kap Blavaands Huk to Holland. Kohl talked about a common sphere characterised by the same natural features (Kohl 1846). Within the scientific community, we find that at the end of the nineteenth century the idea of the Wadden Sea as a distinct habitat began to evolve, with Karl Möbius thinking about the *Wattenmeer* as a habitat for oysters (Möbius 1877). In 1904, the Danish natural scientists Eugenius Warming and Carl Wesenberg-Lund wrote about the Wadden Sea (*Vadehavet* in Danish) as a distinctive ecological feature reaching from Skallingen to Texel. With the beginning of the twentieth century, the specific biological interest in the Wadden Sea area intensified. From then on, we find a growing number of specific and detailed studies on various issues like sedimentation, wadden (mudflat) production, wadden habitats like salt marshes and species like fish, cockles and mussels (Bietz 2004; Reise 2013). However, although there was a growing interest among professional scientists for the habitat, investigation and research was individualistic, nationally oriented, and not committed to protecting this particular landscape.

At around the turn of the twentieth century, new stakeholders entered the Wadden stage: nature lovers, friends of the sea birds and ornithologists. They started promoting the Wadden Sea as an important stopover on the intercontinental flyways of migratory birds. According to the preservationists, this transit sphere was under acute threat. Modern transportation brought tourists and hunters to the islands. A market for selling seabird eggs to city dwellers emerged.

Accordingly, the first generation of nature protection activists, who witnessed the decline of their feathered friends, started to fight for reserves (Weigold 1924). They would buy or lease uninhabited islands and other 'places of beauty' along the coast, put a fence around it, and send in wardens. One such site of early activism was the now-defunct Danish Hallig Jordsand near the island of Sylt. In 1907, a small group of engaged citizens of Hamburg leased the Jordsand (which was German territory at the time) to protect emblematic sea birds, especially terns and oystercatchers. This project was built on sand and was threatened as such by constant erosion. Thus,

the Verein Jordsand looked for new places to protect, deciding to lease the Hallig Norderoog (Ziemek & Wöbse 2016: 68-69). Over the next years, bird societies and governmental agencies established small reserves along the Wadden Sea coast. The threatened birds became the most prominent symbols of the disrupted relationship between humans and nature. As the migrating birds — resting for feeding on their way up north or staying for breeding — ignored any boundaries, the international dimension of the Wadden Sea triggered a certain internationalism among birders and preservationists. Nonetheless, theirs was a piecemeal approach that helped to safeguard individual locations but did not change much about the growing exploitation of coastal resources in terms of tourism, hunting and egg consumption.

Re-evaluating the wetlands

After the end of the Second World War, the pressure on the environment of the Wadden Sea grew steadily. The dynamics of the postwar economy and development schemes changed the environment along the shores of the North Sea dramatically (Lotze, Reise & Worm 2005). New infrastructure, large-scale mechanisation in agriculture, massive industrial pollution of the air and water, and the societal shift towards a consumer society started to significantly affect the Wadden Sea region. Moreover, new types of uses and interests arose: the coastal wetlands were increasingly claimed by the fast-growing market of mass tourism, exploration and drilling for oil and gas, and national and allied air forces in search of spacious military training grounds.

This was not a phenomenon occurring only in the Wadden Sea – it was a development witnessed all over Europe and even worldwide. Wetlands as such came under extreme pressure when the era of postwar reconstruction kicked in. The extent of human intervention such as drainage increased significantly in the second half of the twentieth century – today some two-thirds of the European wetlands that existed 100 years ago have been lost (European Commission 1995). Swamps, bogs and estuaries constituted obstacles to economic and social progress, and few appreciated their ecological and aesthetic features. The post-war reconstruction ethos valued the expansion of arable land, economic growth and the control over the wetlands and the sea more than the preservation of natural landscapes and habitats. When the International Union for the Protection of Nature (IUCN) was founded in Fontainebleau in 1948, the delegates made a field trip to the

swamps of the Camargue in southern France. This ornithological hotspot, home to more than 400 bird species, was probably the most iconic wetland in Europe but was highly threatened by drainage and land reclamation. The small network of international conservationists challenged the commonly held notion that wetlands were landscapes of the past, waiting only to be eliminated. And so, fittingly, the Camargue was selected as the location for the first conference, in 1962, focusing on the protection of marshes, deltas, mudflattidal-flat areas, swamps and estuaries. This 'MAR conference' (MAR evoking various terms like the English marsh, the German Marsch, the French marais and the Spanish marisma) was decisive for the global future of the Wadden Sea. The delegates set out to change the bad image of allegedly useless wetlands and suggested a completely new framing, stressing instead their specific productivity and unique value and promoting them as 'liquid assets'. This marked a fundamental change in wetland policies (Matthews 1993). The wetland alliance was intended to foster economic and political appreciation for this hitherto marginalised habitat. Instead of simply fencing reserves off, the conference recommended a system of 'wise use'. The activists involved in the emerging network of wetland conservation set out to internationalise the threat to water-bound landscapes. Coordinating and synchronising the efforts for protection seemed necessary, as the extinction of wetlands was an urgent issue, and human resources were scarce: 'Things are moving so fast and habitat is being destroyed so rapidly that there is simply not enough available manpower to obstruct, tackle or modify each and every drainage project that comes to our notice.' (Scott 1963: 38). Almost defiantly, the ecologists coined the slogan: 'Wetlands are never wastelands!' (IUCN 1965: 16).

However, in the era of general euphoria over spatial planning and technical modernisation, few voices raised concerns over the future of the Wadden Sea area as a habitat. But in 1966, when another conference on wetlands was convened in the Dutch town of Noordwijk, the networkers played the moral and political card by drawing the attention of the Netherlands government 'to the exceptional biological value of the Waddenzee.' The conference stressed that 'the Netherlands has a great responsibility to the countries of northern and western Europe' (resolutions reprinted in Wolff 1976). The tidal flats were pushed into the spotlight of environmental diplomacy by a small but very efficient network of international activists and ecologists who identified the Wadden Sea with a worldwide web of wetlands. In 1965 the interdisciplinary International Wadden Sea Working Group, led by the young Dutch biologist Wim Wolff, began to coordinate the research. This turned into an epicentre for the development of a trilateral science

community for the protection of the natural Wadden Sea, and along with this, the Wadden Sea as a whole entered the scientific agenda of the three bordering states (Van der Windt 1992).

Scientists found their allies in civil society. In the mid-1960s, local interest organisations began to team up with international conservation groups in an attempt to shift perceptions of this peculiar land and seascape. After a long history of taming the sea as well as massive security measures, the tides literally started turning as Dutch society began exhibiting a growing resistance to large-scale building schemes. Nature lovers and biologists rallied behind the plan: in October 1965, they founded the Wadden Sea Society, which was to become something of a blueprint for NGO action and strategies along the coast. A new era in human-Wadden Sea relations began. There were young urbanites who wanted to have a say in how to handle that coastline and its hinterlands. They discovered a seemingly long-forgotten Dutch wilderness (Westerman 2009; Deen 2014; Freriks 2015). The new generation presented their endeavours as something young, vital and modern. Meanwhile, the World Wildlife Fund suggested the Wadden Sea as a test case on which to base the settlement of environmental conflicts. It was listed among other prestigious wetlands, and this fostered its unique and yet universal transnational character and status (Wöbse 2015).

During the 1960s, social movements influenced the political democratic system in Western Europe. Engaged citizens — among them environmentalists — voiced their ambition to participate in planning processes and development schemes. All the talk about the limits of growth, spaceship earth, just one planet, etc. was an indication of the fundamental doubt being expressed about former concepts of resource management and the exploitation of nature.

In 1962, Rachel Carson published her groundbreaking book *Silent Spring* on the far-reaching effects of the massive use of the insecticide DDT in the US and worldwide. Such planetary boundlessness could be seen and felt in the Wadden Sea area in an almost brutal and frightening way: the industrial pollution of the sea reached a disturbing severity as early as the 1960s. In 1965, thousands of Sandwich terns were found dead or dying with tremors and convulsions on the Dutch island of Texel. And between 1955 and 1965, another breeding colony on the island of Griend declined from more than 20,000 pairs to about 1,000. A study by Dutch scientists discovered residues of a number of chlorinated hydrocarbon insecticides in terns and spoonbills. The residues of insecticides proved to be the highest near the mouth of the river Rhine and at locations stretching northeast from there. The contaminated water moved along the Dutch coast in a northeasterly direction and

entered the Wadden Sea as well as German waters (Koeman et al. 1968). The visibility of the pollution sparked new environmental awareness. Pollutants coming in from the international waters of the Rhine, the Ems, the Weser and the Elbe carried an increasing amount of problematic substances, which then accumulated in the Wadden Sea (Erz 1972). Not only were migrating sea birds and the appealing seals symbols of the transnational character of the Wadden Sea's maritime sphere, but so were the pollutants and pollution. The visual narrative of the sea depicting wide horizons, white seagulls and unspoiled beaches was now being contrasted by illustrations of wastewater pipes, floating oil and yellowish foam.

Concurrently, Europe as a normative concept and potential political entity started to matter. In 1967, the European Council declared 1970 to be the year of nature protection (Wöbse 2016). In 1970, De Boschplaat, a nature reserve on the island of Terschelling, was awarded the European Diploma of Protected Areas. Such symbolic acts and honours reflected how environmentalism was slowly becoming the norm. The Dutch government was very proactive in lobbying for the first wetland convention that led to the Ramsar Convention, signed in 1971, the first international agreement dealing with a specific habitat type (Matthews 1993). Again, this did not necessarily lead to strict legal measures. However, the challenge of being part of the vanguard of ecological modernisation and fulfilling international requirements by listing national wetlands of international importance surely accelerated political acceptance. This was just one element in a much larger picture: ecology changed the perception of the natural world and challenged not only national and political demarcations but also economical concepts and programmes. Such shifts in perception correlated with political and societal changes. Boundaries as such started to blur.

Wadden Sea International

The many small steps and initiatives to reframe the Wadden Sea as a rich, diverse and unique habitat rather than a disadvantaged fringe gained political and institutional momentum. Meanwhile, the Dutch government, encouraged by the public campaigns, asked the IUCN to draft an 'International Convention on the Conservation of the Wadden Sea'. The Union suggested a system of demarcation, regulation and zoning. This draft was far-reaching. It suggested an area to be protected stretching from Den Helder to Blavands Huk, covering not only the shoreline, the islands and the open sea but also 10 kilometres inland of the coast. In 1974, the IUCN sent its

proposal to the governments of the Netherlands, Germany and Denmark. Its supranational perspective met with reluctance beyond the Dutch border (Wolff-de Boom 1983: 152). The German government was even openly hostile. The foreign office rejected any such convention, as the ministry of defence and the ministry of economy refused to let any international NGO hamper their rights of national sovereignty.¹ However, the idea was out there, and the political stakeholders were forced to somehow respond to the IUCN's trilateral concept, which carried the normative aura of an acknowledged international institution. Although the convention was never enacted, the draft did set standards for environmental diplomacy. Moreover, it kicked off the Trilateral Wadden Sea Cooperation and its secretariat (Enemark 2005). When governmental delegations met in The Hague for the first time in 1976 and Germany refused to join any international agreement, the Dutch delegation stated nonchalantly 'that some cooperation would be necessary anyway — public opinion would force politicians to do so.'² And they were proven right.

The tremendous dynamics of relations between humans and the environment in the Wadden Sea region are handed down to us in a prestigious book published more than 40 years ago. In 1976, the Landelijke Vereniging tot Behoud van de Waddenzee, in cooperation with the Vereniging tot Behoud van Natuurmonumenten in Nederland, and orchestrated by the tireless Dutch activist Jan Abrahamse, published an impressive volume (in Dutch, Danish and German) presenting the trilateral Wadden Sea as an extraordinary, vulnerable and vast landscape. It listed the many vested interests in the area, from fisheries to the national militaries. Moreover, it collected aspects of the long cultural history and the latest scientific findings on the flora and fauna of the wetlands. The book was a manifestation of a new approach towards the Wadden Sea: activists and scientists from all three neighbouring states contributed to the volume and celebrated the ecological uniqueness and transboundary character. The twin messages of ecological entity and historical connectedness were masterfully illustrated, particularly with the use of high-quality aerial photography. The visual storyline focused on the boundlessness of the Wadden Sea region and featured the area more as shared than as national territory. Moreover,

1 Zwischenarchiv im Politischen Archiv des Auswärtigen Amtes 107854, 414/495.00 SB-2: Konvention zur Erhaltung der Wattenmeere, 1976, Vermerk über die Ressortbesprechung zum Entwurf eines Wattenmeer-Übereinkommens am 25.6.1976 im BML.

2 Zwischenarchiv im Politischen Archiv des Auswärtigen Amtes 107854, 414/495.00 SB-2: Konvention zur Erhaltung der Wattenmeere, 1976, Vermerk über die Ressortbesprechung zum Entwurf eines Wattenmeer-Übereinkommens am 25.6.1976 im BML.

Figure 17.1 Book cover of Abrahamse et al., *Waddenzee*, 1977.

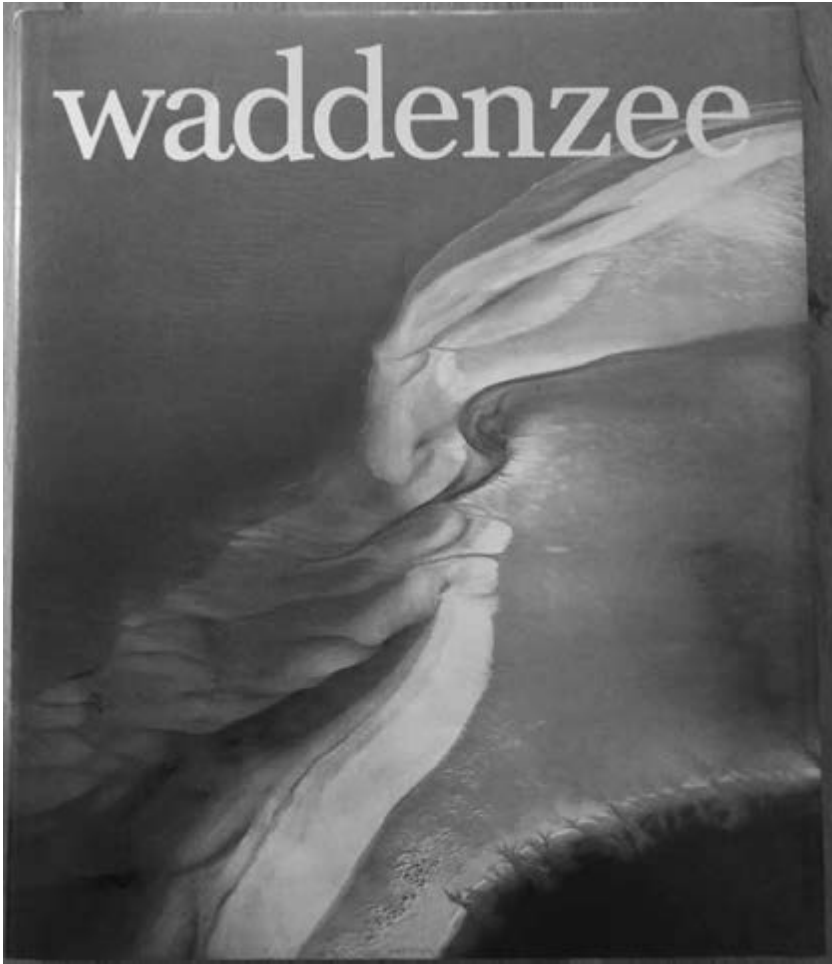


Photo by Herman Conens, Aerofoto Eelde, courtesy of Waddenvereniging

the widely distributed book, which saw several editions, anticipated the international trajectory that the political Wadden Sea discourse was about to take. At the very end of the account, the authors stated confidently that the Wadden Sea area was a 'natural space of importance reaching beyond Europe' (Landelijke Vereniging 1976: 349).

In Germany, for instance, new social movements teamed up with old-school conservationists. German and Danish pro-Wadden Sea activism was influenced and supported by Dutch initiatives, especially the Dutch Wadden Society, which offered many blueprints for how to steer public protest

and political attention (Wöbse 2015). Colourful campaigns and innovative lobbying drew the public eye to the ecological fragility of the Wadden Sea. The rise of the Green Party forced conservative politicians to rethink their ideas about economic modernisation of the coastal region and made national parks an interesting option for 'greening' their party programmes. The Wadden Sea was no longer a murky fringe area but a contested political arena. The concept of modernisation was now to be supplemented with environmental aspects. In 1978, the three nations pursued a common conservation policy; in 1982 a 'Joint Declaration on the Protection of the Wadden Sea' was signed in Copenhagen. It featured a common secretariat that was established in Wilhelmshaven (Germany) in 1987. The 1980s and 1990s saw massive investments in fundamental ecological research projects along the coast (Wolff 1983; Umweltbundesamt 2002). The Wadden served as a space of opportunity and provided a huge laboratory for the field studies of young ecologists. Due to the trilateral and even global dimension that the Wadden Sea had gained over the diplomatic negotiations, their local studies were now automatically part of transboundary research interests. A genuine environmental infrastructure emerged: new institutions, new national parks and reserves, and new monitoring programmes came into existence all along the coast. The shift in mindset made a significant spatial difference. Development was at least tamed or hedged in.

Conclusion

As Karsten Reise has suggested, the shift in attitude towards the Wadden Sea was the result of various dynamic developments (Reise 2013: 56-59). The new environmental framing of a natural and yet cultural sphere came with many fierce debates on whose Wadden Sea it actually was and who would have the right of interpretation. The economic demand for new agricultural land and embankment schemes ceased. Instead, tourism turned into an ever-growing source of income along the coast. It caused problems but also opened up new channels for stirring public awareness and constituencies. The dikes minimised the constant threat posed by an unpredictable sea. The North Sea was no longer a source of potential human catastrophe but became the potential victim of environmental catastrophes caused by humans. Travelling pollutants threatened not only maritime species but also human health. Environmental problems grew in size and outreach. Moreover, the late 1960s and early 1970s saw the formation of environmental internationalism. The global environmental crisis emphasised the necessity of protecting maritime

ecosystems. In addition, the accelerating process of Europeanisation forced member states to think in new terms and along alternative geographies that went beyond the nation-state. Nature entered the arena of diplomacy. Urban environmentalists joined forces with old school conservationists. Civil society and ecology formed influential alliances. Visual and medial representations of the Wadden sphere changed over time. The peculiar coastal area was constructed as a transnational object of protection within a conceptual and legal framework developed by transnational organisations. All this paved the way for a broader political acceptance of a coherent concept of the Wadden Sea based on tits framing as an ecological entity. The environmental history approach, however, demonstrates that perceptions of nature are in constant flow and might quickly change again.

References

- Bietz, H. (2004). *Die Entwicklung der deutschen Wattenmeerforschung: Ein wissenschaftlicher Beitrag zur Bedeutung der Pionierarbeiten*. Bremerhaven: Alfred Wegener-Institut.
- Blackbourn, D. (2007). *Die Eroberung der Natur. Eine Geschichte der deutschen Landschaft*. Munich: Beck.
- Blackbourn, D. (2011). Environmental History and Other Histories. In Coulter, K. and Mauch, C. (eds.), *The Future of Environmental History. Needs and Opportunities*, RCC Perspectives 3/2022, 19-21. Munich: Rachel Carson Center.
- Deen, M. (2014). *De Wadden. Een Geschiedenis*. Amsterdam: Thomas Rap.
- Enemark, J. (2005). The Wadden Sea protection and management scheme – towards an integrated coastal management approach? *Ocean & Coastal Management* 48, 996-1015.
- Erz, W. (1972). *Nationalpark Wattenmeer*. Hamburg and Berlin: Parey.
- European Commission (1995). *Wise use and conservation of wetlands*. COM (95) 189. Brussels: European Commission.
- Freriks, K. (2015). *De kleuren van het wad. Van bedreigde zee tot werelderfgoed*. Assen: Koninklijke Van Gorcum.
- Gillis, J.R. (2011). Filling the Blue Hole in Environmental History. In Coulter, K. and Mauch, C. (eds.), *The Future of Environmental History. Needs and Opportunities*, RCC Perspectives 3/2022, 16-18. Munich: Rachel Carson Center.
- IUCN (1965). *Liquid assets*. Morges: International Union for Conservation of Nature.
- Koeman, J.H., Veen, J., Brouwer, E., Huisman-de Brouwer, L. and Koolen, J.L. (1968). Residues of chlorinated hydrocarbon insecticides in the North Sea environment. *Helgoländer wissenschaftliche Meeresuntersuchungen* (17), 375-380.

