

# Between Land and Sea – The Dike as an important element of the North Sea Coastal Landscape

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## About Landscape

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- The understanding of landscape is determined in Europe by the different perspectives of the **humanities** and **natural sciences**. From a scientific perspective landscape arises as influenced by the specific **physical interactions between nature and man**, say, from the human work on nature. On the other hand humanities and cultural studies understand landscape as a **subjective perception** - an **aesthetic and symbolic view on selected areas** which are mostly dominated by nature.

## North Sea coastal landscape

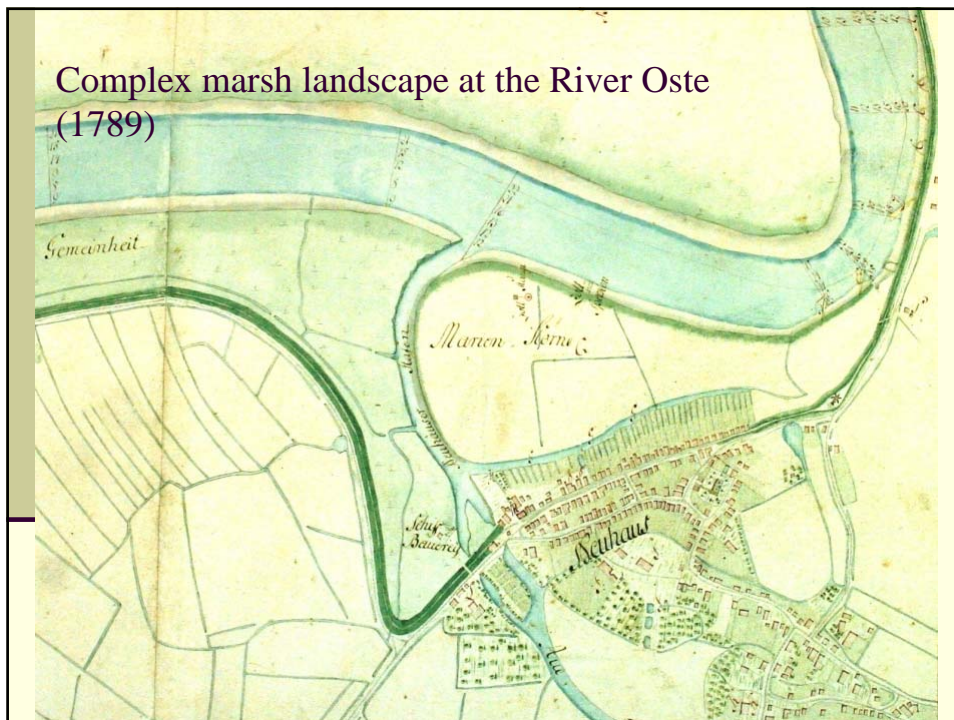
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- Under these conditions North Sea coastal landscape is not understood as a description of idealized nature, but as an analysis of the sometimes very rapid, the natural as well as socio-cultural settings due changes. It is interaction between nature and economy, culture and society, which ultimately shapes the landscape at the North Sea coast.

## Dike and Coastal Landscape

- The dike is one of the most important elements of coastal landscape. At the same time the dike represents aspects of spatial, cultural and social patterns of order in coastal societies. The dike separates the embanked land with its cultivated fields from the inferior outer dike area. It divides civilisation from the wild. Storm tides and currents have repeatedly forced people on the coast to set dike lines back further inland, which also means pulling back the boundary between land and sea. Since the end of 20th century, ecological impact has brought about a new wilderness within the embanked fields. In summary, the dike is a landscape element rich in symbolism: It represents the spatial structuring of the coastal landscape.

Complex marsh landscape at the River Oste  
(1789)



New Polder, new Landscape: Dike Lines at the Mouth of River Elbe  
Groden and Doese Neufeld = today's Cuxhaven (since 1618, here 1776)



## Dike as a Boundary: Inner and Outer Dike Areas

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- Changing Boundaries between agricultural land, salt pastures or foreland, wadden sea and tidal rivers; Inner and Outer Areas connected by sluices (throughgoing water)

## Inside – Outside = Order vs. Disorder

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- **Inside the dike:** „Order “ as shown by cultivated marshland with drainage ditches
- **Outside the dike:** „Disorder“ as shown by free floating water (tidal channels), meandering water courses etc.