- Kohl, J. (1846). *Die Marschen und Inseln der Herzogthümer Schleswig und Holstein*. Dresden & Leipzig: Arnoldische Buchhandlung.
- Landelijke Vereniging tot Behoud van de Waddenzee/Vereniging tot Behoud van Natuurmonumenten in Nederland (eds.) (1976). *Wattenmeer*. Neumünster: Wachholtz.
- Lausche, B. J. (2008). *Weaving a Web of Environmental Law*. Berlin: Schmidt.
- Lotze, H., Reise, K. and Worm, B. (2005). Human Transformations of the Wadden Sea Ecosystem through Time: a Synthesis. *Helgoland Marine Research* (59), 84-95.
- Matthews, G. (1993). *The Ramsar Convention on Wetlands: its History and Development*. Gland: Ramsar Bureau.
- Möbius, K. (1877). *Die Auster und die Austernwirthschaft*. Berlin: Wiegandt, Hempel & Parey.
- Radkau, J. (2011). *Die Ära der Ökologie. Eine Weltgeschichte*. Munich: Beck.
- Reise, K. (2013). *A Natural History of the Wadden Sea. Riddled by Contingencies*. Wilhelmshaven: Waddenacademie & Common Wadden Sea Secretariat.
- Scott, P. (1963). Introductory Remarks. In IUCN: *Project MAR. The conservation and management of temperate Marshes, bogs and other wetlands*. Proceedings of the MAR conference organized by IUCN, ICPB and IWRB (32-34). IUCN Publications news series No. 3. Morges: IUCN.
- Umweltbundesamt (2002). *Gesamtsynthese Ökosystemforschung Wattenmeer. Erfahrungsbericht eines interdisziplinären Verbundvorhabens*. Berlin: UBA.
- Van der Windt, H. (1992). Environmental Scientists and Scientific Symposia in the Wadden Sea Area, a Changing Role. In Dankers, N., Smit, C.J. and Scholl, M. (eds.), *Proceedings of the 7th International Wadden Sea Symposium* (pp. 117-127). Texel: Netherlands Institute for Sea Research.
- Weigold, H. (1924). Die Vogelfreistätten der deutschen Nordsee. *Meereskunde* 159 (14), 375-84.
- Westerman, F. (2009). *Das Getreideparadies*. Berlin: Ch. Links Verlag.
- Wöbse, A.K. (2015). Über Grenzen hinweg. Zur internationalen Geschichte der ehrenamtlichen Zusammenarbeit im Wattenmeerschut. In Nationalparkverwaltung LKN.SH, Tönning (eds.), *Mit uns für das Watt! Ehrenamtliche und der Schutz des Wattenmeers*, 12-22). Tönning: Nationalparkverwaltung LKN.SH.
- Wöbse, A. K. (2016). Die ausgezeichnete Natur Europas Zur Geschichte eines Labels. Retrieved February 01, 2018, from <http://www.europa.clio-online.de/essay/id/artikel-3803>.
- Wöbse, A.K. (2017). Space, Place, Land and Sea: The Ecological 'Discovery' of the Global Wadden Sea. In De Bont, R. and Lachmund, J. (eds.), *Spatializing the History of Ecology. Sites, Journeys, Mappings*, 204-222. London & New York: Routledge.

- Wolff-de Boom, I. (1983). International conventions relevant for the protection and the management of the Wadden Sea area. In Mörzer Bruyns, M. and Wolff, W.J. (eds.), *Nature conservation, nature management and physical planning in the Wadden Sea area*, 145-152. Leiden: Stichting Veth tot Steun aan Waddenonderzoek.
- Wolff, W.J. (ed.) (1976). *Proceedings of the Conference of Wadden Sea Experts held at the Island of Schiermonnikoog*. The Hague: Netherlands Government Pr. Office.
- Wolff, W.J. (ed.) (1983). *Ecology of the Wadden Sea*. Rotterdam: Balkema.
- Wolff, W.J. (1997). Development of the Conservation of Dutch Coastal Waters. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 7, 165-77.
- Wolff, W.J. (2013). Ecology of the Wadden Sea: Research in the past and challenges for the future. *Journal of Sea Research*, 82, 3-9.
- Ziemek, H.P. and Wöbse, A.K. (2016). Nationalpark Schleswig-Holsteinisches Wattenmeer. In: Frohn, H.W. Küster, H. and H.P. Ziemek (eds.), *Ausweisungen von Nationalparks in Deutschland – Akzeptanz und Widerstand*, 67-106. Bonn, Bad Godesberg: Bundesamt für Naturschutz.

About the authors

Dr. Anna-Katharina Wöbse is an environmental historian and research associate at the University of Gießen. She has published extensively on animal-human relations, visual history, the history of transnational environmental movements, and the environmental diplomacy in the League of Nations and the UN. Currently, she is involved in a multidisciplinary research project exploring the transnational history of European wetlands.

Prof. Hans-Peter Ziemek is professor of biological didactics at the University of Gießen. He has conducted extensive research on science and nature education, public relations in conservation, and the history of science. His current research interest lies in the history of national parks and the World Heritage Site of the Wadden Sea.

Part 5

Political, economical and social challenges for
cultural heritage management

18 Energy transition

A challenge for the management of the cultural landscape

Ulf Ickerodt and Matthias Maluck

Abstract

Landscape redevelopment in the wake of the *Energiewende* (energy transition) poses a hitherto unparalleled challenge for heritage management, as is the case in the federal state of Schleswig-Holstein. In contrast to localised mining of raw materials, for example, the energy transition affects the entire German planning area, including its Exclusive Economic Zone in the North and Baltic Seas. New spatial demands emerge in addition to known stakeholder interests. Within the framework of this contribution, strategies for how heritage management can deal with the consequences of developments in the renewable energy sector will be explained using the Schleswig-Holstein case. Several of the ideas presented here are exemplary and can be transferred to other areas of work. For this purpose, the statutory basis and preconditions for – as well as goals of – a sustainable management of archaeological monuments and cultural landscapes shall be illuminated. The tools presented here cover the spectrum from ‘interest areas’ to the concept of ‘heritage value’, which guides decision-making processes. Two projects — the 380KV high-voltage power line Heide-Niebüll and ‘Regiobranding’ — are used as showcase examples.

Keywords: heritage management, spatial planning, interest areas, heritage value, regiobranding

The expansion of the renewable energy sector poses new challenges (Reinke 2016) to which the State Archaeological Department of the northernmost German state of Schleswig-Holstein (Archäologischen Landesamtes Schleswig-Holstein 2015) must respond, as it is affected in many different

ways. Aside from the repercussions of ‘energy crops’ or solar parks on agricultural land use (Reinke 2016: 469; Ickerodt et al. 2013), which will not be discussed here, it is first and foremost the construction of an energy infrastructure that will have a great impact in terms of wind power plants, high-voltage power lines, electric power transformation stations and the like. Its development occurs in the North Sea’s exclusive economic zone of Germany and on firm land and passes through Schleswig-Holstein’s territorial waters and its maritime and submarine cultural landscapes (Ickerodt & Warnke 2017 and others). Given Jochen Bölsche’s critical outcry that the German landscape was suffering a slow death as it was increasingly being intersected, overgrown by housing areas and destroyed (1983; Trommer 2016: 39),¹ one could pose the crucial question: at what point do our historic cultural landscapes or characteristic landforms lose their historic values?

Consequently, the protection of cultural landscapes is not entirely a subject-specific issue. The discussion on negative and positive impacts is influenced by competing overriding political goals. For instance, a guideline on an integrated energy and climate concept for Schleswig-Holstein (2011) was passed with political consent. The concept is designed as spatial planning policy (Kühnau 2016: 393) and links the overriding but abstract goals of the politically motivated *Energiewende* (‘energy transition’, i.e. the transition to alternative low-carbon power production) with the legally binding obligation of monument and landscape protection. The latter are commonly within the framework of their own subject or remit, although factors concerning public services and economic development must be taken into account as well.

Against this background, authorities dedicated to the protection of cultural landscapes are obliged to deal with the growing spatial demands (Trommer 2016: 41–42) and must come to terms with all stakeholders, of which heritage management professionals are only one group among many (Woltering 2017: 121). Their protected goods — in this case the archaeological heritage as an integral part of historic cultural landscapes — are situated next to wind, biogas and solar plants, transformer stations as well as subterranean and overhead high-voltage power lines; all manifest elements of the renewable energy sector’s spatial requirements. In order to achieve the goal of a sustainable protection of the cultural landscape (Ickerodt 2016 and others), policymakers, planners, contractors, conservationists and heritage experts must actively work together in order to reconcile diverging interests.

1 Although this was within a different context, the awareness of cultural landscapes has drastically improved since it was published.

Figure 18.1 The expansion of the renewable energy sector is causing change. As the example of Pellworm shows, traditional farming is shifting towards energy production with wind power, biogas plants and photovoltaics. Agricultural historical cultural landscapes are changing towards the production of energy, and new ‘transformation’ or ‘energy’ landscapes are evolving.



Courtesy of Archäologisches Landesamt Schleswig-Holstein, Linda Hermannsen

The action radius of cultural landscape management requires a change of perspective on the part of the state's archaeological monument protection authority, which has long taken a subject-driven approach. Stakeholders often put undue emphasis on academic and historical-cultural aspects and have pursued research questions of personal interest, while matters of administration and the law were perceived as disruptive trivialities and therefore neglected. Nonetheless, one of the crucial tasks of a state archaeological authority is to coordinate necessary research into the protection of monuments within the legal framework.

In practical terms, this means that the State Archaeological Department, or ALSH, should provide adequate data sets for planning, as does nature conservation, through which the protection of the cultural landscape can be implemented. The evaluation criteria must be based on verifiable standards (Ickerodt 2014; Zölitz 2016), whose procedure will be addressed in more detail below. The appropriate administrative tools are the active involvement on all levels of planning (Kühnau 2016; Woltering 2017) as well as the use of

all available tools under the plan approval procedure, like environmental impact assessments (Reiter 2016). The technical content of the evaluations and decisions have to be calibrated to the legal framework according to the scale necessary for the required level of planning.

Basics and preconditions for a sustainable protection of the cultural landscape

In general terms, the protection of the cultural landscape and other aspects related to archaeological and conservational objective can be summarised by four main goals: it is all about documenting, studying, narrating, and — in order to enhance the qualitative awareness of cultural landscapes and their archaeological potential — also preserving. Meanwhile, the term ‘preserving’ incorporates the paradoxical notion of uniting both preservation and change as aspects of a development path. The catchphrase ‘history matters’ can be used as a yardstick of development path interdependencies. Therefore, the sustainable management of cultural goods and landscapes in Schleswig-Holstein not only encompasses those explicitly protected by the *ipsa lege* principle — i.e., listed cultural and natural monuments — but also incidental elements of the cultural landscape that are not in themselves monuments or landmarks.

Both listed monuments and unlisted elements form cultural landscapes, the unique attributes of which need to be ascertained. Their interplay expresses an intrinsic quality of spatiality. As a regional unique characteristic, this expression is closely linked to the quality of life and services for the public, playing a vital role in moulding regional identity. Thereby, a wide spectrum of civic life is affected, including the right of basic general and adult education, recreational learning, content for school curricula, as well as the encouragement of civic and honorary commitment.

On a supraregional scale, this aggregated value can be seen as an important location factor within the context of European and German regional competition. It includes services for the public, like sustainable resource management, but also issues like innovation and growth. The development of the tourism sector and the potential for local recreational activities are aspects that are just as relevant as the infrastructural development and the politically driven energy transition. Specifically, this includes all infrastructural developments: apart from road construction, the extension of broadband services, the railway, maintenance works, flood prevention and the power grid. This last is particularly strongly affected, as it is the stated political aim to implement the energy transition on a regional level

to an acceptable degree. The state has raised awareness and acceptance of this process through numerous public relations events.

Goals of heritage management in cultural landscapes

Aside from the management of archaeological monuments, their protection is a primary goal. Within the current legal framework of Schleswig-Holstein, the protection can be object-based but it can also be expanded to encompass entire cultural landscapes (*Denkmalschutzgesetz* 2014). The goal is a sustainable use of all resources, which is reflected in the great emphasis on planning as part of ALSH's mission. In order to make the public responsibilities more transparent and explicable, four evaluation parameters were established for archaeological monument protection, namely historical, spatial, vertical and seasonal coherency. These are adequate benchmarks for an interdisciplinary exchange when addressing the protection of monuments, cultural landscapes and the environment (Stobbelaar & Hendriks 2006: 6; see also Ickerodt 2016).

Historical coherency is the result of an assessment of development path dependencies or similar landscape biographic analyses. Their aim is to analyse the societal identity in the context of its historical dimension and its manifestation in the anthropogenic use of space, which in turn has to be seen in the context of the environmental preconditions. Historical coherency offers a suitable interface for achieving a balance with environmental protection goals. Several monument precincts and regional cultural landscapes can become or extend habitats for faunal and floral species. It is important to note, however, that the strategies for monument and environment protection can be different or even diametrically opposed.

Spatial coherency is synonymous with the expansion of the object-based historical coherency onto a holistic level of historical spaces. These spatial references not only render unique characteristics landforms but could — if they enhance the appreciation of monuments or groups of monuments — be an intrinsic part of the heritage value. As such, they have to be considered as intangible aspects of the cultural heritage and their essence is commonly captured by the term *genius loci*. Elements of the cultural landscape — monuments and their surroundings — ideally form historical reference areas. These are the results of decision-making in the past, essential features of which can be still experienced. They offer the observer an emphatic and authentic glimpse into a lived life and thus a contemplative self-awareness in a historical dimension.

Vertical and occasionally also seasonal coherency are metonymic for the retention of specific deposition conditions of the material cultural heritage

and for the appreciation of intangible spatial relationships of inanimated and animated elements of cultural landscapes. Both aspects have a source value, for which reason an *in situ* preservation is desirable and occasionally offers opportunities for cooperation between the heritage and natural protection sectors.

These four categories form the basis for the procedural sustainability evaluation. These are based on the assessment of the long, medium and short-term impact of developments and the viability of the cultural landscape and its monuments. In order to achieve this goal, Schleswig-Holstein is committed to pursuing a planning-oriented management of its archaeological heritage.

Interest areas

A well-performing cultural landscape protection requires not only the legal competence of a public authority, as in the case of the ALSH, but also good communication on new developments at an early stage. This is not always the case, as developers are not always aware of the legal and professional framework. In order to determine the intended level of protection for a site, planners as well as permit and construction supervision agencies have to be provided with elementary guidelines, which enable them to decide whether the ALSH has to be involved or not.

In order to implement this decision guidance, the ALSH has developed the concept of archaeological interest areas, which enables planners to determine — often merely through a visual check — whether an area falls into the remit of the ALSH's responsibilities (Archäologisches Landesamt Schleswig-Holstein 2015). As the culture sector is not within the jurisdiction of the German federal government but rather its federal states (*Bundesländer*), there are a number of differences in archaeological management practices, which incooperate different legal, managerial and scientific notions. A harmonisation of these various notions is negotiated on the federal level at the *Kultusministerkonferenz* conference of ministers of culture.

Interest areas and their associated archaeological potential are mapped and edited for all planning levels, i.e. for the regional land use plan and above. On this basis, the significance of the archaeological heritage can be verified at an early stage in areas where, for instance, extensive development is scheduled. This enables planners to factor in the time required for archaeological investigations and adds to the overall planning security. The interest may concern perimeter protection or developer-funded excavations in accordance with the Valetta Treaty.

Heritage value as a basis for decision-making in planning processes

The *Denkmalwert* (heritage value) has proven to be a suitable concept for academically justifiable, legally valid, conservational decision-making (Kallweit 2013: 28-31). From the archaeological and heritage management perspective, the heritage value consists of several components (Ickerodt 2014). These are nominally the archive value, the source value, the state of preservation and the uniqueness, and includes aspects of authenticity, historical integrity and experienceability. These have to be ascertained in the course of the planning procedure and form the basis of the management goals. Aside from the physical preservation and the storage conditions, another responsibility may arise from the need for perimeter protection around the archaeological site, and the preservation of the essence of the cultural landscape. Moreover, the heritage value encompasses academic, legal and practical administrative aspects, which genuinely and credibly substantiate the historical importance of the site in relation to its spatial context. Ideally, the goal would be a holistic and complete transmission for preserving for future generations the essence of the site as well as the cultural landscape in which it is embedded.

The archaeological-conservational-professional interest is correlated with the respective administrative framework. The basic goal of substance preservation and/or perimeter protection can only be relativised in exceptional cases. This can occur in marginal areas when, for instance, other planning goals are prioritised. In other cases such as emissions control, a weighing of interests can take place beforehand. This raises the question, however, of what stage of the planning process the archaeological interest should be taken into account in order to prevent being overridden on a regional planning level.

The benchmark for the assessment of whether an archaeological heritage site is under threat is set by an observer receptive to the goals of monument protection, who must be able to reproduce the technical evaluation of the archaeological authority. A prevention or mitigation of the impact can be best achieved by early and calibrated planning. With respect to the designation of wind energy priority areas, in which the interests of the archaeological cultural landscape were not yet considered, the *Umgebungsschutz* (protection of archaeological perimeters) still applies for the later authorisation process and does not result from early priority zoning.

In view of potential projects, it needs to be noted that substantial consequences may arise from mitigation measures for protected sites

Figure 18.2 The erection of wind power plants has repercussions for the landscape that go far beyond the actual location of the plants, as demonstrated by the example in the northern part of the district of Nordfriesland: it is accompanied by the construction of infrastructure, trenches for cables, electric power transformation stations and high-voltage power lines.



Courtesy of Archäologisches Landesamt Schleswig-Holstein, Linda Hermannsen

(emissions, landscape preservation plans, etc.). In order to prevent or reduce such consequences, it becomes necessary to examine concrete measures to mitigate the project's impact, particularly through project alternatives or even the *Nullvariante* (abortion of the project) (subject to *Gesetz über die Umweltverträglichkeitsprüfung*). Possibilities for compensatory measures in the course of the implementation process (as common in environmental protection) are only very limited due to the fixed location and the unique nature of archaeological sites as well as the peril of political instrumentalisation (e.g. indulgence or ransom payments).

Example: The 380kV high-voltage power line Heide-Niebüll

For the construction of the 380kV high-voltage power line in the summer of 2013, the ALSH contributed two reports to an environmental impact assessment (Kühlborn 2014) in which route corridors through areas with

the lowest archaeological potential were identified. In accordance with the legislative framework of the time, the outstanding and common archaeological monuments and their relationship to the historical cultural landscape were examined. The starting point of the assessment was the 600-metre-wide corridors that had been designated for the later power line. In view of the great importance of the archaeological monuments — now protected sites under the *ipsa lege* principle — the corridors were extended at the ALSH's discretion by a buffer zone of 1,000 metres on each side, which became subject to a detailed re-evaluation of archaeological sites. The heritage value of the monuments within this zone was evaluated. The basis of this evaluation was the assessment of the source value, the state of preservation, pre-existing spatial impairments, the experienceability of the landscape and the monument's historic context within it, uniqueness, as well as preservation and sustainability issues. In this example, 72 archaeological sites were affected. A five-tier scale was used for their evaluation, with ratings ranging from *außerordentlich hoch* (outstanding) to *sehr hoch* (very high), *hoch* (high), *bedeutend* (significant) and *unbedeutend* (insignificant).

In the ensuing impact prognosis, the exact nature of the impact in terms of its construction, installation and operation was determined and how it would affect the substance, function and sensory integrity of the archaeological monument. A general impact was deduced from specific case-by-case impacts and likewise evaluated with the five-tier scale.

In the second phase, common archaeological sites were evaluated in a more simplified procedure. One criterion was their visibility. In the third phase, historical landscapes were evaluated.

For the quantification of 'archaeological spatial resistance', these three evaluation phases were summarised and a recommendation was issued that presented a solution in which the archaeological heritage and the cultural landscape would be minimally affected. In general, this evaluation represents a transparent and replicable procedure, which meets the requirements of the evaluation on a case-by-case basis (Kühlborn 2014).

Regiobranding

An important goal for enhancing the protection of archaeological cultural landscapes — beyond the level of current involvement as determined in the existing legislative framework — is to be actively involved in the planning processes. By the early involvement of the affected portion of the public — represented

by interest groups or individuals — conflicting goals can be identified at an early stage while longterm goals for the enhancement of the archaeological heritage and cultural landscapes can be worked out by consensus.

On this level, other interests such as social services and business development become important. They occur together with branding processes. A concrete goal is to prevent a lopsided regional centralisation and the fragmentation of interests. Other aspects concern the improvement of the regional net product as through a better visitor flow management, for instance, or greater sustainability via civic involvement. Good knowledge of the homeland is an important factor for tourism and the commitment of the local population. Incidentally, it should be noted that goals calibrated well in advance tend to accelerate planning processes.

This interplay is currently being examined by the Federal Ministry of Education and Research (*Bundesministerium für Bildung und Forschung*, BMBF) within the framework of the REGIOBRANDING project as part of the FONA-initiative² (Kempa & Herrmann 2014; see also Ickerodt 2016: 268). The test area is the Elbe marshland of the district of Steinburg, which is a metropolitan region of Hamburg. This is a pilot sub-project in partnership between the ALSH and the district of Steinburg.

On the basis of a historical-geographical evaluation of the historical cultural landscape, and with active citizen involvement, an attempt is made to raise public awareness for historical landscapes and the archaeological heritage beyond the ordinary public participation procedures. In an externally moderated meeting, development goals are worked out and verified by the legislative framework of urban land use planning and spatial planning. The goal of this exercise is not only to garner greater public acceptance for archaeological protection issues but also to establish a more sustainable and economically prospective attitude towards local heritage (Ickerodt et al. 2015 and others).

Latent images: A synoptic outlook

The development of renewable energies and the expansion of the power supply infrastructure, which is the focus of this paper, can be currently regarded as key challenges. These are new factors and are as significant as other political goals regarding social services and business development.

2 *Innovationsgruppen für ein Nachhaltiges Landmanagement* (Innovation Group for Sustainable Land Management) and *Innovationsgruppen Landmanagement* (Innovation Groups Land Management), 2015.

These interests must be offset against the objective of protecting and managing the archaeological heritage with a special emphasis on preserving the nativeness of the cultural landscape.

Against this background, historical cultural landscapes represent a regional asset, which is closely connected with the quality of life and which plays a role in moulding regional identities. It is also a location factor, which becomes increasingly important within the context of European regional competition. In this area, heritage management and the protection of cultural landscapes could contribute to regional branding, preventing a lopsided centralisation and fragmentation of interests, while indirectly enhancing the regional net product. The cultural historical and environmental connection not only strengthens the local identity and ties in with the concept of a homeland; a knowledge of the past and the clandestine interplay of historical factors that shaped the land also constitutes a locational advantage, a potential that is very rarely tapped. As a 'regenerative resource', this knowledge base requires special care and appreciation. The scale in itself of the development of renewable energy infrastructure poses a special challenge, which the archaeological monument protection of the state of Schleswig-Holstein must respond to increasingly with the solutions presented here.

References

- Archäologisches Landesamt Schleswig-Holstein (2015). *Merkblatt Archäologische Interessensgebiete*. Schleswig: Archäologisches Landesamt Schleswig-Holstein.
- Bölsche, J. (1983). *Die deutsche Landschaft stirbt. Zerschnitten, zersiedelt, zerstört*. Reinbek: Rowohlt Verlag.
- Denkmalschutzgesetz (2014). Ratified on 30.12.2014 (*Gesetz- und Verordnungsblatt* 2015 No. 1 p. 1-42). Retrieved from <https://www.schleswig-holstein.de/DE/Fachinhalte/D/denkmalschutz/downloads/Denkmalschutzgesetz.pdf?blob=publicationFile&v=5>
- Gesetz über die Umweltverträglichkeitsprüfung*, UVPG 1990, §6: Unterlagen des Trägers des Vorhabens, section 3.
- Ickerodt, U., Kempa, D., Von Malottky, B. and Huusmann, P. (2015). Regiobranding. Nachhaltiges Management historischer Kulturlandschaften in der Region Steinburger Elbmarschen. *Archäologische Nachrichten aus Schleswig-Holstein*, 21, 100-103.
- Ickerodt, U., Schiller, G. and Roos, T. (2013). Alternative Energien und nachwachsende Rohstoffe. Umweltschutz auf Kosten historischer Kulturlandschaften – Eine schleswig-holsteinische Perspektive. *Archäologisches Nachrichtenblatt*, 17 (4), 311-315.

- Ickerodt, U. (2014). Was ist ein Denkmalwert? Archäologische Denkmalpflege zwischen denkmalrechtlichen Anforderungen und wissenschaftlichem Selbstanspruch. *Österreichische Zeitschrift für Kunst und Denkmalpflege (ÖZKD)*, 68 (3/4), 294-309.
- Ickerodt, U. (2016). Der Nachhaltigkeitsbegriff in der archäologischen Denkmalpflege. Versuch einer Standortbestimmung am Beispiel der denkmalpflegerischen Praxis in Schleswig-Holstein. *Archäologische Informationen*, 39, 265-280.
- Ickerodt, U. and Warnke, U. (2017). Schutzgut submarine und marine Kulturlandschaft Nordsee – eine wissenschaftsgeschichtliche und denkmalpflegerische Betrachtung zum Kulturgutmanagement. In Recker, U., Kleefeld, K.D., and Burggraaff, P. (eds.), *Kulturlandschaftsmanagement. Planung – Perspektive – Vermittlung*, 181-201. Wiesbaden: R. Habelt Verlag.
- Kallweit, N.C. (2013). *Drittschutz aus dem Denkmalschutz*. Berlin: Duncker & Humblot.
- Kempa, D. and Herrmann, S. (2014). Regiobranding – Kulturlandschaft als Identitätsträger und Marke einer Region. Transformationen im ländlichen Raum durch erneuerbare Energien. *Unimagazin. Forschungsmagazin der Leibniz Universität Hannover*, 3/4, 64-67.
- Kühlborn, M. Der Denkmalwert in der Umweltverträglichkeitsprüfung (2014). Das Fallbeispiel „380KV Höchstspannungsleitung Heide-Nieüll“ in Schleswig-Holstein. *Österreichische Zeitschrift für Kunst und Denkmalpflege (ÖZKD)*, 68, 3/4, 303-304.
- Kühnau, C. (2016). Integration in die räumliche Gesamtplanung. In: Riedel, W., Lange, H., Jedicke, E. and Reinke, M. (eds.), *Landschaftsplanung*, 393-407. Berlin: Springer.
- Reinke, M. (2016). Energiewende unter dem Aspekt der Landschaftsplanung. In: Riedel, W., Lange, H., Jedicke, E. and Reinke, M. (eds.), *Landschaftsplanung*, 467-480. Berlin: Springer.
- Reiter, S. (2016). Umweltverträglichkeitsprüfung. In Riedel, W., Lange, H., Jedicke, E. and Reinke, M. (eds.), *Landschaftsplanung*, 127-141. Berlin: Springer.
- Schleswig-Holstein (2011). *Integrierte Energie- und Klimakonzept für Schleswig-Holstein*. Schleswig: Landesregierung Schleswig-Holstein. Retrieved from https://www.schleswig-holstein.de/DE/Fachinhalte/K/klimaschutz/Downloads/IEKK.pdf?__blob=publicationFile&v=1
- Stobbelaar, D. J. and Hendriks, K. (2006). Reading the identity of place. In Van der Knaap, W. and Van der Valk, A. (eds.), *Multiple landscapes. Merging past and present*, 1-12. Wageningen: NWO/WUR-Land Use Planning Group.
- Trommer, G. 2016. Energiewende unter dem Aspekt der Landschaftsplanung. In: Riedel, W., Lange, H., Jedicke and E., Reinke, M. (eds.), *Landschaftsplanung*, 39-45. Berlin: Springer.

- Woltering, U. (2017). Kulturlandschaftsgutachten auf unterschiedlichen Planungsebenen in Westfalen-Lippe. In Recker, U., Kleefeld, K.D. and Burggraaff, P. (eds.), *Kulturlandschaftsmanagement. Planung – Perspektive – Vermittlung*, 121-132. Wiesbaden: R. Habelt Verlag.
- Zölitz, R. (2016). Landschaftsbewertung. In: Riedel, W., Lange, H., Jedicke, E. and Reinke, M. (eds.), *Landschaftsplanung*, 127-141. Berlin: Springer.

Acknowledgements

We would like to extend our gratitude to Christian Weltecke and Daniel Zwick (ALSH) for their support, with special thanks to Daniel for his translation of this manuscript.

About the authors

Dr. Ulf Ickerodt is deputy director at the State Archaeology Department of Schleswig-Holstein in Schleswig and head of its fieldwork archaeology unit. His research fields include archaeological heritage management and public participation. He has been involved in the Trilateral Wadden Sea Cooperation since the inception of the INTERREG-funded LANCEWADPLAN. Currently, he is involved as researcher in the REGIOBRANDING Project (among other projects).

Matthias Maluck is head of the spatial planning and international projects unit at the State Archaeology Department of Schleswig-Holstein. He has been involved in the Trilateral Wadden Sea Cooperation since the INTERREG-funded LANCEWADPLAN. Currently, he is working on the UNESCO World Heritage Site application for the archaeological monuments of *Danneværk* ('Danevirke') and *Haithabu* ('Hedeby') and the INTERREG-project BalticRim, which deals with archaeological heritage management and maritime spatial planning in the Baltic Sea region.

19 The Lower Saxon UNESCO Biosphere Reserve Programme

Engaging with inhabitants and stakeholders for a sustainable development

Peter Süßbeck and Jürgen Rahmel

Abstract

The Wadden Sea of Lower Saxony has been protected as a national park since 1986. It encompasses the whole area seaward of the dikes including nearly all mudflats and subtidal areas of the Wadden Sea in Lower Saxony as well as all parts of the East Frisian Islands outside the built-up areas. Since 1993, the region has been designated as a UNESCO Biosphere Reserve according to the Man and the Biosphere Programme (MAB). Because modern biosphere reserves function as model areas for sustainable development with clear tasks in nature conservation, education and information, research and sustainable regional development, the designated areas cannot fulfil all goals equally since there are no people living inside the conservation area.

Furthermore, there is a strong need for activities to promote sustainable regional development since the inscription of the international Wadden Sea as a World Heritage Site in 2009, e. g. as part of the trilateral sustainable tourism strategy.

Therefore, the UNESCO Biosphere Reserve landward of the dikes needs to be enlarged to build up a region for sustainable development on a voluntary basis together with the municipalities along the Lower Saxon Wadden Sea coast.

This strategy follows a strong participatory approach, which means that common actions towards more sustainability are identified together with inhabitants and institutions in the respective municipalities or in the region. Cooperation is taking place in partnership programmes with the regional economy in the areas of tourism, gastronomy, accommodation,

education or agriculture. Examples of successful cooperation include the Junior Ranger programme, which has already trained more than 500 children, or the Migratory Bird Days, which have been held since 2009. At the end of the participative process, the municipalities willing to move forward in this way together will jointly apply for a new UNESCO Biosphere Reserve status. This step will strengthen the UNESCO World Heritage as well as the National Park in an integrated approach supporting regional identity as well as regional pride in and identification with the Waddenland.

Keywords: Wadden Sea of Lower Saxony, UNESCO Biosphere Reserve, participatory approach

Introduction

The Wadden Sea region is a natural system of outstanding universal value, outstanding in relation to ongoing geological and biological processes and a hot spot of biodiversity in a global perspective. Based on these criteria, the entire Wadden Sea was designated as a UNESCO World Heritage Site in 2014. In Lower Saxony, this nature area has been protected as a national park since 1986.

In the coastal area of Lower Saxony, this area of wilderness is separated from a cultural landscape by just a dike that restricts the natural dynamics of the Wadden Sea landscape. In an extended approach for regional development, both 'landscapes' should be combined to meet the objectives in terms of nature conservation on the one hand, and the sustainable development of the inland areas on the other. Our contribution recommends a way to implement this combination and demonstrates the practical opportunities and problems that go with it. This approach will be prepared in several municipalities that lie in the cultural landscape behind the dike. This new perspective is based on the fact that the Wadden Sea of Lower Saxony was designated a UNESCO Biosphere Reserve according to the Man and the Biosphere Programme (MAB) as early as 1993 and only with focus on the natural areas seaward the dike. As the largest parts of the Wadden Sea are dominated by natural processes, the economic and social dimensions of sustainability have not played a significant role here up to now.

In contrast, the inland Wadden Sea region has been created and used by humans. Especially the marshes have been influenced by a long history of human settlement and embankment. They are homeland and tourist

destinations characterised by historical buildings and settlements. However, the cultural landscape behind the dike is extraordinary from a worldwide perspective, too. This is delineated in the study *Comparative analysis of the landscape and the cultural heritage of the Wadden Sea Region*, abbreviated as the *Essex Report* (Essex County Council Historical Environment Branch 2010; Fredriksen 2012). However, in contrast to the designation of the Wadden Sea as a UNESCO World Heritage Site, there is no comparable international recognition for this area behind the dikes!

One way to gain adequate acknowledgement for this inland region could be by combining both conceptual approaches in a joint regional framework to bridge the dike in terms of nature conservation and promoting sustainable regional development. The tool for such a process will be the MAB biosphere reserve in its actual rationale after the implementation of the Sevilla Strategy of MAB and the Madrid Action Plan (see below). Here, the inland parts (i.e. those parts lying behind the dikes) of the municipalities adjacent to the national park are invited to become part of the transition zone of a new UNESCO Biosphere Reserve. In order to achieve this overarching goal, an invitation was sent to the municipalities in the Wadden Sea region of Lower Saxony to join the MAB Biosphere Reserve:

- to voluntarily participate in a process as we have not had before in Lower Saxony;
- to participate in a bottom-up process to safeguard the future and revaluation of the region; and
- to build an institutional bridge from the UNESCO World Heritage to Waddenland or the (inland) region.

Following the principles of sustainability, this new cooperation with the municipalities on the islands and along the mainland coast will help all those involved to think about things in a comprehensive way, to exploit possible advantages together and thereby to 'bridge the dike' in respect to nature and even the mind. Furthermore, an implementation of a transition zone along the coastline will help to buffer the World Heritage Site against harmful influences from the inland and to protect the homeland of the citizens of the region. It also offers the possibility of complying with the regulations for German MAB Biosphere Reserves (see below).

Regarding the dimensions of sustainability, numerous questions must be discussed and solved in cooperation with stakeholders and citizens. As examples, demographic change and customer satisfaction (social), prosperity (economy), conservation or restoration of biodiversity (ecology) must be mentioned.

Figure 19.1 Synergy of World Nature Heritage, MAB Biosphere Reserve and National Park in the Wadden Sea of Lower Saxony.



National Park Wadden Sea Niedersachsen

The tool: The UNESCO-MAB Biosphere Reserve

UNESCO's Man and the Biosphere Programme (MAB) was launched in 1971. Its main goal is an improvement of relationships between people and their environments. Today, 669 Biosphere Reserves in 120 countries belong to the worldwide network of the programme (UNESCO 2017 b).

During the first years, the MAB focused on research and monitoring concerning the man-environment relationship. This led to the designation of the Wadden Sea of Lower Saxony as an MAB Biosphere Reserve in 1993 (figure 19.2). In a follow-up to the Rio Conference on Environment and Sustainable Development in 1992, the MAB programme shifted its focus more towards the field of sustainability. In 1995, the Sevilla Strategy and the Statutory Framework of the World Net of Biosphere Reserves were adopted. Here, the regulations for the zonation of biosphere reserves and their role as a 'model region for a sustainable development' were determined. Some years later, the German MAB national committee substantiated these regulations for the German Biosphere Reserves (Deutsches National-Komitee 2007). Clear guidelines are given, e.g. for the zonation of the German Biosphere

Reserves. The core zone must cover at least 3 percent of the total area of the Biosphere Reserve, the buffer zone 10 percent. At least 50 percent of the total area must belong to the transition zone. In the case of marine Biosphere Reserves, like the Wadden Sea, this demand is related to the terrestrial of such reserves area only. Following the Lima Action Plan, the World Network of Biosphere Reserves has been engaged to support the Sustainable Development Goals (SDG) of the United Nations since 2016 (UNESCO 2017 a).

Biosphere reserves have to comply with three functions: conservation, sustainable regional development, and environmental and sustainability education and research. Nowadays, Germany has seventeen Biosphere Reserves. Three of them are Wadden Sea sites. Another Wadden Sea Biosphere Reserve exists in the Netherlands.

Regarding all the aspects shown so far, the designation of a region in the framework of the UNESCO Man and the Biosphere Programme can be considered an award, a keen image of the region and a strengthened identity of the people. It signifies entry into the worldwide family of very special natural and cultural landscapes with the potential for being a model region for sustainable development. It can also be seen as an opportunity or challenge for comprehensive regional development.

The process of enlarging the transition zone of the Biosphere Reserve of the Lower Saxon Wadden Sea deals with this challenge and aims at three goals:

- to secure acknowledgement for the inland cultural landscape;
- to better adapt the biosphere reserve to the guidelines of the MAB and German MAB committee; and
- to involve an international outstanding cultural landscape in the World Network of Biosphere Reserves.

This last goal emphasises the important role of the status of the Wadden Sea as part of the World Heritage. This designation confirms the high quality of the region even on a global scale. And it obliges everyone who is responsible on a local, national or even transnational scale to assure that this part of our Common Heritage is passed on to the next generations unharmed in terms of its integrity and beauty. To achieve this task means to implement the concept of sustainability in the Wadden Sea region, with the Biosphere Reserve as the perfect tool!

The approach

Every ten years, the UNESCO Biosphere Reserves are the object of an evaluation. In 2003, the most important point for further development of the Biosphere Reserve Wadden Sea of Lower Saxony was the insufficient size of the transition zone, as was expected. Consequently, an approach was elaborated that was implemented in three steps.

Step 1: Projects in the functional transition zone

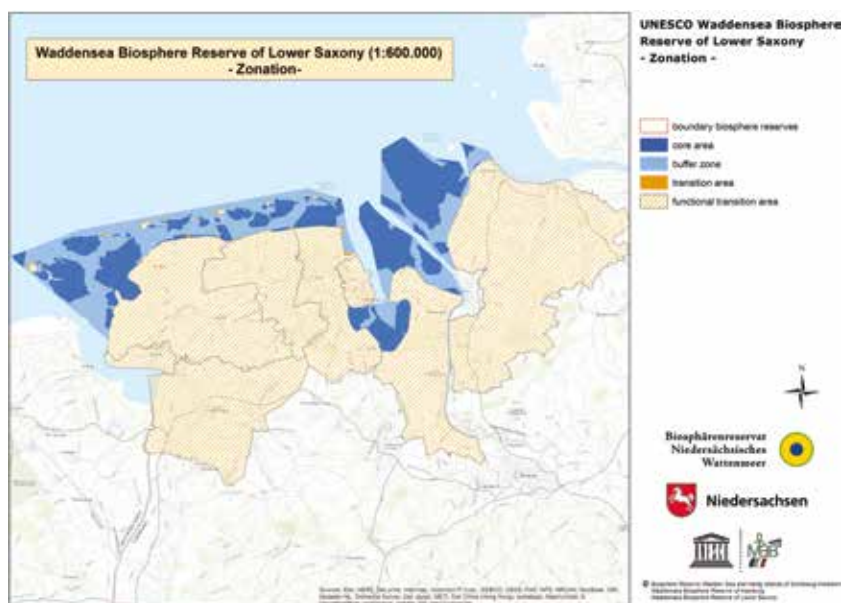
To support a sustainable development in the inland region along the Wadden Sea, the counties of Leer, Aurich, Wittmund, Friesland, Wesermarsch and Cuxhaven as well as the towns of Emden, Wilhelmshaven and Cuxhaven were designated a functional development zone (figure 19.2). The realisation of projects in this cooperation area had a higher priority than a more legal connection to the other zones of the biosphere reserve.

The first initiative with respect to the development function of the biosphere reserve was the launch of a partner programme with stakeholders who expressed their commitment to the overall aims and goals of biosphere reserves and national parks. The first partners were nature guides. The cooperation with this group started as early as 1997. Today, there are about 150 partners in this sector. In 2005, the first 'National Park experience cruises' with tourist ships or cutters were certified. From 2009 on, the partner programme also included tourism organisations, restaurants, accommodation and environmental education. Cooperation with these partners now includes support for the 'Migratory Bird Days', a ten-day long event. This collection of more than 200 individual activities takes place all along the coastline of Lower Saxony and covers excursions, talks, sustainable and regional meals, and cultural activities aimed to embed the spirit of the international bird migration of the Wadden Sea within a broad societal context. Moreover, it is just one example of how to animate the idea of a sustainable tourism strategy for the UNESCO World Nature Heritage Site of the Wadden Sea.

Another aspect of the partner programme is the certification of regional sustainable products. Mainly products from organic farms are recommended as 'Wadden Sea products'. This effort is aimed at changing land use in the region to a more sustainable agriculture.

Regarding the function of research and education (a logistic function), two examples will be mentioned. One of them is the climate change adaptation project 'Water storage instead of pumping', which was implemented in the county of Wesermarsch. The project pinpointed the question of what can

Figure 19.2 Map of the Biosphere Reserve of Lower Saxony. The counties of the coastal area of Lower Saxony are currently used as an operation area for the development of the Biosphere Reserve Wadden Sea of Lower Saxony.



National Park Wadden Sea Niedersachsen

be done when the period of free draining (with the tide through the dike sluices) is increasingly shortened due to raised sea levels as a consequence of climate change. In regional fora with stakeholders in drainage management, coastal protection, agriculture, tourism and nature conservation, potential future problems were identified and a corresponding catalogue of mitigation measures was compiled (Nationalpark- und Biosphärenreservatsverwaltung Niedersächsisches Wattenmeer 2010).

The second example touches on the topic of Education for Sustainable Development (ESD): the 'Junior Ranger Programme' offers nature experiences and ESD approaches to children from the region, thereby spreading seeds for the future of nature conservation (EUROPARC).

Step 2: Cooperation with partner municipalities

Partner municipalities confirm their commitment to the biosphere reserves and national parks in a recorded agreement. The cooperation encompasses the realisation of a common cooperation programme in the fields of nature

tourism, environmental education or sustainable development. Furthermore, the partner municipality participates in and supports the process towards a formal transition zone of the UNESCO biosphere reserve. At the moment, seven municipalities have joined this partnership (Cuxhaven, Sande, Dornum, Spiekeroog, Langeoog, Juist and Norden).

Other forms of cooperation beyond borders of counties or municipalities are also stimulated and supported by the biosphere reserve. One example is the connection of several municipalities via a cycling route around the Jade Bay combining nature values, culture, arts and tourism (<http://www.nationalpark-wattenmeer.de/nds/radroute-um-den-jadebusen>). Thus, a good range of tourist options to explore the Waddenland and to understand the cultural landscape can be developed.

Step 3: Process towards a formal transition zone

In the course of the following evaluation of the biosphere reserve, it became evident that UNESCO demanded a closer relationship between the transition zone and the other zones. The status of the transition zone was to be changed from 'functional' to 'formal'. This was one of the reasons for the invitation to the municipalities mentioned above. Contacts and discussions with mayors and municipal councils followed as a starting point for a process to develop a formal transition zone with interested municipalities on a voluntary basis. The next steps will be the identification of common topics for future activities and the development of a participative governance structure.

At the moment, there is great interest among the mayors and within the tourism sector for this initiative. However, there is also scepticism and rejection within the agricultural sector. One reason may be that no final or concrete statement can be given about what will happen in the transition zone. The region will make a start towards sustainable development, but there is no general roadmap. On a voluntary basis, fields of action can and will be defined with citizens and municipalities. This is not easy and will require input and participation. 'Lots of things are possible, nothing has to be done as a compulsory measure!'

To convince citizens and elected municipal officers of the advantages of the status as a biosphere reserve, municipalities must be informed. An improved image is advantageous for tourist municipalities. The promotion of the quality of life and cultural identity increases the self-consciousness and the pride of the local communities but will also help to attract specialised staff. Regional economic effects can be derived from the promotion of regional products.

While a better approach to subsidies can be a strong argument, the participation in education for sustainable development and in the exchange and cooperation in national and international networks are rather soft options. Nevertheless, they may turn out to have significant advantages in the future.

At the end of this process, we intend to have a new biosphere reserve Wadden Sea of Lower Saxony that encompasses the wilderness of the Wadden Sea National Park and the World Heritage Site as well as the treasures of the cultural landscape of the interior — in Waddenland! This could be an important step in moving the area towards a sustainable future.

References

- Deutsches National-Komitee für das UNESCO-Programm Man and Biosphere (2007). *Kriterien für die Anerkennung und Überprüfung von Biosphärenreservaten der UNESCO in Deutschland*. Bonn: Deutsches Nationalkomitee für das UNESCO Programm.
- Essex County Council Historical Environment Branch (2010). *Comparative Analysis of the Landscape and Cultural History of the Wadden Sea Region*. Chelmsford: Essex County Council.
- Europarc (2017). Nationalpark Niedersächsisches Wattenmeer. Retrieved 7 September 2017 from <http://www.junior-ranger.de/lexikon/nationalpark-niedersaechsisches-wattenmeer/>
- Frederiksen, J. (2012). *The Wadden Sea Region: A world class cultural landscape*. Leeuwarden: Waddenacademie.
- Nationalpark- und Biosphärenreservatsverwaltung Niedersächsisches Wattenmeer (2010). *Speichern statt pumpen. Abschlussbericht*. Wilhelmshaven: Nationalpark- und Biosphärenreservatsverwaltung Niedersächsisches Wattenmeer.
- Nationalpark Wattenmeer (2017). Radroute um den Jadebusen. Retrieved September 7, 2017 from <http://www.nationalpark-wattenmeer.de/nds/radroute-um-den-jadebusen>
- UNESCO (2017a). *A new roadmap for the man and the biosphere (MAB) programme and its world network of biosphere reserves*. Paris: UNESCO.
- UNESCO (2017b). Man and the Biosphere Programme. Retrieved July 27, 2017 from <http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/man-and-biosphere-programme>

About the author

Peter Südbeck M.Sc. was trained as a biologist with a special emphasis on zoology, ecology and ornithology. He performed field work on woodpecker ecology and ethology with a strong focus on bird conservation in forests. Between 1992 and 2004, he worked for the State Agency on Bird Protection in Lower Saxony and has been the head of that agency since 1998. His main research themes are bird monitoring, the designation of bird protection areas according to the EU Bird Protection Directive, and bird protection programmes in forests, wetlands, coastal areas and cultural landscapes. Südbeck is author of red lists of breeding and migratory bird species in Germany and the main author of the *Handbook of breeding bird monitoring in Germany*. Since 2005, he has been the head of the Wadden Sea National Park and Biosphere Reserve Administration of Lower Saxony.

Jürgen Rahmel M.Sc. was trained as a biologist. Between 1991 and 2000, he conducted research on the ecology of the Wadden Sea for Federal State Agencies of Lower Saxony. Between 2000 and 2013, he was the head of the National Park Information Centre on Norderney. Since 2013, he has worked as the head of the biosphere reserve department in the Wadden Sea National Park Administration of Lower Saxony.

20 Senses of place in the North Frisian Wadden Sea

Local consciousness and knowledge for place-based heritage development

Martin Döring and Beate Ratter

Abstract

Inhabitants of the North Frisian Wadden Sea coast have been living with and struggling against the sea for centuries. This relationship has been portrayed in the familiar Frisian saying ‘God created the sea, the Frisians the coast’, which expresses an emotional nexus and a sense of place with the coastal landscape and the sea. Both are permeated by historical features, traditions, intangible values, social practices and local knowledge about the coastal environment. This kind of local knowledge and engagement with different pasts often conflict with the well-established and evidence-based planning cultures that zone different users’ interests, protect habitats or handlee and present heritage. Against this background, the challenge is not only how to acknowledge local knowledge but, even more, how it could be used to establish more symmetric and place-based development strategies to be integrated into landscape and heritage management in the Wadden Sea. For this to be done, the chapter theoretically reflects on current approaches in heritage management and pledges for a practice-oriented approach highlighting local and regional engagements with past presents and present presents. The conceptual issues raised are empirically explained against the backdrop of walking interviews conducted with coastal dwellers on the North Frisian coast. The authors explore the ways in which so-called lay perspectives on landscape heritage and heritage in general could enrich heritage management.

Keywords: Sense of place, landscape, heritage, walking interviews, North Frisia Germany

The coastal region of North Frisia: A contested littoral landscape

In this contribution, we would like to emphasise that acknowledging regional and local consciousness about or in relation to a certain stretch of land or landscape is a basic ingredient in any consultation process. Such an approach might contribute to not only developing a better understanding of the local appraisal of any natural or cultural feature but also to raising awareness about these issues among policymakers and environmental managers. It is therefore imperative to reflect on the aspect of how local knowledge and regional consciousness about the littoral landscape and cultural relicts could contribute to developing awareness among policymakers and environmental managers for establishing place-based development strategies. For this to be done, it is important to investigate how local people engage with the landscapes, places and objects they care about and how they form a sense of coast.

These aspects will be empirically analysed against the backdrop of the North Frisian Wadden Sea, which is part of the Wadden Sea region, one of the most intensively researched natural areas in the world. Best described as a wetland site with tidal flats, it stretches 500 kilometres from Den Helder in the Netherlands to Skållinge north of Esbjerg in Denmark. Characterised by a unique flora and fauna, the Wadden Sea coast is a key resting place for migratory birds and was inscribed on the UNESCO World Natural Heritage List in 2009. Although the Wadden Sea area is mainly profiled as a unique natural habitat, it also represents a place with rich cultural diversity (Vollmer et al. 2001). This is also apparent in the coastal landscape of North Frisia (Fischer 1997), which has undergone constant modification by coastal inhabitants throughout the centuries and exhibits a rich variety of dike structures, drainage systems and traces of land reclamation. The German Wadden Sea area is the most northern district of Germany, with a population of 162,200 inhabitants on the mainland and its islands and Halligen (Statistisches Amt für Hamburg und Schleswig-Holstein 2014). Alongside a declining agricultural sector and an emerging wind energy sector, its most important economic factor is tourism.

At the end of the 1980s, the aforementioned uniqueness of this natural ecosystem triggered an intensive scientific research programme. Brought together under the conceptual umbrella of ecosystem research, this programme had scientists from the national park authorities and other research institutions in Germany study and analyse the many biological and other natural processes of this intertidal coastal zone. Driven by a conservationist agenda, the establishment of the Nationalpark Schleswig-Holsteinisches Wattenmeer in 1985 and its considerable enlargement in 1999 led to concerted and sometimes fierce local resistance, with the local population particularly

critical of the process of implementation (Jakubowski-Tiessen 2007; Jeß 2014; Steensen in this volume). Based on a scientific rationale, the synthesis report (Stock et al. 1996) almost exclusively investigated the natural side of the North Frisian Wadden Sea and only vaguely touched upon socio-cultural aspects or elements of cultural heritage. The situation spiralled out of control when the synthesis report was publicly presented during a hearing in Tönning in 1998, because participatory processes acknowledging local opinions and alternatives had been blatantly left out in favour of a scientific, evidence-based assessment of the natural landscape.

The cultural heritage dimensions of the North Frisian landscape were addressed later and documented in the LANCEWAD project while — once again — local resistance arose when attempts were made to apply for world cultural heritage status (Krauß & Döring 2003). In the course of the usual consultation process, which was undertaken by Peter Burbridge (2000), representatives of the Environmental Administration of Schleswig-Holstein, regional politicians of all parties and representatives of UNESCO met local people from different North Frisian municipalities and parishes. These were mainly represented by regional and local activists gathering under the well-known banner of the 'Initiative for the Cultural Landscape of Eiderstedt' (Krauß 2006). The problem with the UNESCO assessment process was that it almost exclusively addressed the North Frisian Wadden Sea in terms of a cultural landscape highlighting its natural features in aesthetical terms while at the same time using material objects such as historical monuments, archaeological sites or museum artefacts as cultural evidence. All these objects were 'stripped of their actual cultural, social and political meanings and neatly placed into an already existing administrative context' (Krauß 2006: 42) before public consultation began in the first place, not acknowledging the historically and coevally grounded topophilia (Tuan 1974) enmeshed in people's lifescapes (Convery et al. 2009) and essential for an integrated and symmetric (Latour 1993) management process.

Littoral landscapes and places: Theoretical and methodological aspects

The littoral landscape of Northern Frisia is ontologically not only constructed as a material landscape but has also been conceived in the past as an intangible entity embodying social, cultural and political processes. Kenneth Olwig (2002: 17) has emphasised different dimensions of this aspect by showing that 'custom and culture defined a Land, not physical geographical

characteristics — it was a social entity that found physical expression in the area under its laws'. Even nowadays, coastal dwellers refer to these aspects by using the familiar Frisian saying 'God created the sea, the Frisians created the coast', expressing what Olwig (2002: 10) calls 'the place of a Frisian polity'. Such a contemporary and identity-related immersion into the littoral landscape raises the question of how this intangible sense for the North Frisian coast could be considered and productively used in the context of landscape heritage. Its nonmaterial dimensions are challenging, as most heritage-related activities on the German North Sea coast are concerned with the 'materiality of the past and associated imperatives of conservation' (Waterton & Watson 2013: 546), displaying a management-oriented rationale in terms of emerging cultural tourism. Concern about materiality and its conservation intermingles with scientific and business activities at the expense of a variety of local and regional engagements with the past. Hence, its reading is often characterised by dominant conservation discourses and ascriptions of meaning that suppress the multiple and local significances nestling in landscapes and in heritage sites (Smith 2006).

To theoretically symmetrise this imbalance, a more practice-oriented approach in heritage is needed to emphasise the relevance of personal and everyday interaction with heritage and heritage landscapes in terms of the physical, the discursive and the emotional. Furthermore, it should not be forgotten that these processes and practices happen in spatial settings that go beyond representation and call for an inclusion of the 'sensual, haptic, corporeal, kinaesthetic' (Cromby 2007: 96) and affective. These aspects productively 'de-ontologise' heritage and refer to a relational understanding that questions the idea of heritage as a past or historicised thing barred from all sorts of contemporary engagements and experiences. On the contrary, it brings it back into human livelihoods (Ingold 2000) and day-to-day encounters of people, places and objects. Such affordances (Gibson 1977) contribute considerably to creating meaning and refer to the fact that 'heritage is a social and cultural process' (Waterton & Watson 2013: 555). It is therefore necessary to combine a conservational and representational understanding of heritage with a more relational and process-oriented approach, which might help to tease out the multiple human articulations of and engagements with heritage.

Engagements with the landscape

A good starting point for refashioning the relationship between representation and experience is the concept of landscape (Wylie 2007) as it

conceptually meanders between the obvious materiality of the land and its manifold socio-cultural connotations (Crouch 2010). Especially the analysis of intangible associations might help to uncover aspects of identity, elements of an economic and social history and a sense of place or coast, which grows 'dense with a social imaginary — a fabulation of place contingent on precise modes of sociality [...] that give place a tactile, sensate force' (Stewart 1996: 137). It is exactly these aspects of landscape that are of vital interest in the present context because they offer an opportunity to analyse the impalpable cultural meanings ascribed to and social experiences made in the North Frisian coastscapes (Döring & Ratter, *in press*). Hence, landscapes are theoretically conceived as the material and intangible outcome of social processes exhibiting 'values through a community's knowledge of [and immersion into] the past' (Waterton 2005: 314). These aspects also apply to the convergent concept of place (Casey 2002), as it represents an analytical category aimed at disentangling the dimensions of the 'human experience of space and place' (Buttimer & Seamon 1980) in terms of a place-attachment (Manzo & Devine-Wright 2014) that helps to unravel and systematise the representations and experiential dimensions made in places and landscapes. The methodological question, however, remains what approach might be able to meet the theoretical requirements outlined above, even if only in part?

Acknowledging the representational and experiential requirements of our theoretical approach, we decided to apply the mobile method of walking or go-along interviews (Kusenbach 2003). This method enabled us to gather data for analysing a place-based perspective of the North Frisia coastscapes on site and while moving through it. It is theoretically based on a philosophy of walking that puts emphasis on the walker who 'inhabits the landscape and dwells within it for the duration of his or her journey' (Gros 2015: 147). This dwelling perspective highlights the relational engagements and experiences the interviewees build with their surroundings (Ingold 2000: 186) during the interview stroll in the coastal landscape. In doing so, go-along interviews offer a substantial insight into experiences tied to places and engagements with landscapes, and they also situate the interaction between research subjects in concrete places and locate the interviewer in the spatial experience of the interviewee (Macpherson 2016: 429-431). In practical terms, eleven walking interviews were conducted on the islands of Sylt, Amrum and Helgoland, and these were preceded by in-depth sedentary interviews to get into contact with local people. Once interviewees agreed to give a walking interview, an appointment was made and they were asked to take a route or path of their choice or one they would like to show the interviewer. Interviews lasted between 68 and 147 minutes and were structured by an

interview guide with questions revolving around people's sense of place. They were taped by a mobile tape recorder, transcribed verbatim and analysed according to the requirements as outlined in Grounded Theory (Charmaz 2014; Corbin & Strauss 2015). This approach was chosen because it places emphasis on the inductive development of analytical categories from data to avoid preconceptions and problems resulting from a vicious circle. Once main themes or topics emerged during the process of analysis, text segments were grouped under headings. Data was separately analysed, coded and discussed by the two authors of this chapter. This procedure offered the opportunity to empirically disclose a thematic structure engendering each interview in order to develop a coherent interpretative basis and to unveil representative convergences among all interviews conducted.

Senses of place in the North Frisian Wadden Sea

As we outlined in the previous section, to theoretically conceptualise heritage and landscapes purely from a material or representational point of view would be to miss the dynamic and experiential dimensions of the senses of place on the North Frisian coast. A more inclusive approach would carefully consider the relational intermingling of human beings with the pasts and presents nestling in coastal landscapes, and this became apparent in the interviews. All in all, the four categories of aesthetic visual elements, genealogy, identity and spirituality emerged in the course of the grounded analysis. Sentiments expressed frequently, such as in the following quote, display an aesthetic appraisal of the North Frisian Wadden Sea coast:

Now, here I'd like to stop for a moment, ok? I tell you something, ah, this landscape with all its colours and these smells, so typical for the mudflats. Especially during a storm, that is really breathtaking. And this vast expanse of the Wadden Sea, that makes me feel free and, yeah, I am really free ah, I can think freely. Very much feels like Nolde and the Skagen School of painting doesn't it? They really got a feel for the beauty here. (16)

What we can see here and in other examples of this category is an aesthetised encounter with the North Frisian coastscape as seen through the eyes of the interviewee. The subject blends visual aspects of colours and endless sky with non-visual aspects such as smells that characterise the atmosphere of the place and alludes in art-historical terms to a long-standing fascination for this type of landscape. The reference to the storm, furthermore,

implicitly refers to aspects of the sublime and the beauty well-known in artistic theory since the nineteenth century. These reflections reveal an emotional excitement, while the experience of extensiveness is explained in terms of the feeling of freedom. Emotional interjections such as 'ah' or 'oh' exhibit a non-verbal emotional immersion and appreciation of the very spot and the surrounding littoral landscape.

Comparable aspects also hold true for the differently structured category of genealogy. It is mainly based on concepts of a backward lineage and forward-oriented insinuations in terms of family ties. These are in many cases combined with ritualised practices blending the material and temporal dimensions through the lens of place, and by doing so merging past and future into the present:

My father and I, we used to walk along this way and he did the same with his grandchildren, my son and my brother's son and daughter. I think that the environment has changed a lot since then but we used these stones to get 'out to the sea', as we said. I remember in winter with all the whiteness and the icicles hanging about. That was some sort of a magical place to all of us. (I4)

Furthermore, in the quote a genealogical position is constructed that is explicitly tied to the place through spiritual experiences. These blend nature and culture into one and provide a socio-spatial connection between family and landscape: it becomes a material anchor and a place to reflect and structure family-related temporalities.

Coastal places are also used for relating a personal identity to a locally or regionally constructed one. In these cases, certain places or stretches of the coastal land are used as a medium through which the self is constructed or reasoned about. A prominent and overarching example is the often articulated Frisian struggle against the sea, which materially more or less produced the current shape of the North Frisian coast. Although land reclamation came to a halt in the 1970s, such thinking is still contained in the collective memory of local people and represents a repertoire for characterising oneself as a Frisian as opposed to the regional or national identities:

But back to your question, yes that is Heimat for me, to live here on the coast with all this nature around [...]? Resistant as we have been here for centuries, we made this coastal stretch of land arable and it is the right place for me as a Frisian, as someone living on this coastal island. Look down there. 26 years ago we went there with the pram and my

daughter. New parents, my husband and me at that time [...] There are some historical places as well. They have found pearls and other things. Viking stuff, so we were a trading post. (I11)

Besides the mythologised framing of the North Frisian coast as the place of a continuous battle between the Frisians and the sea, a strong historicised connection is expressed by 'we were a trading post' and enriched with aspects of the family history. A specific emplacement on the coast is used for merging historical and biographical elements and illustrating this with family practices. This displays a landscaped identity showing that coastal dwellers 'are just as much part of the landscape they live in as are so-called "natural" features' (van Dommelen 1999: 279).

Finally, the North Frisian coast becomes a material and intangible place for reflections on spiritual aspects. Here, specific sites in or elements of the landscape are often used as a link for reflecting on the meaning of life and the question of what comes afterwards. Such aspects can be seen in the following example where the rocks of Helgolandian upland become a projection surface for the relationship between man and nature:

Yeah, this is a place I very much like. Do you see the rocks there, yeah the ones over there, that steeply go uphill? Ah, there you can see the full power of nature. [...] They will still be here when I have found my peace [...] when I am gone. Sometimes I ask myself what that might feel like and what state of being that might be. (I5)

Here, the encounter with the geological forces that triggered the rising of the rocky uplands introduces spiritual contemplations about the position of man in the context of the long-standing forces of nature. This process is reflected upon in terms of transience and the question of where one goes in life and what happens after one dies — an aspect that can be found, though not exclusively rocky-coast-related, in all our interview data.

In conclusion, one can say that the North Frisian Wadden Sea coast is engendered through multiple socio-spatial constructions such as aesthetic visual elements, genealogy, identity and spirituality. These not only provide a multi-layered insight into the different dimensions of a sense of coast or conceptualise the littoral landscape as a cultural passage point but, in fact, all these intangible aspects are embodied in the physical land, which alludes to different ways of currently experiencing the coast in terms of an era of a Frisian landscape polity, Viking remains or one's own family history. Seen from a theoretical standpoint, the physical and the

discursive dimensions represent acts of 'mindscaping' (Olwig 2002: XXXI) that interact with relational experiences made and practices performed along and with the North Frisian coastscape: they are one important way of knowing, experiencing and engaging with the coast's present pasts and present presents productively complementing concepts of mapping and conserving cultural and landscape heritage.

Whose senses of coast? The need for a more humanistic approach

This chapter has investigated the multiple ways in which people relate to the present pasts and present presents of the North Frisian coast. This revealed multiple forms of how people make sense of and personally engage with their littoral landscapes, including the intermingling with material places, historical facts and intangible values implicated in the littoral landscapes. Although concrete community aspirations did not materialise in the course of our interviews, the analysis provides food for thought about a more symmetric way for seeing landscape heritage and heritage in general because landscape holds the potential to 'gather experiences, histories, memories and thoughts, and figures in the way of life' (Waterton 2005: 317) of coastal communities. Our analysis indeed suggests that society, landscape and heritage — which apparently identifies and defines the identities of communities — belong together and should be included in management processes. This aspect, however, holds consequences for the status of 'stakeholders': their role might be transformed from that of a person to be informed or educated to that of active involvement and participation in terms of citizen stewardship. This would not only mean that additional epistemologies should be included in cultural heritage but also that the role of the expert would undergo considerable change. Heritage managers might then become facilitators of representing different communities in different situations and enable processes of negotiation in which more meanings and connected values might enter the management arena to enrich debates. Finally, the more humanistic approach, as sketched out here, holds the advantage of being more contextual and dynamic because socio-cultural engagements with the North Frisian coast and its pasts pave the way towards the question of whose sense of coast is to be represented. Looking back on the disputes revolving around the implementation of National Park Schleswig-Holsteinisches Wattenmeer and the tedious process of overcoming controversies by using different kinds of participative strategies, we believe that there would be no region better suited for such a real-world experiment as the North Frisian coast.

References

- Burbridge, P. (2000). *The nomination of the conservation area as a world heritage site. A feasibility study for the trilateral Wadden Sea Cooperation/Common Wadden Sea Secretariat*. Common Wadden Sea Secretariat: Wilhelmshaven.
- Buttimer, A. and Seamon, D. (eds.) (1980). *The human experience of space and place*. Dundee: Croom Helm.
- Casey, E. (2002). *Representing place: Landscape painting and maps*. Minneapolis: University of Minnesota Press.
- Convery, I., Bailey C., Mort M. and Baxter J. (2009). Altered lifescapes. In Döring, M. and Nerlich, B. (eds.), *From Mayhem to meaning: The cultural meaning of the 2001 outbreak of foot and mouth disease in the UK*, 150-171. Manchester: Manchester University Press.
- Corbin, J. and Strauss, A. (2015). *Basics of qualitative research: Techniques of procedures for developing grounded theory*. London: Sage.
- Charmaz, K. (2014). *Constructing grounded theory*. London: Sage.
- Cromby, J. (2007). Towards a psychology of feeling. *International Journal of Critical Psychology*, 21, 94-118.
- Crouch, D. (2010). Flirting with landscape relationally. *Cultural Geographies*, 17, 5-18.
- Döring, M., & Ratter, B. (2017). Coastal landscapes: The relevance of researching coastscapes for managing coastal change in North Frisia. *Area*. doi: 10.1111/area.12382
- Fischer, L. (ed.) (1997). *Kulturlandschaft Nordseemarschen*. Bredtstedt/Westerhever: Hever Verlag.
- Gibson, J.J. (1977). The theory of affordances. In Shaw, R. and Bransford, J. (eds.). *Perceiving, acting, and knowing: Toward an ecological psychology*, 67-82. Hillsdale: Lawrence Erlbaum.
- Gros, F. (2015). *A philosophy of walking*. London: Verso.
- Ingold, T. (2000). *The perception of the environment. Essays in livelihood, dwelling and skill*. London: Routledge.
- Jakubowski-Tiessen, M. (2007). Ökodiktatur? Nein danke! Der Streit um den Nationalpark Schleswig-Holsteinisches Wattenmeer. In Allemeyer M., Jakubowski-Tiessen M. & Rus-Rufino S. (eds.), *Von der Gottesgabe zur Ressource: Konflikte um Wald, Wasser und Land in Spanien und Deutschland*, 85-96. Essen: Klartext Verlag.
- Jeß, E. (2014). Das Wattenmeer als Nationalpark. In: Jakubowski-Tiessen, M., Masius, P. and Spenger, J. (eds.), *Schauplätze der Umweltgeschichte in Niedersachsen*, 25-36. Göttingen: Universitätsdrucke.
- Krauß, W. and Döring, M. (2003). Zwischen Globalismus und Populismus: Die Debatte um die Anmeldung des Wattenmeers als UNESCO-Welterbe. In Döring, M., Engelhardt, G., Feindt, P. and Oßenbrügge, J. (eds.), *Stadt-Raum-Natur: Die Metropole als politisch konstruierter Raum*, 135-150. Hamburg: University Press.

- Krauß, W. (2006). The natural and cultural landscape heritage of Northern Friesland. *International Journal of Heritage Studies*, 11, 39-52.
- Kusenbach, M. (2003). Street phenomenology: The go-along as ethnographic research tool. *Ethnography*, 4, 455-485.
- Latour, B. (1993). *We have never been modern*. Harvard: Harvard University Press.
- Macpherson, H. (2016). Walking methods in landscape research: Moving bodies, spaces of disclosure and rapport. *Landscape Research*, 41, 425-432.
- Manzo, L. and Devine-Wright, P. (eds.) (2014). *Place attachment: Advances in theory, methods and applications*. London: Routledge.
- Olwig, K. (2002). *Landscape, nature and the body politic. From Britain's renaissance to America's new world*. Madison: The University of Wisconsin Press.
- Smith, L. (2006). *Uses of heritage*. London: Routledge.
- Statistisches Amt für Hamburg und Schleswig-Holstein (2014). *Bevölkerung der Gemeinden in Schleswig-Holstein, 4. Quartal 2013*. Fortschreibung auf Basis des Zensus 2011. Retrieved from http://www.statistik-nord.de/fileadmin/Dokumente/Statistische_Berichte/bevoelkerung/A_I_2_S/A_I_2_vj134_Zensus_SH.pdf
- Stewart, K. (1996). An occupied place. In Feld, S. and Basso, K. (eds.), *Senses of place*, 137-165. Texas: School of American Research Advanced Seminar Studies.
- Stock, M. et al. (1996). *Ökosystemforschung Wattenmeer Synthesebericht: Grundlagen für einen Nationalparkplan*. Heide: Boyens Buchverlag.
- Van Dommelen, P. (1999). Exploring everyday places and cosmologies. In Ashmore, W. and Knapp, B. (eds.), *Archeologies of landscape*, 277-285. Oxford: Blackwell.
- Vollmer, M., Guldberg, M., Maluck, M., Marrewijk, D. and Schlicksbier, G. (eds.) (2001). *Landscape and cultural heritage in the Wadden Sea Region – Project Report*. Wadden Sea Ecosystem Report No. 12. Wilhelmshaven: Common Wadden Sea Secretariat.
- Wylie, J. (2007). *Landscape*. London: Routledge.
- Tuan, Y.-F. (1974). *Topophilia: A study of environmental perception, attitudes, and values*. New York: Columbia University Press.
- Waterton, E. (2005). Whose sense of place? Reconciling archeological perspectives with community values: Cultural landscapes in England. *International Journal of Heritage Studies*, 11, 309-325.
- Waterton, E. & Watson, S. (2013). Framing theory: Towards a critical imagination in heritage studies. *International Journal of Heritage Studies*, 19, 546-561.

About the authors

Dr. Martin Döring is a postdoctoral research fellow at the Institute for Geography at the University of Hamburg and the Department of Human

Dimensions of Coastal Areas, Institute of Coastal Research, at the Helmholtz-Zentrum Geesthacht in Germany. He currently investigates the regional framing of climate change and extreme weather events in Northern Germany, especially the Wadden Sea area including the islands and holms. His work focuses on the areas of environmental discourse, coastal research, ecolinguistics, science studies and methods in qualitative research.

Prof. Beate M.W. Ratter is professor of integrative geography and coastal research at the University of Hamburg and jointly holds the position as head of the Department of Human Dimensions of Coastal Areas, Institute of Coastal Research, at the Helmholtz-Zentrum in Geesthacht, Germany. Her academic work focuses on the analysis of resource and environmental management strategies in times of climate change including environmental, nature and climate change perception in different regional cultures, especially in coastal areas and on small islands.

21 The Wadden Sea coast challenged by sea level rise

Karsten Reise

Abstract

Global warming will ultimately entail a sea level rise of several metres. However, the rate at which it will rise in the future is still uncertain. The question arises whether dikes built to protect against storm surge flooding will also suffice against a long-term sea level rise on the Wadden Coast. Although much higher dikes are technically possible, costs are likely to escalate. Therefore, no-regret adaptations relieving the outer dike line should be considered as supplementary precaution. Seaward of the dikes, sand nourishments from offshore to inshore could stabilise island positions, supplement sediment accretion rates on tidal flats, and replace stone revetments and brushwood groins. In addition to resulting in wave attenuation, these coastal defence measures would integrate with the landscape and support ecological or touristic functions. Landward of the outer dikes, housing should be above level ground by restoring traditional dwelling mounds, building stilt houses and floating homes. Roads should run on dams. Polders could be permanently inundated, either seasonally or tidally to stop soils from further sinking. More water would diversify the landscape as well as the regional economy with aquaculture, floating gardens and greenhouses. Living with more water could also attract more visitors enjoying water sports and nature. Together, this would spread the risk during disastrous flooding and initiate stepwise the sustainable transformation of the Wadden Coast faced with an unprecedented sea level rise.

Keywords: dikes, coastal futures, coastal zone management, sea level rise, Wadden Sea

A global sea level rise follows slowly but inevitably from anthropogenic global warming. This rise is the sum of the thermal expansion of oceanic waters, the meltwater of land ice flowing into the ocean, and polar ice sheets sliding into the sea. Higher sea levels will affect coastal flatlands by inundation and soft shores by erosion. The Wadden Sea coast from the northern Netherlands through the German Bight into southern Denmark is composed of vast shallows — the mudflats, where one can wade across at low tide, along exposed dune islands with sandy beaches, tidal gullies and estuaries, and a wide coastal plain secured by earthen seawalls (dikes) against episodic flooding. The Wadden Sea and Waddenland will not simply submerge when the sea rises, nor will coastal people simply evacuate. They will defend their land, raise dikes, create a buffer against shoreline erosion with sand shipped or piped from offshore, continue trapping suspended sediments to gain land, or perhaps adapt to more water with floating townships. This contribution is not to warn about a coming deluge but is meant to discuss how the Wadden Sea coast can cope with higher levels of the sea.

Debating timely adaptive transformations of the Wadden Sea coast may help us to find viable, no-regret and multiple benefit steps that could prolong the integrity and coherence in this coastal region. A sense of transnational and intergenerational solidarity should steer attempts to master the long-term challenge of sea level rise by precautions rather than by flood disasters. In my introduction, I acknowledge the outstanding role of dikes in the history of the Wadden Sea coast. Second, I discuss the prospects of a sea level rise challenging these dikes. Then I suggest timely coastal transformations by employing more sand nourishments from the sea and accommodating more water on land to stop subsidence and to initiate sedimentation. This would essentially mean living with more water rather than less. These considerations are meant to champion sustainability with respect to natural and cultural values and to encourage the continuation of previous discussions (i.e., Ahlhorn & Meyerdirks 2010; CWSS 2010; De Vriend & Van Koningsveld 2012; Fischer & Reise 2011; Helmer et al. 1996; Hofstede & Stock 2016; Michael Otto Stiftung 2010; Reise 2015, 2017). My suggestions are also an attempt to stop the further stonewalling of Wadden shores.

Dikes

Hiking on modern dikes offers spectacular panoramic views over the contrasting realms of the Wadden Sea and Waddenland. Dikes are more than a single-minded pursuit for maximising safety. They constitute a

symbol of human victory over the rambunctious sea. They protect against drowning, secure property, and allow for dealings and lifestyles similar to further inland. Dikes have removed the sea from the coastal land.

When people began settling on fertile salt marshes, they built dwelling mounds to stay dry during storm surges. This did not interfere with ongoing supplies of fresh sediment with each inundation in their surroundings, which was thus growing with the sea. However, untimely inundations threatened livestock and harvests of hay and other crops. Presumably, this is what sparked dike building. Besides preventing the land from being flooded by the sea, dikes also intercepted rainwater runoff, which could inundate embanked land with fresh water. An elaborate system of ditches and canals enabled the draining of wet terrain, and excess rainwater became sluiced through dikes toward the sea when tides were low. However, the dikes and their associated water management had several side effects.

Dikes expelled further sedimentation on the enclosed land, and draining caused shrinking soils. An inverse topography emerged, with embanked land subsiding below the level of the sea. Where bogs were drained to excavate peat, this coastal inversion became aggravated. Not surprisingly, such an unsustainable situation entailed disasters when storm surges breached feeble dikes. Losses of livestock and people were particularly grave where dwelling mounds had lost their relative height. In response, dikes were built ever stronger and higher. They became trusted, and gradually new farmsteads were no longer built on dwelling mounds at all. Farming and fishing were no longer combined where dikes blocked creeks meandering from the sea to the land. Building massive new dikes required external subsidies and investments. Due to ongoing subsidence and sea level rises, it became necessary to pump water from sunken hinterland upwards to the sea to keep this land dry. Finally, water reservoirs were built by embanking tidal flats, where rainwater was stored when strong onshore winds causing high water levels prevented discharge to the sea.

Dike-building triggered a cascade of effects on landscape and coastal societies. With the accelerating sea level rise in the wake of anthropogenic climate change, the subsiding Waddenland is in peril. Although higher dikes are technically possible, the costs of building them will escalate. As an extreme example, at Nordstrand in the northern Wadden Sea, upgrading only 2.5 kilometres of dike entailed costs of 32 million euros (Klimaschutz Deich am Nordstrand 2017). This is almost half of the annual budget for coastal defence in the state of Schleswig-Holstein. Columns of sand penetrating soft ground to prevent subsidence of the massive new dike particularly increased the costs. Such precautions against storm surges raise questions of cost-effectiveness and the capacity to meet financial obligations for future dikes.

Sea level

Changes in sea level are trivial on steep coasts but highly relevant where the slope from the sea to the land is as flat as on the Wadden Sea coast. Although dikes and dunes interrupt this extreme flatness, the likelihood and magnitude of the future sea level rise may question their long-term ability to secure coastal business as usual.

The level of the sea rose by about three millimetres per year from 1993 to 2014 (Chen et al. 2017). This is twice the average calculated over the last two centuries but may not seem threatening for a coast where tidal ranges and storm surge heights are measured in metres. However, long-term projections of climate scenarios suggest a possible range of 25 to 52 metres higher than today in the course of the next few thousand years, caused by greenhouse gas emissions in this century (Clark et al. 2016). We are about to leave the comfortable phase of the late Holocene with a relatively stable climate and sea level, which is what coastal societies were used to. The disintegration of polar ice sheets could raise the sea level in pulses, as happened in the last interglacial period at a similar global temperature as today (O'Leary et al. 2013). Then, the sea level rose by four to six metres within a few centuries. Large chunks of ice slipped into the ocean. This could happen again and would be a fundamentally new situation for populated coasts.

There is widespread agreement on an accelerating sea level rise. Most estimates are for an increase of around one-half to one metre by the end of this century, and more than two metres in the coming centuries in the North Sea region (Wahl et al. 2013; Katsman et al. 2011, Slangen et al. 2014). However, the likelihood cannot be inferred from current ongoing measurements of sea level rise. Sea level rises in the future will depend primarily on ice sheet dynamics in both polar regions (DeConto & Pollard 2016; Hvidberg 2016; Bakker et al. 2017). The known 'unknowns' of these poorly understood processes may be reduced by further research. However, as with avalanches or earthquakes, the exact timing will remain essentially unpredictable.

This double bind may block long-term strategies for coastal adaptations. On the other hand, many coastal challenges require timely debates. Examples are the lifetimes of coastal defence structures, the effective reach of land use planning, time elapsing from the first planning to final decisions on such controversial coastal issues as dredging estuaries deeper, building storm surge barriers, extending or building new harbours, removing coastal power plants, or giving permissions for drilling gas and oil. All these have implications that reach beyond or this century. Assumed rates of sea level rise or possible sea levels in the next century will likely have effects on such

coastal measures and on public opinion. Uncertainties call for no-regret measures and the rejection of irreversible ones.

Sand

Facing an accelerating sea level rise, the entire Wadden Sea coast may run into a negative sediment budget. Therefore, transferring sand from offshore to inshore sites could supplement natural sedimentation in an attempt to keep up with the sea level rise. The North Sea bottom has plenty of sand, mostly originating from a Palaeogene river delta and Neogene glacial depositions. This offshore resource of sand should not only be used for compensating actual inshore losses. With a precautionary strategy, the costs for hard coastal defences and introducing alien materials into the coastal environment could be avoided. Precautionary sand nourishments constitute a long-term and no-regret adaptation by growing along with the level of the sea.

At exposed Wadden Sea island beaches, repeated sand nourishment to hold the line has already become standard practice (CWSS 2010; WWF 2015). Besides holding the line, such sand supplies have the benefit of maintaining the quality of recreational beaches and could support dune-building (Bakker et al. 2012). Moreover, sand washed away may supplement downstream sediment budgets, i.e., in adjacent tidal basins. To maintain tidal flats there, offshore sand could also be dumped into tidal channels for natural redistribution. Saving the area and level of tidal flats by such means would benefit coastal defence by absorbing wave energy and would support nature protection by preventing the loss of feeding grounds for spectacular flocks of coastal birds (Hofstede & Stock 2016).

Offshore sand could be used to cover armoured shores or cushion dikes with ridges of dunes. This could spare other enforcements. It offers a more natural transition between the land and the sea for the sake of both nature protection and recreation. Furthermore, rectangular fields of brushwood groins facilitating sediment accretion could be replaced by sand bars or sandy hooks supplied by sand nourishment. On their lee sides, mud deposition could take place and salt marsh succession could begin. Nourished dunes, beaches, sand bars and sandy hooks may last for several decades at sheltered inshore positions and would be a better fit with the Wadden Sea World Heritage status than the prevailing artificial hard structures. Sand washed away from sites of nourishment within decades would remain in the Wadden Sea for centuries, supplementing the inshore sediment budget for growing with the level of the sea.

Water

In the Waddenland, old dikes or their remnants bear testament to the history of claiming or reclaiming land. Polders with their dates of embankment and their depth relative to the sea level further reveal the history of water control for improving the use of land. However, the divergence between sunken land level and the rising sea is aggravating. Could this unsustainable development be mitigated with a comeback of more water?

Higher water levels could stop soils from shrinking. Instead of emitting carbon dioxide, wet polders with marsh plants could serve as carbon sinks for the atmospheric excess of CO₂. At the same time, such polders would become rich in wildlife and could attract tourism. Wet polders could also be used for harvesting reeds and as pasture for water buffaloes or wild horses. In the outer dike, sluices could be rebuilt for letting tidal waters flowing back and forth. The created tide polders could accrete sediment from flood waters (such as with Luneplate Island on the River Weser near Bremerhaven). Particularly under estuarine conditions, one can expect high rates of sedimentation that could raise the level of the embanked land back to the level of the sea (Reise 2015). Tide polders could be used for aquaculture, as recreational areas, and to restore coastal biodiversity. However, such a reversal of the traditional land use practice is bound to meet resistance, and no concerted projects have yet been undertaken.

A main reason for this dilemma may be that more water in the landscape entails not only new ways of land use but also infrastructural adaptations. Roads need lifting onto dams. Together with existing old dikes, this could compartmentalise the landscape. Individual polders could then be managed in their own way with regard to water: dry arable land, seasonal or tidal flooding or even permanent inundation. Traditional dwelling mounds would be pre-adapted toward returning water. Houses on level ground could be lifted onto new mounds or set on stilts or floats.

Such far-reaching transformations would be only possible in viable steps. The partial loss of arable land and pasture could be compensated by an improved landscape diversity attracting tourism and residential areas. Floating homes would be accessible by boardwalks or water taxi. Floating gardens or greenhouses could be combined with various forms of aquaculture. Central rescue towers on mounds for emergency in case storm surges breach dikes could serve manifold functions when not needed for rescue: panorama restaurant, fire department, health station, etc.

Creating floating infrastructures or raising them to a higher level spreads the risks that hitherto were mitigated entirely by outer dikes. Living in the

low marshes would be less vulnerable. Traditional farm houses, churches or even entire villages on dwelling mounds would be accentuated in the transformed landscape. Canals could regain their former importance. The rewetted coastal landscape would become more distinct again from landscapes further inland. This also applies to the concomitant lifestyle adjusted to more water. The mosaic structure with polders of various water levels would mean a diversified economy replacing the current hegemony of agriculture.

Outlook

The sea level rise should be kept within limits by proper climate policies. However, even though the 2015 Paris Agreement intends to keep 'well below' 2° Celsius of global warming, inherent inertia will cause the sea level to rise for many centuries to come. As communities that will be directly affected by this, societies in coastal flatlands adjacent to a rough North Sea should pioneer the reduction of greenhouse gas emissions. Power plants fired with coal imported from overseas and for which estuarine waterways have to be dredged ever deeper (i.e., at Eemshaven, Wilhelmshaven, Hamburg, Esbjerg) are intolerable on a coast rich in wind energy and subject to concomitant sea level rise.

Although a sea level rise is certain to occur, the rate of sea level rise is still being debated and is often believed to be occurring slowly enough to be able to postpone adequate adaptations. However, merely reinforcing dikes will be at the expense of the generations to come if this is not combined with a general concept of growing with the level of the sea via sand nourishments and by accommodating more water on land. Given the length of time we are talking about here, we can expect many environmental and societal conditions to change just as much as the sea level. Will the coastal environment remain healthy and economically viable? Will airborne traffic make roads and waterways superfluous? Will natural and cultural assets still be valued? Will present states and languages of the Wadden Sea coast persist? Spiritual domains may change entirely. In contrast to such imponderables and vagaries, we can be reasonably sure that the sea level will be much higher than today and that dikes alone will not suffice. Acting accordingly now and enjoying the benefits of timely coastal transformations would be more fulfilling and meaningful than postponement.

References

- Ahlhorn, F. and Meyerdirks, J. (2010). *Speichern statt pumpen*. Wilhelmshaven: Nationalpark- und Biosphärenreservatsverwaltung Niedersächsisches Wattenmeer.
- Bakker, M., Van Heteren, S., Vonhögen, L., Van der Spek, A., & Van der Valk, B. (2012). Recent coastal dune development: Effects of sand nourishments. *Journal of Coastal Research*, 28(3), 587-601.
- Bakker, A.M.R., Wong, E.T., Ruckert, K.L. and Keller, K. (2017). Sea-level projections representing the deeply uncertain contribution of the West Antarctic ice sheet. *Scientific Reports* 7: 3880.
- Chen, X., Zhang, X., Monselesan, D., Legresy, B., Church, J.A., Watson, C.S., King M.A. and Harig, C. (2017). The increasing rate of global mean sea-level rise during 1993-2014. *Nature Climate Change* 7, 492-495.
- Clark, P., Shakun, J., Marcott, S., Mix, A., Eby, M., Kulp, S., Levermann, A., Milne, G.A., Pfister, P.L., Santer, B. D., Schrag, D.P., Solomon, S., Stocker, T.F., Strauss, B.H., Weaver, A.J., Winkelmann, R., Archer, D., Bard, E., Goldner, A., Lambeck, L., Pierrehumbert, R.T. and Plattner, G. (2016). Consequences of twenty-first-century policy for multi-millennial climate and sea-level change. *Nature Climate Change* 6, 360-369.
- CWSS (Common Wadden Sea Secretariat) (2010). *Coastal protection and sea level rise*. Wadden Sea Ecosystem 28. Wilhelmshaven: CWSS. www.waddensea-secretariat.org/sites/default/files/downloads/cps_third_report.pdf.
- DeConto, R.M. and Pollard, D. (2016). Contribution of Antarctica to past and future sea-level rise. *Nature* 531, 591-597.
- De Vriend, H.J. and Van Koningsveld, M. (2012). *Building with nature: Thinking, acting and interacting differently*. Dordrecht: EcoShape.
- Fischer, L., Reise and K. (eds.) (2011). *Küstenmentalität und Klimawandel*. Küstenwandel als kulturelle und soziale Herausforderung. Munich: Oekom.
- Helmer, W., Vellinga, P., Litjens, G., Goosen, H., Ruijgrok, E. and Willem Overmans (1996). *Growing with the sea: creating a resilient coastline*. Zeist: World Wide Fund for Nature (WWF).
- Hofstede, J.L.A. and Stock, M. (2016). Climate change adaptation in the Schleswig-Holstein sector of the Wadden Sea: An integrated state governmental strategy. *Journal of Coastal Conservation*. doi: [org/10.1007/s11852-016-0433-0](https://doi.org/10.1007/s11852-016-0433-0).
- Hvidberg, C.S. (2016). Ice sheet in peril. *Science* 351, 562-563.
- Katsman, C., Sterl, A., Beersma, J., Van den Brink, H., Church, J., Hazeleger, W., Kopp, R.E., Kroon, D., Kwadijk, J., Lammersen, R., Lowe, J., Oppenheimer, M., Plag, H.-P., Ridley, J., Storch, H. von, Vaughan, D.G., Vellinga, Vermeersen, L. L. A., R S; Wal, R. S. W. van de and Weisse, R. (2011). Exploring high-end scenarios

- for local sea level rise to develop flood protection strategies for a low-lying delta – the Netherlands as an example. *Climatic Change* 109, 617–645.
- Klimaschutz Deich am Nordstrand: ‘Alle wussten dass da Steine drin sind (2017, 23 June),’ *Husumer Nachrichten*. Retrieved from <https://www.shz.de/lokales/husumer-nachrichten/klimaschutz-deich-auf-nordstrand-alle-wussten-dass-da-steine-drin-sind-id17124761.html>.
- Michael Otto Stiftung (ed.) (2010). *Ein Zukunftsbild für eine klimasichere Wattenmeerregion*. www.michaelottostiftung.de
- O’Leary, M.J. Hearty, P., Thompson, W., Raymo, M., Mitrovica, J., & Webster, J. (2013). Ice sheet collapse following a prolonged period of stable sea level during the last interglacial. *Nature Geosciences* 6, 796–800.
- Reise, K. (ed.) (2015). *Kurswechsel Küste: Was tun, wenn die Nordsee steigt?* Kiel: Wachholtz.
- Reise, K. (2017). *Facing the third dimension in coastal flatlands*. *GAIA* 26(2), 89–93.
- Slangen, A., Carson, M., Katsman, C., Van de Wal, R., Köhl, A., Vermeersen, L., and Stammer, D. (2014). Projecting twenty-first century regional sea-level changes. *Climatic Change* 124, 317–332.
- Wahl, T., Haigh, I., Woodworth, P., Albrecht, F., Dillingh, D., Jensen, J., Nicholls, R.J., Weisse, R. and Wöppelmann, G. (2013). Observed mean sea level changes around the North Sea coastline from 1800 to present. *Earth-Science Reviews* 124, 51–67.
- WWF Deutschland (2015). *Klimaanpassung an weichen Küsten. Fallbeispiele aus Europa und den USA für das schleswig-holsteinische Wattenmeer*. Husum: WWF Deutschland.

About the author

Prof. Karsten Reise is a retired coastal ecologist from the Alfred Wegener Institute. He lives on the island of Sylt, with mud at his feet, sand in his heart and a deep desire for water. He has been professor of marine zoology, biological oceanography and coastal ecology at the universities of Göttingen, Hamburg and Kiel, respectively. His written or edited works include *Tidal Flat Ecology* (Springer 1985), *Ökosystem Wattenmeer* (Springer 1998), *Ecological Comparisons of Sedimentary Shores* (Springer 2000), *Küstenmentalität und Klimawandel* (oekom 2011), *A natural history of the Wadden Sea / Eine Naturgeschichte vom Wattenmeer* (Waddenacademie Leeuwarden 2013/2014), and *Kurswechsel Küste: Was tun, wenn die Nordsee steigt?* (Wachholtz/Murmann 2015).

22 A future for cultural history of the Dutch Wadden region

Challenges and policies in a maritime-agricultural landscape

Linde Egberts

Abstract

The Wadden Sea region has a rich and diverse cultural history and landscape that does not always find a proper place in spatial planning and policy in the region. The author investigates how the cultural-historical richness is addressed and embedded in one particular segment of the fragmented governance of the Wadden Sea area, namely the national spatial policy in the Netherlands. The changes in the ways in which cultural heritage and landscape are mentioned and framed in the course of slightly more than a decade of spatial governance are traced from a national perspective. In this period, the attitudes towards cultural heritage changed substantially: in sectoral policy, in international cooperation, and in regional and local spatial planning towards more developmental and holistic approaches. However, in the national spatial planning for the Dutch Wadden Sea area, this has not been the case. Rather, the preservation of natural values in the Wadden Sea itself has been rather successful. Cultural heritage and landscape values are integrated as a sectoral element in the 2007 Core Decision on Planning Wadden Sea but have not received much attention in its implementation. This is partly due to the narrow boundaries of the Core Decision, which strictly follows the sea dikes on the mainland and islands. By separating the sea from the land, the Core Decision fails to do justice to the complex interrelationships between the two. Strong critique led to an extensive evaluation of the policy measures and recommendations for more developmental and holistic strategies that include cultural history both in the sea and on the land. If this critique is taken to heart in the new national policy development, there will be

more room for cultural heritage to serve as a source of meaning-making in a landscape that is dynamic in essence.

Keywords: Dutch national spatial policy, heritage, Wadden Sea area

The Wadden Sea region has a rich and diverse cultural history and landscape that does not always find a proper place in spatial planning and policy in the region. The policy on landscape and cultural heritage is nationally and regionally institutionalised, resulting in a highly fragmented governance structure and thus great differences in preservation and development measures. This is perceived as a problem, as the big picture of the various approaches to cultural heritage and landscape throughout the region is lost. Moreover, it has been suggested by various authors that the dominance of nature preservation ambitions is hindering the development of integrated approaches to the landscape and planning in which interests and ambitions from various sectors are brought together. This is related to the issue of the boundaries that are chosen for the protection of the natural values of the Wadden Sea region. These include almost exclusively the Wadden Sea itself, while excluding any areas inhabited by humans in the past or the present.

In this chapter I aim to investigate how the cultural-historical richness is addressed and embedded in one particular segment of the fragmented governance of the Wadden Sea area, namely the national spatial policy in the Netherlands. This case is particularly interesting, as the Dutch national spatial policy on the Wadden Sea region is going through a process of evaluation and renewal at the time of writing (July 2017). This allows me to trace the changes in the ways in which cultural heritage and landscape are referred to and framed in the course of slightly more than a decade of spatial governance from a national perspective. The outcomes of this diachronic analysis are relevant to understanding the Dutch national government's attitude towards cultural heritage in spatial planning of the Wadden Sea area. Moreover, this chapter can be seen as a detailed study that underscores and also nuances the consensus among cultural historians and historical geographers, namely that the conceptual divide between nature and culture obstructs the development of holistic approaches to the landscape that do justice to both its unique natural as well as cultural and heritage characteristics (for this discussion, see the contributions of Döring & Ratter and Renes in this volume.)

This chapter starts with a brief description of the Wadden Sea region, after which I will introduce the conceptual framework I use for this policy

analysis. I then outline the changing role of the Dutch national government regarding heritage and spatial planning since roughly 2000. This context is important in understanding how the policy on the Dutch Wadden Sea area has since been shaped. I continue by tracing the role of cultural heritage and landscape in the current policy framework on the area, as well as the recent evaluation and revision of these measures. By doing so, I aim to draw a clearer picture of the framing of the Wadden Sea region in national policy, one that will not only be developed in lower-scale policy frameworks but will also be inscribed in the physical landscape itself.

The Wadden Sea region

The Wadden Sea region stretches from Blåvands Huk (Denmark) in the northeast to Petten (the Netherlands) in the southwest. It includes the Danish, German and Dutch Wadden islands, the shallow Wadden Sea and a substantial part of the adjacent mainland, which has historically been shaped naturally and culturally by the vicinity of the tidal wetlands, in many cases as former wetlands that have been embanked by humans over the course of centuries. Humans have influenced the geology of the Wadden Sea region for at least the last 2,500 years (Bazelmans et al. 2012), in which a landscape developed that is as much characterised by its agricultural character as its maritime features. Despite great differences, the inhabitants of the islands and mainland combined farming, fishing and trading, through which they were able to adapt and remain resilient in this coastal environment with its specific ecological and geological features (Renes 2014; Smit 1971). It is for this reason that I argue that the Wadden Sea region should be understood as a maritime-agricultural landscape, in which the cultural is strongly intertwined with the natural (Egberts 2018).

Regional identity narratives

Cultural historians, geographers and archaeologists have stressed the importance and uniqueness of the cultural heritage of the Wadden Sea region, most importantly to take a stance on improving knowledge development and preservation (Bazelmans et al. 2012; see also the other chapters in this volume), but also in order to improve the sustainable development of the mainland through tourism and to enhance the engagement of the population in the preservation and planning of the region (Krauss 2005).

These pleas for more care and attention for the cultural heritage and landscape of the area can be understood as a response to the perceived dominance of the preservation of *nature* rather than *culture*. The dichotomy emerged in the 1960s, when the values of the natural heritage of the Wadden Sea region were 'discovered' by nature activists as they started campaigning against gas drilling, land reclamation and excess. In the course of several decades, the Wadden Sea region was re-conceptualised as a natural heritage site of outstanding universal value, one that received the highest possible recognition in 2009: UNESCO World Heritage Status (see chapter 17 in this book).

The process by which this interpretation of the Wadden Sea region was shaped can be considered an *authorized heritage discourse* (Smith 2006). This concept is used to refer to the dynamic process of meaning-making in which the selection of particular parts of the past (such as artefacts, landscapes, stories and traditions) for preservation and re-use are legitimized. In the case of the Wadden Sea region, the Wadden were already perceived as a *sea* in the eighteenth century – a coherent collection of sand and mudflats covered by high tides (Engelberts 1784: 141) – but its regional heritage discourse mainly took shape under the nature conservation lobby that emerged after the Second World War. It should come as no surprise that the authorised heritage discourse was almost exclusively based on the ambition to protect the geological and ecological values of the area.

Like any other authorised heritage discourse, the one on the Wadden Sea region took shape and is continuously being renegotiated and reshaped in an arena of actors including scientists, politicians, activists, inhabitants, civil society and entrepreneurs. One of the veins in which this discourse is reflected, shaped and passed on to the future is spatial policy. I suggest framing the integration of cultural heritage in current spatial planning in the same way, namely as a practice to give the past a place in the present. Spatial policy is, of course, only one of many ways of what anthropologist Sharon Macdonald calls *past presencing* such as historical reenactments, which commodify regional products for the tourist market (Macdonald 2013).

Dutch national heritage policy: Belvedere

The place of heritage preservation in spatial planning has seen many changes in the past decades. Following the examples of surrounding countries, a reorientation of the national government took place in the Netherlands by which preservation was no longer seen as in opposition to change, planning and design. Between 1999 and 2009, the Belvedere Memorandum encouraged

Figure 22.1 Boundaries of the Core Decision on Planning Wadden Sea. The green line demarcates the Wadden Sea area, whereas the red line marks the area on which the Core Decision is applicable.



Source: VROM, 2007

an approach in which heritage was seen as an integral part of spatial planning processes. Under the slogan ‘preservation through development’, the programme funded pilot projects and policy development in which heritage was a central factor for future spatial changes. It was financed by four different ministries: the Ministry of Education, Culture & Science; the Ministry of Transport; the Ministry of Housing, Spatial Planning & the Environment; and the Ministry of Agriculture, Nature & Food Quality; plus the Directorate-General for Public Works and Water Management. Being successful in fueling new approaches to heritage, some of the Belvedere legacies have been integrated into the Modernisation of Heritage Management (Modernising Monumentenzorg) (Janssen et al. 2014).

The Belvedere Memorandum funded many pilot projects. The New Dutch Water Defence Line was one of them, which aimed to redevelop the defence structure that was developed in the nineteenth and twentieth centuries to protect the cities in the west of the Netherlands from potential attacks from the east. The 85-kilometre defense line was hardly known to the public and preserved in fragmented ways. The bunkers and other built objects received more attention from preservationists than the dikes, sluices and canals that enabled the inundation of large areas to prevent invading armies from advancing. A strategy was developed to reconsider the Defence Line as a coherent structure and to make it recognisable for visitors. Many of the forts were opened up to the public or received a new function that enabled

their long-term preservation, being rebuilt as hotels, restaurants or nature reserves (Kalkman et al. 2001).

The Wadden area in existing Dutch national spatial policy

In the 1950s and 1960s, the national government developed serious plans for land reclamation in the Wadden Sea, for economic reasons as well as for coastal defense. After protests by the nature conservation movement, the Wadden Sea Committee advised against these large-scale plans and instead opted for a preservationist approach (Mazure 1974). In successive policy frameworks, the boundaries of the protected area have remained narrow, as they included only the uninhabited areas (the tidal flats and the sea) and excluded any areas where people live. In this way, the decision-makers seem to have avoided a potential conflict between nature conservation and spatial developments on land. But at the same time, it arbitrarily divided the Wadden Sea area into two different zones (Schroor 2008): one where nature should be preserved as pristine (and humans and their history should be kept more or less out of it) and one where inhabitants, entrepreneurs, farmers and visitors negotiate on land use without really taking the relationship to the Wadden Sea into consideration.

The change in attitude that the Belvedere Memorandum fuelled found its way into many spatial policy plans of national, regional and local governments, but this is not really the case for the Wadden Sea area. In 2007, the Core Decision on Planning Wadden Sea came into effect. It was the follow-up of two earlier national policy frameworks that intended to manage the Wadden Sea area as a coherent region with exceptional ecological qualities (VROM 2007). The Core Decision had an integrative approach, which meant that many different sectors were incorporated into the spatial vision of the area, which included landscape and heritage. While serving many purposes at once, the strategy aims to promote the sustainable protection and development of the Wadden Sea as a nature reserve and the preservation of its unique open landscape (VROM 2007: 11). As such, it mainly focuses on the reservation of the tidal flows (including its geomorphological processes) and the quality of water, soil and air and flora and fauna. It also strives to protect the landscape in its tranquility, vastness, open horizon and natural darkness at night. And, importantly, the Core Decision is meant to safeguard archaeological and cultural historical values (*ibid.*).

Cultural heritage, landscape and history are thus quite prominently valued in the aims of the Core Decision, albeit separately from the other

domains and sectors. Yet the boundaries of the plan are so narrow that they exclude any areas where people live, instead strictly following the sea dikes of the mainland and islands. As will become clear below, this was problematic for regulating not only human activities that influence the natural values of the Wadden Sea but also the cultural heritage value of the larger Wadden Sea area, including the embanked marshlands of the mainland. The Belvedere Memorandum had already been in force for eight years and was supported by the same ministry that developed the Core Decision: the Ministry of Housing, Spatial Planning and the Environment (VROM). And yet due to its conservationist stance towards spatial planning, the Core Decision hardly reflects the Belvedere notions at all, which stressed more offensive and developmental strategies for safeguarding cultural heritage.

Meanwhile, the trilateral cooperation in the Wadden Sea region were leading to surveys and policy recommendations on the role of heritage in spatial planning. The projects LANCEWAD (1999-2001) and LANCEWADPLAN (2004-2007) provided solid groundwork and best practices for working with cultural heritage and history in the future development of the area (Vollmer 2001; Common Wadden Sea Secretariat 2007). Unfortunately, most of its recommendations remained outside the national spatial plans in the Netherlands.

Critical policy evaluations

Some seven years after the Core Decision went into force, the Dutch government's Human Environment and Transport Inspectorate performed an evaluatory study to assess the implementation of the policy document in the policies of sixteen municipalities and three provinces in the wider Wadden Sea area (Human Environment and Transport Inspectorate 2014). The inspectorate's conclusions were harsh: it appeared that the goals set in the Core Decision had been scarcely implemented in spatial policy at the local, provincial and national levels that addressed the coastal areas and islands bordering the Wadden Sea. Particularly the preservation of darkness and the open horizon were often not concretely translated into local decision-making, not even in areas close to the Wadden Sea. The provinces generally did not see a concrete role for themselves in implementing this national policy. They saw themselves as directors of intersectoral developments in larger areas but appeared to follow their own agendas (Human Environment and Transport Inspectorate 2014). A further investigation revealed that, although the effects on the landscape were minimal in the rural areas, the regulations on darkness and the openness of the horizon had not prevented unwanted developments

in the more industrialised and urbanised areas close to and bordering the Wadden Sea (Human Environment and Transport Inspectorate 2015).

Thus, the tensions that the Inspectorate and the evaluation reveal in the implementation of the Core Decision manifest themselves not only in the world of policy, monitoring and intergovernmental cooperation. The effects of its hard contours along the sea dike are slowly becoming inscribed in the physical appearance of the Wadden Sea landscape. In recent years, large wind parks have been planned and built on this dike by energy companies, stimulated by government funding schemes for renewable energy. At Eemshaven, for example, the wind parks on the sea dike are currently being expanded by energy company RWE. In preliminary studies, the spatial policies regarding the mainland are taken into account (Arcadis 2015), presenting the sea dike as the edge of the landscape. However, there is very little consideration for the coherence between the land and the sea – perhaps the main theme of this book – as well as the vulnerable open horizon of the Wadden Sea. The narrow borders and definitions of the Wadden Sea area have in this case led to a reference framework in which the landscape coherence between nature and culture, sea and land is a blind spot.

2015-2017: Cultural history and heritage in the new national policy on the Wadden Area

Towards the end of the ten-year term of the Core Decision on Planning Wadden Sea, the policy measure was extensively evaluated on behalf of the Ministry of Infrastructure and the Environment, in which the strong criticisms of the Human Environment and Transport Inspectorate were expressed. This evaluation by Royal Haskoning DHV (2015) recognises the limited implementation of the Core Decision in lower-scale spatial policy. Moreover, it mainly concludes that protective measures of the natural environment in the Wadden Sea itself are rather effective, but the developmental opportunities it should have offered are lagging behind.

Therefore, a concrete and intersectoral development plan for the Wadden Sea region is the main recommendation for future national policy on this area. As the evaluation strictly monitored whether the aims of the policy were met, no relevant role was attributed to cultural history or landscape apart from remarks that some stakeholders had indicated a lack of integration of cultural heritage (Royal Haskoning DHV: 31, 76) and others had pointed out the lacunae in knowledge that the Waddenacademie is tasked with addressing (*ibid.*: 136).

After this evaluation, the Ministry of Infrastructure and the Environment and the Ministry of Economic Affairs began an extensive orientation phase for new policy development in 2016. Kees van Es of Wing Consultancy recommended a broad orientation that would include the exploration of ambitions, the possibilities for intersectoral cooperation, the consequences of the decentralisation of responsibilities to lower governments that has been taking place over the past years and the development of a policy monitoring project (Van Es 2016: 7). Part of the orientation included six essays written by young scholars that shed light on current developments in various domains of the Wadden Sea area (Waddenacademie 2016). One of these was an essay on cultural heritage that argued for a more holistic approach to natural and cultural values as part of the same, unique Wadden landscape (Egberts 2016).

In the final report of the policy orientation, cultural heritage and landscape gained a more central role than before, namely as one out of seven fields of ambition that are explored (the others being climate, sustainability and economy, accessibility, recreation and tourism, the Ems-Dollard Estuary, and trilateral cooperation) (P2 et al. 2017). The authors studied a vast array of national and international, regional and local policy documents dating from 2007 onwards, observing that an increasingly important role is being assigned to cultural heritage and landscape (*ibid.*: 68). The authors advise the government to continue in the line that has been taken up in sectoral heritage policy. The Cultural Heritage Agency of the Netherlands had already taken up several initiatives to provide expertise and vision on cultural heritage in coastal landscapes (2014). The authors of the policy orientation translated these sectoral foundations into four principles (P2 et al. 2017: 62-63) for the Wadden Sea area:

1. The characteristic alternation of dunes, dikes and dams should be taken as a point of departure when reinforcing coastal defence.
2. Characteristic access principles should be retained: large-scale access routes to the islands, fine-grained access routes to the quiet coast.
3. Military coastal defence structures from various periods (for example, the remains of the German Atlantic Wall and forts dating back to the Napoleonic periods) should be made more recognisable in their coherent clusters and their hierarchy made more visible.
4. The identity of coastal towns and islands should be taken as a starting point for development and restructuring.

From the orientation, it appears that local and regional governments have been increasingly successful in building cooperations in the field of tourism

and heritage that integrate the mainland as well as the Wadden Sea. One example is the joint vision of the three Wadden provinces *Wadden van Allure* (Provinces of Fryslân, Groningen, and Noord-Holland 2013). The policy orientation includes recommendations to integrate a similar, future-oriented approach in future national spatial policy on the area. The expected installment of the Environment and Planning Act (*Omgevingswet*) in 2019 will demand more holistic approaches to spatial developments. Moreover, the authors argue that the narrow focus on nature in the assessment framework could be broadened again in new executive policies to include landscape and cultural heritage values (Provinces of Fryslân, Groningen, and Noord-Holland 2013: 113). To conclude, the policy orientation can be understood as a plea for maintaining the conservationist character of the natural values of the Wadden Sea area while making more concrete plans for the developmental aspects of the Dutch government's ambitions in the region. These include a more integrative and developmental approach to cultural heritage that has already been concretised in regional and sectoral policy.

Conclusion

In the past decade of national spatial planning on the Dutch Wadden Sea area, the preservation of natural values in the Wadden Sea itself has been rather successful. This reflects the dominance of nature protection in the heritage discourse on the Wadden Sea area in general. Cultural heritage and landscape values were integrated as a sectoral element into the Core Decision but have not received much attention in its implementation. This is partly due to the narrow boundaries of the Core Decision, which strictly follows the sea dikes on the mainland and islands, thereby excluding all inhabited areas from its territory. By separating the sea from the land, the Core Decision fails to do justice to the complex interrelationships between the two. And it is precisely the coherence in this maritime-agricultural landscape that makes the Wadden Sea region unique, both in its natural and in its cultural heritage and landscape aspects. Moreover, the preservationist perspective of the Core Decision overwhelmed its developmental perspective, which made space for sustainable economic growth and intersectoral spatial developments. This is also true for the cultural heritage and landscape values, despite the inspiration and change in attitude set in motion by the national Belvedere Memorandum.

Since the issuance of the Core Decision in 2007, local, provincial and sectoral policy have moved in a hopeful direction for the integration of cultural heritage into holistic spatial developments in the Dutch Wadden

Sea area, providing interesting examples, knowledge and guidelines for new measures on a national level. If the critique on the current policy is taken to heart in new national policy development, there will be more room for cultural heritage to serve as a source of meaning-making in a landscape that is dynamic in essence.

References

- Arcadis (2015). *Landschappelijke beoordeling windpark 'Dankzij de dijken'*. Amsterdam: Arcadis.
- Bazelmans, J., Meier, D., Nieuwhof, A., Spek, T., & Vos, P. (2012). Understanding the cultural historical value of the wadden sea region: The co-evolution of environment and society in the Wadden Sea Area in the Holocene up until early modern times (11,700 BC-1800 AD): An outline. *Ocean & Coastal Management*, 68, 114-126.
- Common Wadden Sea Secretariat (2007). *LANCEWADPlan: The Wadden Sea Region: A living historic landscape*. Wilhelmshaven: Common Wadden Sea Secretariat.
- Cultural Heritage Agency of the Netherlands (2014). *Masterplan Kust en Erfgoed*. Amersfoort: Cultural Heritage Agency of the Netherlands.
- Egberts, L.R. (2016). Voorbij de harde grens: Een cultuurhistorisch toekomstperspectief op het Nederlandse Waddengebied. In Waddenacademie (ed.), *Visies op de Wadden: Zes essays ten behoeve van de Beleidsverkenning Toekomstige Rol en Ambitie van het Rijk voor het Waddengebied*, pp. 30-47. Leeuwarden: Waddenacademie.
- Egberts, L.R. (2018). Moving beyond the hard boundary: The nature-culture divide in an agricultural-maritime cultural landscape, the case of the Dutch Wadden region. *Journal of Cultural Heritage Management and Sustainable Development* doi: 10.1108/JCHMSD-12-2016-0067
- Engelberts, E.M. (1784). *De aloude staat en geschiedenissen der Vereenigde Nederlanden*, part 1. Amsterdam: Johannes Allart.
- Van Es, K. (2016). *Plan van aanpak beleidsverkenning Waddengebied*. Wageningen: Wing.
- Human Environment and Transport Inspectorate (2014). *Beleidsmonitoring Waddenzee*. Utrecht: Human Environment and Transport Inspectorate.
- Human Environment and Transport Inspectorate (2015). *Rapportage Onderzoek Waddengebied 2015: Nader onderzoek naar knelpunten gemeenten bij doorwerking Barro en fysieke effecten op de Waddenzee*. Utrecht: Human Environment and Transport Inspectorate.
- Janssen, J., Luiten, E., Renes, H. and Rouwendal, J. (2014). Heritage planning and spatial development in the Netherlands: Changing policies and perspectives. *International Journal of Heritage Studies*, 20(1), 1-21.

- Kalkman, M. (2001). *Nieuwe Hollandse Waterlinie: Nationaal project*. Utrecht: Projectbureau Nationaal project Nieuwe Hollandse Waterlinie.
- Knottnerus, O.S. (2003). Sea Level Rise as a threat to cultural heritage. In Wolff, W.J., Eessink, K., Kellermann, A. and Van Leeuwe, M.A. *Challenges to the Wadden Sea Area. The 10th International Scientific Wadden Sea Symposium, Groningen, The Netherlands 31 October – 3 November 2000*, 31-38. Groningen: Ministry of Agriculture, Nature and Fisheries.
- Krauss, W. (2005). The natural and cultural landscape heritage of Northern Friesland. *International Journal of Heritage Studies*, 11(1), 39-52.
- Macdonald, S. (2013). *Memorylands: Heritage and identity in Europe today*. London: Routledge.
- Mazure, J. and Interdepartementale Waddenzeecommissie (1974). *Rapport van de Waddenzeecommissie: Advies inzake de principiële mogelijkheden en de voor- en nadelen van inpolderingen in de Waddenzee*. The Hague: Directorate-General for Public Works and Water Management.
- P2, Rho, and ProDo (2017). Beleidsverkenning Waddengebied: Beleidsverkenning toekomstige rol en ambitie van Rijk en regio voor het Waddengebied. Deel 1: Bevindingen. Rossem: P2, Rho, and ProDo.
- Provinces of Fryslan, Groningen and Noord-Holland (2013). *Wadden van allure!* Retrieved from <http://www.investeringskaderwaddengebied.nl/download/wadden-van-allure.pdf>
- Renes, H. (2014). Islands: Isolation and pressure. *Landscapes*, 15(1), 44-58. doi: 10.1179/1466203514Z.00000000023
- Royal HaskoningDHV (2015). *Evaluatie Structuurvisie Derde Nota Waddenzee: Ontwikkelen als perspectief, beschermen als basis*. Nijmegen: Royal HaskoningDHV.
- Schroor, M. (2008). *Waddenzee Waddenland: Historische verkenningen rond de geografische identiteit en begrenzing van het internationale Waddengebied*. Leeuwarden: Raad voor de Wadden.
- Smit, G. (1971). *De agrarisch-maritieme structuur van Terschelling omstreeks het midden van de negentiende eeuw* (doctoral dissertation). Groningen: Sasland.
- Smith, L. (2006). *Uses of heritage*. London: Routledge, Taylor & Francis Group.
- Vollmer, M. (2001). *LANCEWAD: Landscape and cultural heritage in the Wadden Sea Region: Project report*. Wilhelmshaven: Common Wadden Sea Secretariat.
- VROM (2007). *Ontwikkeling van de wadden voor natuur en mens: Deel 4 van de planologische kernbeslissing derde nota waddenzee, tekst na parlementaire instemming*. The Hague: Ministerie van VROM.
- Waddenacademie (ed.) (2016). *Visies op de Wadden: Zes essays ten behoeve van de Beleidsverkenning Toekomstige Rol en Ambitie van het Rijk voor het Waddengebied*. Leeuwarden: Waddenacademie.

About the author

Dr. Linde Egberts is an assistant professor in the interdisciplinary field of heritage studies at Vrije Universiteit Amsterdam. She studied human geography and cultural history at Utrecht University and at Vrije Universiteit Amsterdam, where she defended her PhD thesis, *Chosen Legacies*, in 2015. Her research interests lie in heritage, identity, regions, landscape, and the interplay of tourism and identity. As a member of the research institute CLUE+, she currently focuses on heritage in coastal landscapes in Europe. She combines her research endeavours with lecturing and coordinating the master's programme in heritage studies at Vrije Universiteit Amsterdam.

23 Conclusion

Linde Egberts and Meindert Schroor

Beginning in the 1960s, it was environmentalists who put the Wadden Sea and its Frisian or Wadden Islands on the map. Since then, the Wadden Sea area has been defined both by its natural habitat and the area beyond the dikes, ultimately leading in 2009 to the designation of the Wadden Sea proper and its islands, or parts thereof, by UNESCO as a World Heritage Site. As such, the outstanding universal value of the Wadden Sea is derived from exclusively ecological and geological definitions, the area being 'the largest unbroken system of intertidal sand and mud flats in the world, with natural processes undisturbed throughout most of it' (UNESCO 2017). In recent years, though, researchers and policymakers have become increasingly aware that the Wadden Sea area is not only the Wadden Sea and the islands but also the mainland, particularly the clay areas or marshes extending from Den Helder in the Netherlands to Esbjerg in Denmark. Of course, this has always been where you can hear, see and feel the Wadden Sea: the screeching seagulls, the wide horizon, the unceasing salty sea wind tearing into the trees surrounding the farms and sometimes even into the very shell-permeated clay soils.

This volume emerged from the Waddenland Outstanding symposium held in Husum in December 2016 with the goal of firmly imprinting the *Waddenland* on the mental map of the Wadden Sea area. The symposium's central theme was the de facto neglect of this 'continental' part of the Wadden Sea area and the need to incorporate this geographical component. It treated, perhaps for the first time, existing and impending challenges for the whole of the Wadden Sea region — the sea, the islands and the mainland — intractable issues like climate change, economic decline in parts of the mainland versus gentrification on the islands, agricultural uncertainties, an aging population, and the perspectives and vicissitudes of tourism. The outcomes of the symposium led to the preparation of this book, to which it lends its name.

With this ambition and scope, this volume sets out to widen the knowledge about the Wadden Sea area to include its landside, both in geographical as well as in epistemological terms. Pushing forward beyond existing cultural historical research in this area (Fischer 1997), the volume aims to challenge the narrow definitions and borders of the Wadden Sea area, which are currently the dominant paradigm in research and are firmly entrenched

in regional, national and international policy. Taking a different tack, it suggests new ways to perceive and manage the area when it comes to the preservation of natural and cultural historical values as well as coastal management.

This landscape of salt marshes that slowly developed in and around the shallow coastal Wadden Sea has been inhabited for some two-and-a-half millennia and been embanked since 1,000 AD. From that time, the land within the dikes went its own way: former gullies became ditches and canals, salt water was turned into fresh water, villages and towns developed, and the area and its people mentally moved away from the sea. And in recent decades, the protection of nature came to prevail over treasuring the human presence of the past and present.

This volume makes clear that, as a result, dualism has become one of the main characteristics of the Wadden Sea region. It is a dualism of many aspects – nature versus culture, sea versus land, islands versus mainland, salt water versus fresh water, protection versus development – but it is a dualism that needs to be overcome, if only in respect of the previously defined environmental challenges and the need for sustainable strategies in dealing with them. Several contributions stress the importance of a greater involvement of the inhabitants, not only on the islands but also on the mainland, the Waddenland which, after defining it from geographical, historical and cultural heritage perspectives, this volume discusses along four thematic lines. The first explains the origins of a deep-seated mental gap between nature and culture in the Western world in general and the Wadden Sea area in particular. One of the principal ways to overcome this gap is to listen more intensively to local populations and their unique perceptions of their surroundings, so frequently overlooked by politicians, researchers and civil servants, and to involve them in the process. Doing this means taking into account immaterial and intangible, often elusive but no less important values, recorded and expressed in myths and ideologies. These sometimes include certain aspects of Frisian history currently being used (and, some might say, misused) for cultural historical tourism, even as many other phenomena, such as the link between the component parts of the area through coastal trading or the widespread practice of winter-storage of excess water inside the dikes, seem to have faded from collective memory. This volume also underscores that history and archaeology can not only kindle interest but also offer depth in matters of nature management and viable spatial and economic planning, as well as provide a narrative useful to the development of responsible forms of cultural tourism.

This volume ends with the different ways in which cultural heritage is and can be managed against the background of existing and future economic, social and political challenges. The conclusion is that a combination of old and forgotten practices and highly innovative, even provocative research, always integrating natural and cultural qualities of the Wadden Sea region, is essential. With this rich collection of contributions, we have tried to offer a compendium of recent research in the broad field of cultural history on the Wadden Sea area and to set out lines for future coastal management that will take a more integrative approach to natural and cultural values.

This volume illustrates that research on the history, cultural landscape and cultural heritage of the Waddenland has made great advances in the last decade. But there is still much to be done. A key issue will be the development of research that is: (1) programmatic, (2) interdisciplinary, (3) comparative, (4) long-term, and (5) participatory, with a perspective on developments over centuries (or millennia), coupled with historical and ethnographical detail. In this regard, we should applaud the initiative as formulated by the Dutch Waddenacademie to develop a trilateral research agenda (6). There is just one element to add: research should remain critical and be partisan where needed. How to navigate between a critical and a partisan position is, however, perhaps the most difficult question an individual researcher faces, especially in an area that has so many involved stakeholders (some of them in conflict).

Like any publication that is ambitious in its scope, the integrative strengths of this book come alongside several shortcomings and challenges it does not succeed in addressing. First of all, the focus of the contributions in the book is on the Wadden Sea area itself, with the consequence that the comparison with and position with respect to comparable areas is lacking. Based on the Essex Report (2010), Frederiksen (2012) made an interesting start towards positioning the cultural landscape among other wetlands with similar characteristics worldwide. Further analysis and comparisons could lead to insights that could be of great value not only for academic reflection but for management as well. Although the current volume contributes to the knowledge of the Wadden Sea region itself, it leaves the positioning of the area in a wider context to future publications.

The editors come to a similar conclusion with regard to the integration of the perspective of old and new inhabitants as well as visitors to the Wadden Sea area. Some of the contributions highlight the former and present inhabitants of the region while largely overlooking the modern visitor. As region branding and the sustainable development of tourism are rising in

importance on the agendas of politicians in the region, it becomes increasingly important to better understand the meanings the region conveys to visitors from both near and far. In particular, an understanding of their appreciation of cultural heritage and landscape is needed, as these are being increasingly appropriated to draw visitors to the mainland of the Wadden Sea region. This implies the introduction of a contemporary economic dimension and cooperation with economists.

Although this volume was long-awaited and necessary, it still leaves several major ambitions for the future. While this book can be seen as an attempt to offer an integrative counternarrative to dominant nature conservation discourses, it does not go so far as to take the side of nature conservationists, ecologists and geologists. But its content does aim to trigger interest among natural scientists for the human aspects of the Wadden environment in which their work and aspirations unfold. A task for the near future would be to experiment with research projects, reflections and case studies that approach the interrelated natural and cultural qualities of the Wadden Sea region as mutually reinforcing.

References

- Essex County Council Historic Environment Branch (2010). *Comparative Analysis of the Landscape and Cultural Heritage of the Wadden Sea region*. Chelmsford: Essex County Council.
- Fischer, L. (1997). *Kulturlandschaft Nordseemarschen* (Nordfriisk instituut, nr. 129). Bräist/Bredstedt: Nordfriisk Instituut.
- Frederiksen, J. (2012). *The Wadden Sea Region. A World Class Cultural Landscape*. Leeuwarden/Wilhelmshaven: Waddenacademie/Common Wadden Sea Secretariat (CWSS).
- UNESCO (2017). Wadden Sea. Retrieved 24 December 2017 from <http://whc.unesco.org/en/list/1314>

About the authors

Dr. Linde Egberts is an assistant professor in the interdisciplinary field of heritage studies at Vrije Universiteit Amsterdam. She studied human geography and cultural history at Utrecht University and Vrije Universiteit Amsterdam, where she defended her PhD thesis, *Chosen Legacies*, in 2015. Her research interests lie in heritage, identity, regions, landscape, and the

interplay of tourism and identity. As a member of the research institute CLUE+, she currently focuses on heritage in coastal landscapes in Europe. She combines her research endeavours with lecturing and coordinating the master's programme in heritage studies at Vrije Universiteit Amsterdam.

Dr. Meindert Schroor is a freelance geographer and historian at his own Bureau Varenus in Leeuwarden. Active since 1976 in researching and writing on the landscape, urban history, demography, water management and cartography of Fryslân (Friesland) and Groningen, he has developed into the most prolific researcher and writer on cultural history in the Northern Netherlands. Schroor received his PhD in 2014 on the demographic and economic history of the town of Groningen and is editor-in-chief of the *New Encyclopaedia of Fryslân* (published on paper in 2016). Since 2014, he has been a member of the board of the Waddenacademie responsible for the cultural history and society portfolio.

Index

- Abrahamse, Jan 260
Adolf Hitler-Koog 124-125
Africa 48
Afsluitdijk 208
Alkmaar 184
Altenbruch 187
Altona 202
Ameland 54-55, 57, 152, 232
America 170, 176, 212, 216-218, 220
Amrum 53-54, 103, 176-177, 231, 297
Amsterdam 24, 27-28, 36-37, 42, 49, 53, 60,
128-129, 191, 199-200, 202-206, 208
Amt Riberhuser 39
Andersen, Hans Christian 98
Andersen, Theodor 140
Anhalt-Zerbst 39
Annales 34
Annemarie tragedy 173
Anthropocene 22, 67, 69, 72, 74-76
Antiquity 186
Antwerp 97
Appingedam 36
Asia 176
Assmann, Aleida 171
Atlantic 83, 125, 132
Aurich 44, 162, 194, 288
Aventoft 140

Bachmann, Alfred 122-123, 133
Bahnsen, Hellmut 104
Ballum 41, 55, 235
Å 235
Baltic 54, 102, 191, 202, 213, 269
Bantelmann, Albert 104
Barendsz, Willem 40
Bauerland 37
Bauman, Zygmunt 158
Beckmann, Max 127, 129-131, 133
Beemster drained lake 60
Belvedere 318-321, 324
Bergen, Claus 125-126
Berlin 127
Beucker Andreae, Johan Hendrik 189
Beurmann, Eduard 217
Blankenmoor 187
Blåvands Huk 32, 259, 317
Bölsche, Jochen 270
Bolsward (Bodilwerth) 49-50
Grote Dijk 49
Bordelum 234
Borkum 173, 176
Boschplaat 259
Bourdieu, Pierre 218
Brabant 188, 190
Brake 174

Braudel, Fernand 213
Brede Å 236
Bredebro 41
Bremen 24, 27, 36, 39, 41, 193, 211-223, 229, 243,
255
Bremerhaven 173, 185, 211-212, 214, 216, 218-220,
310
Brinckerhoff Jackson, John 170
Burbridge, Peter 295
Busch, Andreas 104, 241-248
Büsum 97
Butjadingen 185, 188

C&A (Brenninckmeijer) 191
Camargue 257
Campina 190
Carolingian times 35, 96, 186, 190
Carson, Rachel 258
Charlemagne 156
Cold War 52
Copenhagen 201-204, 262
Cuxhaven 36, 175, 184-185, 288, 290

Danewerk 104
Dangast 173
Davidsen, H.C. 144
Delius brothers 217
Delius, Friedrich Adolph 220
Den Haag *see* The Hague
Den Helder 36, 40, 184, 208, 259, 294, 329
Denning, Greg 222
Denmark 17, 19, 24, 32-33, 39, 41, 49, 54, 68-69,
86, 137, 139, 142-143, 145, 147, 188, 199-202,
206, 260, 294, 306, 317, 329
Descola, Philippe 71
Dirksen, Lendvai 124-125
Dithmarschen district 97
Dittmer, Ernst 104
Dokkum 36
Dollard 32
Dorestad 35
Döring, Martin 23
Dornum 290
Duchy of Schleswig 200, 227
Duke Hans the Elder 139
Duke of Augustenborg 101
Duke of Gottorp 97
Dunbar, James 116-117
Dutch Republic 36, 39, 192-193, 222
Dutch Revolt 156

Early Middle Ages 47, 154-155
Early Modern Era 190
Early Modern society 40, 192

- East Frisia/East-Friesland 157, 162, 184, 189,
 195, 230
 Islands 176, 283
 peninsula 189, 194
 East India 206
 East Jutland 205
 East Pomerania 185
 East Prussia 185
 Ecco (shoes) 41
 Eckermann 111
 Edomsharde 241, 243-244
 Eemshaven 36, 311, 322
 Eemswoude 187
 Egberts, Linde 26
 Eider 32, 95-96
 Canal 201, 204
 Eiderstedt 97, 228-230, 236
 Elbe 32, 36, 111, 175, 185-188, 195, 202-203, 227,
 231-232, 259, 278
 Emden 36, 185, 194, 288
 Ems 32, 41, 187, 259, 323
 Ems-Dollard Estuary 323
 Enemark, Jens 22
 Enge 234
 England/English 100, 159, 192, 212, 216-217, 220,
 222, 257
 Enkhuizen 205
 Enlightenment 116
 Es, Kees van 323
 Esbjerg 17, 36, 40, 87, 138, 147, 184, 208, 294, 311, 329
 Essex report 285, 331
 Eurasian continent 186
 Europe 23, 25, 27, 40, 53, 57, 68, 98, 109-110, 114-
 115, 142, 153, 157, 160, 171, 183, 185, 189-190, 196,
 214, 221, 253-254, 256-257, 261, 263, 272, 279
 European Diploma of Protected Areas 259
 Everscop 228
 Exmorra 187
- Fanø 32, 203, 208
 Fen Colonies 37, 189-192
 Finland 160
 Fischer, Ludwig 22-23
 Fischer, Norbert 24
 Flanders 190, 243
 Flensburg 142
 Föhr 100-101, 231-232
 FONA-initiative 278
 Fontainebleau 256
 France 54, 97, 190, 192, 214, 231, 257
 Francop 187
 Franeker 193-194
 Frederiksen 331
 Friedrich, Caspar David 126, 128
 Friesland 28, 36, 38-40, 43, 50, 52, 60, 156-157,
 159, 162-163, 186, 188-189, 191-193, 288
 Dutch 25, 156
 Estates of 36
 North 25, 52, 111
- Frisia/Frisian 23, 31, 35-36, 41-42, 52, 96-98,
 100-103, 131, 151, 154-164, 184, 186-194, 231,
 233-235, 293, 296, 299-300, 330
 Islands 31-33, 42, 154, 176, 186, 191, 329
 railway-bridge 41
 Sea 96
 Fryslân 28, 40-41, 44, 62, 153, 166, 184, 189-190,
 192-193; *see also* Friesland
- Ganter, Barbara 91
 Geest 35, 137, 139-143, 189, 194, 227-228, 232-236
 Colonies 189
 German Bight 184, 186, 306
 Germany/German 17, 19, 23-24, 26-27, 32, 35,
 37-38, 40-41, 46, 53-54, 68-69, 82-83, 86-88,
 91, 97, 100, 116-117, 121-126, 129, 137-139,
 141-143, 145, 153, 155, 157, 159, 162, 173, 175-176,
 184-186, 190, 192-193, 195, 200-202, 211, 214,
 217-218, 239, 243, 250, 255, 257, 259-262,
 269-270, 272, 274, 285-287, 293-294, 296,
 317, 323
 Glacken, Clarence J. 110
 Goethe 99, 109-113
 Golden Age 109, 114-115, 200
 Goting 103
 Gotteskoog 137-139, 142-143, 145, 147-148
 Göttingen 111
 Gottorp 39, 97, 230
 Graadyb 200, 203
 Grass, Günter 98
 Great Navigation 36
 Greater Frisian Empire 154, 156
 Green Coast Road 41
 Greenland 206
 Sea 176
 Griend 258
 Groningen 34, 37-41, 53, 188-194, 324
 Guldberg, Mette 24, 200
- Hadler, Hanna 24, 104
 Haien, Hauke 98
 Haithabu 104
 Haller von, Albrecht 114
 Hallig/Halligen 48, 62, 73-74, 91, 97, 98-101,
 104, 294
 Hallig Jordsand 255
 Hallig Norderoog 256
 Hallig Südfall 241-246, 249
 Halligen islands 88
 Hamburg 24, 33, 36, 39, 53, 97, 128, 172-173, 175,
 199-200, 202, 204, 218, 229, 232, 243, 255, 278,
 294, 311
 Hansen, Willi 102
 Hari, Mata 40
 Harlingen 36, 184, 186, 191
 Havneby 208
 Hedeby 35
 Heerenveen 190
 Heide-Niebuß 269, 276

- Helgoland 126, 297, 300
 Helmholtz von, Hermann 117
 Heritage 17, 19-23, 26-27, 31, 33, 39, 42, 45-48, 58-60, 68-69, 75-77, 81, 86-87, 104, 134, 159, 170, 253, 269-270, 273-275, 277-279, 283-285, 287, 291, 293, 296, 298, 301, 309, 317-324, 329-330
 cultural 17, 19-21, 23, 25-27, 33, 65, 69-70, 72, 75-76, 95, 104-105, 151-152, 154, 157-161, 169-170, 178, 192, 267, 273, 295, 301, 315-318, 320-325, 331-332
 immaterial 21, 23
 natural 21, 65, 95, 104, 254, 286, 288, 294, 318
 Hessian 190
 High Middle Ages 35, 48-49, 156, 239
 Hinrichs, Nina 23
 Hitler, Adolf 123
 Hitler Youth 127
 Hjerting 201-205
 Hockwerd 49
 Højer 139-140, 143, 232, 235
 Sluice 142, 144, 146
 Holland 36, 39-41, 49, 114, 116-117, 157, 184, 186, 188, 190, 192, 201-205, 255, 326
 Hollum 55, 57
 Hollywood 164
 Holocene 240, 308
 Holstein 39, 142
 Holwerd 60
 Hondsbossche Zeewering 32
 Horns Reef 200
 Horsens 205
 Husum 17, 97, 143, 232-233, 243, 249-250, 329
 Amt 233
 Norder Harde 233-234, 236

 Ickerodt, Ulf 26
 ICOMOS 58
 IJsselmeer 40, 208, 230
 Iken 217
 Île de France 190
 India 206
 Ipsen, Detlev 173
 Italy 97, 190, 225
 IUCN 48, 58, 60, 256, 259

 Jacobsen, Boy 147
 Jade 32, 126, 128, 185, 187
 Bay 290
 Jadebusen 173
 Jakubowski-Tiessen, Manfred 116
 Jensen, Johannes 103
 Jensma, Goffe 23
 Jessen, Carl 176
 Jever 39
 Johanne tragedy 176
 Jordsand 255-256
 Juist 290
 Jutland 199-200, 203-206

 Karrharde 234
 Kating 229
 Keitum 175-176
 Kiefer, Michael Mathias 126-127
 King, Charles 213
 Kingdom of Denmark 200
 Kniepsand 176
 Knottnerus, Otto 227-229
 Kohl, Johann Georg 255
 Kongeå 204
 Köstlin, Konrad 221
 Kühn, Hans Joachim 95, 100, 104
 Kulenkampf 217
 Kulturlandschaft Nordseemarschen 68
 Küster, Hansjörg 111

 Lake District 58-59
 LANCEWAD 321
 plan 68, 321
 project 42, 69, 295
 Land Hadeln 39
 Langdale 58
 Langdorf 232
 Langenhorn 234
 Langeoog 290
 Late Middle Ages 35, 53, 188, 190, 228-229, 239-240
 Latour, Bruno 48, 71
 Lauenburg 39, 142
 Lauwersmeer 52
 Leer 41, 288
 Leeuwarden 17, 36, 40-41, 161, 163, 184, 188-189, 193
 Liliencron von, Detlev 98
 Lima Action Plan 287
 Limfjord 204
 Lister Tief 95-96
 Listerdyb 200
 London 36
 Lorenzen, Lorenz 101
 Low Countries 46, 97, 231
 Lower Saxony/Lower Saxon 26, 33, 35, 99, 185, 283-289, 291; *see also* Germany
 Lübeck 218
 Lüdtke 215
 Luxembourg 185

 MAB programme 286
 MacDonald, Sharon 318
 Maersk 41
 Maluck, Matthias 26
 Mandø 32
 Marcus, George 215
 Marsch 189, 194, 257
 Marten, Norbert 174
 Mediterranean 213, 221
 Meier, Hermann Henrich 217
 Meiners, Christoph 111
 Meinssen von, Balthasar 175
 Melchers 217

- Memmert 173
 Mettingen 191
 Meuse 195
 Middle Ages 46, 51, 100, 156, 163, 186, 188
 Möbius, Karl 255
 Møgeltønder 139-141, 143-144
 Mommsen, Theodor 40
 Moor 194
 Mosbech 144
- National Park 48, 95, 102-103, 240, 283-286,
 288-289, 294, 301
 National Trust 59
 Naturalis Historia 34, 96
 Neogene 309
 Neolithicum 58
 Netherlands 17, 19, 24, 28, 32-33, 35, 38, 40-41,
 55, 59, 68-69, 86, 97, 109-111, 114, 117, 157, 159,
 173, 184-185, 190, 200, 206, 216, 230, 232, 257,
 260, 287, 294, 306, 315-319, 321, 323, 329
 Neukirchen 147
 Neuwerk 33, 175
 Nolde, Emil 129, 132-133, 140, 145-146, 298
 Noord-Holland 153, 324
 Nora, Pierre 171
 Nordby 208
 Norden 194, 290
 Norder Harde 233-234, 236
 Norderhever 241
 Nordmarsch 53
 Nordstrand 102, 104, 228-229, 231, 307
 Noordwijk 257
 North Frisia/North Frisian/North Friesland 17,
 23, 25, 52, 95-97, 99-101, 103-104, 106, 111,
 116, 129, 160, 184, 227-228, 230-231, 239-244,
 247-248, 293-302
 Islands 32, 227, 231
 North Frisians 95-96, 100-104, 157
 North Schleswig 236
 North Sea 32, 40, 70, 73, 84, 86, 96-97, 99, 102,
 113, 121-128, 132, 175, 186, 195, 200, 203, 208,
 211, 214, 221-223, 231, 243, 246, 255-256, 262,
 270, 309, 311
 coast 54, 124, 127, 154, 169, 171, 173, 175, 178,
 246, 296
 region 124, 214, 222, 308
 Northern Flanders 190
 Northern Germany 214
 Northern Italy 190
 Northern Schleswig 137, 142-143, 145, 147, 185
 North-western Europe 188
 Norway 201-203
- Oberg, Jan C. 24
 Oelrichs 217
 Oetken, Gert 104
 Oldenburg 39, 133
 Olufsen, Oluf P. 144
 Olwig, Kenneth 48
- Ommelanden 39, 192
 Oostergo 193
 Orient 221
 Øster Risør 203
 Ostfriesische Landschaft 46, 162
 Ostfriesland 162, 191
 Ottonian times 35, 186
 Overgaard, Anne Marie 24
 Overijssel 38, 40, 188
- Palaeogene 309
 Panten, Albert 104
 Paris Agreement 311
 Paulsen, Frederik 102-103
 Paulsen, Hermann Neuton 100
 Pedersen, Ulrik 147
 Pellworm 73, 100-101, 103-104, 228-230, 243, 271
 Petersen, Lorentz 141, 145
 Petersen, Marcus 104
 Petersen, Thomas 147
 Petersen, Ulrik 143, 146
 Petten 32, 317
 Pietikäinen 160
 Pliny the Younger 49
 Pliny the Elder 96
 Porskrog Rasmussen, Carsten 25
 Posen 104, 185
 Programma Rijke Waddenzee 52
 Prussia/Prussian 39, 100, 142, 185, 191
- Quedens, Georg 103
- Radziwill, Franz 126, 128, 131, 133
 Rahmel, Jürgen 25
 Ramsar Convention 259
 Ratter, Beate 23, 316
 Redbad 163
 Regiobranding 269, 277-278
 Reinhardt, Andreas 103
 Reise, Karsten 22, 25
 Rendsburg 104
 Renes, Hans 21, 316
 Rhine 35, 100, 192, 195, 258-259
 Rhineland 190
 Ribe 39, 200, 202, 206, 235-236
 Å 200, 235
 Riberdyb 200
 Richter, Dieter 170
 Riis, Jacob 40
 Riisbøl, Knud 205
 Ritzbüttel 39
 Roman times 186
 Rømø 32, 41, 53-54, 208, 235
 Rosenkrans 141, 145
 Rösner, Hans-Ulrich 22
 Rotterdam 36
 Rudbøl 139-140, 142
 Lake 145, 147
 Ruhr 35, 192

- Rummelsloch 241
 Rungholt 25, 98, 104, 239-241, 243, 245-248
 project 243-244, 248-249
 Flood 98

 Sæd 139
 Said, Edward 221
 Sami 160
 Sande 290
 Scandinavia 35
 Schama, Simon 114-115, 171, 173
 Scheldt 195
 Schildwolde 187
 Schleswig 39, 104, 137-139, 142-145, 147, 185, 200,
 227-228, 230-232, 234, 236-237
 Schleswig-Holstein 26, 33, 35, 48, 89, 103-104,
 185, 206, 230, 240, 269-274, 276, 279, 294-
 295, 301, 307
 Schleswig-Holstein Wadden Sea national
 park 240
 Schokland 60
 Schroor, Meindert 20, 24
 Seebüll 129, 132, 146
 Sevilla Strategy 285-286
 Silesia 185
 Simonswolde 187
 Skallingen 255
 Skaw 201
 Sneek 36, 191
 Sønderjylland 39, 200
 Spiekeroog 176, 290
 St. Peter Ording 173
 Stade 111
 States of Fryslân 193
 Stedesand 234
 Steensen, Thomas 23, 295
 Steinburg 278-279
 Storm, Theodor 98-100
 Struckmann, Erick 146
 Stuyvesant, Peter 40
 Südbeck, Peter 25
 Süderoog 100
 Südfall 241-246, 249
 Südwesthörn 145
 Sustainable Tourism Strategy 283, 288
 Sweden 54
 Syddanmark 39
 Sylt 101, 123, 142, 175-176, 231, 235, 255, 297
 Declaration 89

 Tadema, Alma 41
 Tasman, Abel 40
 Terschelling 53-54, 56-57, 232, 259
 Tetenböll 144
 Tetens, Johann Nikolaus 116
 Texel 54, 184, 186, 255, 258
 The Hague 36, 260
 Tønder 139-140, 142-146, 184, 200, 229
 County 145

 Tøndermarsk 137-139, 142-147
 Tønning 184, 295
 Toxen, Rasmus 205
 Traeger, Eugen 104
 Trilateral Wadden Sea Cooperation 69, 76, 260

 UK *see* United Kingdom
 UNESCO 17, 21, 31, 48, 58-59, 87, 254, 283-288,
 290, 294-295, 318, 329
 United Kingdom 58-59
 United States 48
 Upper Saxonian 191
 Utenwarf 146
 Utersum 103
 Utholm 228
 Utrecht 40

 Valetta Treaty 274
 Van Deventer map 36, 38
 Varde 200-204
 Å 200, 203
 Vejle 205
 Vidå 138-139, 143-146
 Vierlingh, Andreas 115-116
 Vijversburg 163
 Viking 104, 186, 300
 Vlie 35, 187
 Volquardsen 144
 Voltaire 114

 Wadden *passim*
 Wadden Islands 17, 31, 37, 41-42, 53-54, 184,
 317, 329
 Waddenland 17, 19, 21, 24, 31-34, 36, 39-42, 77,
 91, 97, 183-186, 188, 190, 192-195, 222, 254,
 284-285, 290-291, 306-307, 310, 329-331
 Wadden provinces 190, 324
 Wadden Region 95-96, 315
 Wadden Sea
 area 23, 26, 31-32, 38, 43, 58, 81, 153, 214,
 255, 257-258, 261, 294, 315-317, 319-324,
 329-331
 coast 24, 37, 41, 67-68, 70, 72-76, 111-112, 117,
 131, 141, 151-152, 163, 199-202, 206, 208,
 253-254, 256, 283, 293-294, 298, 300,
 305-306, 308-309, 311
 Committee 153, 320
 landscape 21, 114, 158, 284, 322
 Niedersachsen 286, 289
 North Frisian 100, 240-242, 248, 293-295,
 298, 300
 of Lower Saxony 283-284, 286, 288-289, 291
 region 17, 19-21, 23-26, 31-34, 37-38, 41-42,
 45-46, 48-49, 51, 58-59, 69-70, 72-73,
 75-76, 82, 85-90, 97, 109, 121-126, 129,
 132-133, 152-154, 158-160, 183-186, 194-195,
 199, 256, 260, 284-285, 287, 294, 315-318,
 321-322, 324, 329-332
 Society 258

- tourism 37
- World Heritage Site 22, 48
- Waddenacademie 17, 322, 331
- Waddenzee 257, 260-261
- Wangerooge 127-129, 131
- Warming, Eugenius 255
- Warns 156
- Wätjen 217
- Weener 41
- Weidemann, Magnus 123-124
- Wendt, Karin 170
- Werlen, Benno 175
- Wesenberg-Lund, Carl 255
- Weser 32, 35, 37, 173, 187, 193, 195, 230, 259, 310
- Wesermarsch 174, 288
- West Frisia/West Frisian 40, 96, 160, 162, 189, 232
 - Islands 232
- West Jutland 206
- West Schleswig 144
- Westerdahl, Christer 48
- Westergo 49, 193
- Westerland 176
- Westerländer dunes 176
- Western Europe 32, 35, 81-82, 183, 185-186, 188, 190-191, 193, 222, 257-258
- Western Schleswig 138-139, 143
- Western Wadden Sea 51, 187
- Westphalia/Westphalian 188, 190-191
- Wiedingharde 144, 228-230
- Wilhelmsburg 172-173
- Wilhelmshaven 126, 185, 262, 288, 311
- Wittewierum 193
- Wittmund 288
- Wöbse, Anna-Katharina 25
- Wohlenberg, Erich 104
- Wolff, Wim 257
- Wordsworth, William 59
- World Heritage 17, 19, 21, 23, 33, 39, 42, 48, 58-60, 68-69, 75-76, 284-285, 287, 309, 318
 - site 17, 31, 42, 45-46, 48, 70, 75, 81, 86-87, 104, 134, 253, 283-285, 291, 329
- World Natural Heritage 95, 104, 254
 - list 254, 294
- Wouwer, Johan van 97
- Wursten 35, 185
- WWF 83
- Yellowstone 48
- Yosemite 48
- Zeeland 37, 115
- Zevenwouden 193
- Ziemek, Hans-Peter 25
- Zuiderzee 208