## Two Worlds: inside „Civilization“ (l.), outside „Wilderness“ (r.)

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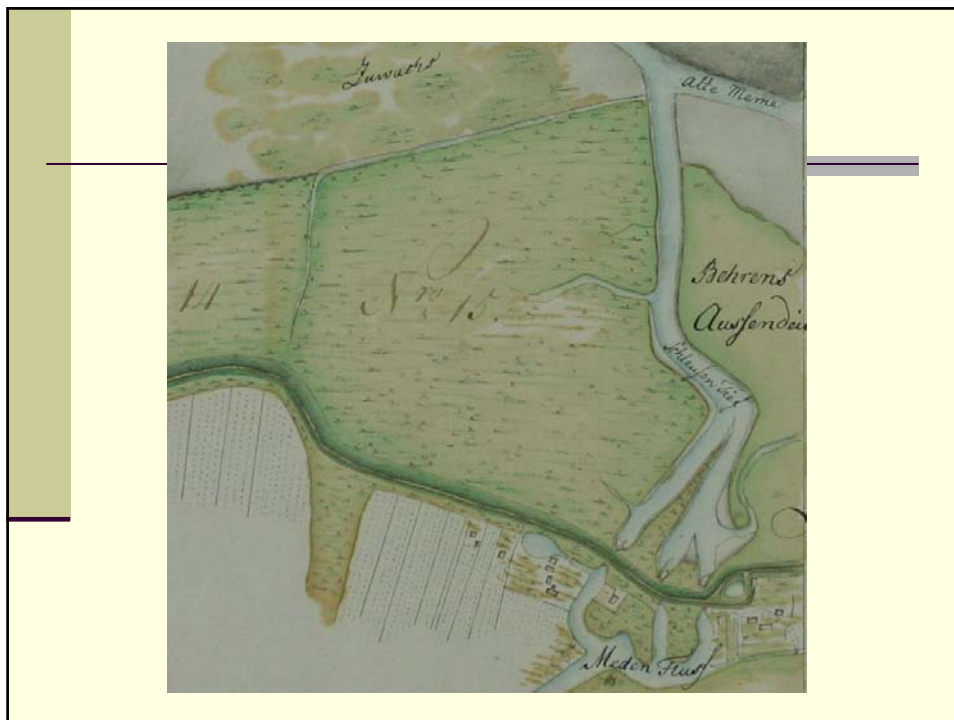




## Outside the Dike: Land of Dishonour – Land of the Gallows

- A Gallow in outer dike area near Brunsbüttel (Dithmarschen), 1559
- Thanks to Otto Knottnerus for this chart





## Conquest of outer dike area by marshland farmers



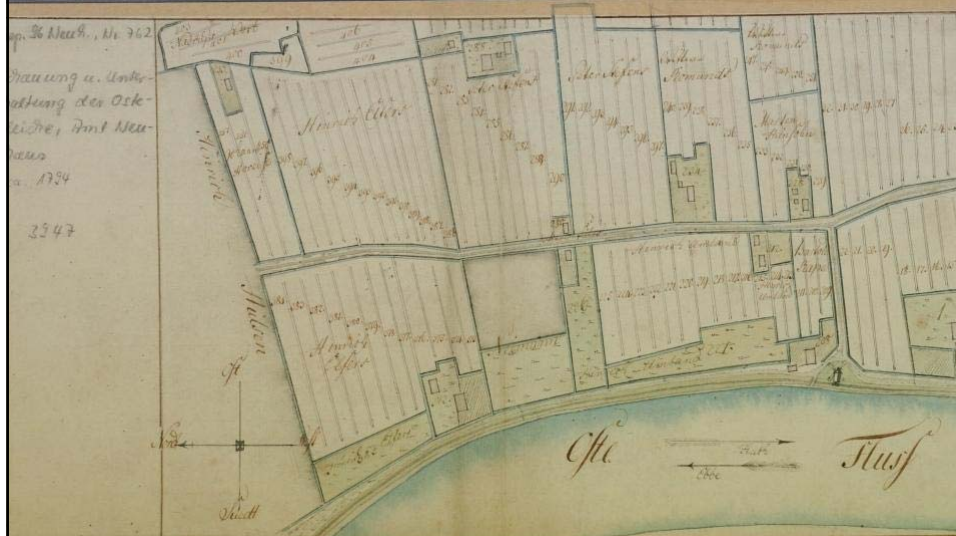
- 1810, Lower Elbe, Land Kehdingen
- Area outside the dike were cultivated but regularly flooded in summer and winter

60 years later ...

**... so-called „summer dikes“  
(„Sommerdeiche“ = flat-profiled dikes)  
erected by resident marshland farmers  
allowed to cultivate land**



### Field Dikes („Sietwenden“) in the Oste marshland (chart from 1794)



### Großenwörden (1792)





When Dikes burst:  
Changing boundaries  
by storm tides and flood disasters



Changing Lines of Neufeld Dike  
(Cuxhaven) between 1618 and 1785



## Fragmentation of boundaries between land and water

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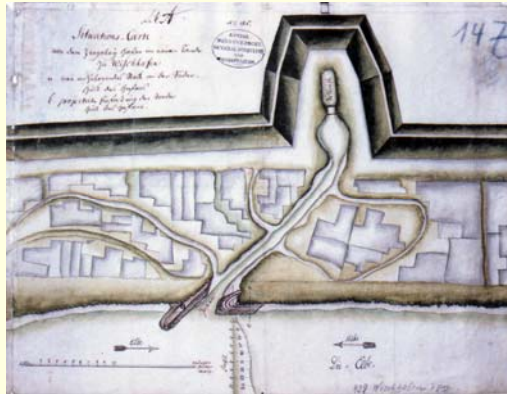
- Christmas Flood Disaster 1717 –  
„Wischhafen Dike Burst“ (Land Kehdingen)
- Dike burst and loss of about 500 hectare  
cultivated marshland for nearly 25 years
- In 1742 the Hannoverian Government built up  
a new boundary and annexed the land from  
resident farmers

## The Wischhafen Dike Burst 1717 ff

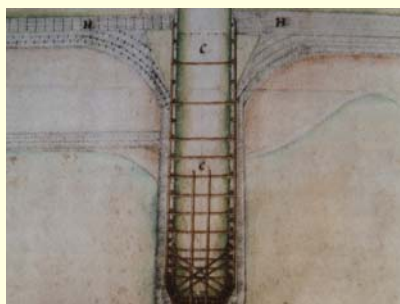
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## Taming the Tide: Wischhafen „Outland“ Harbour 1742



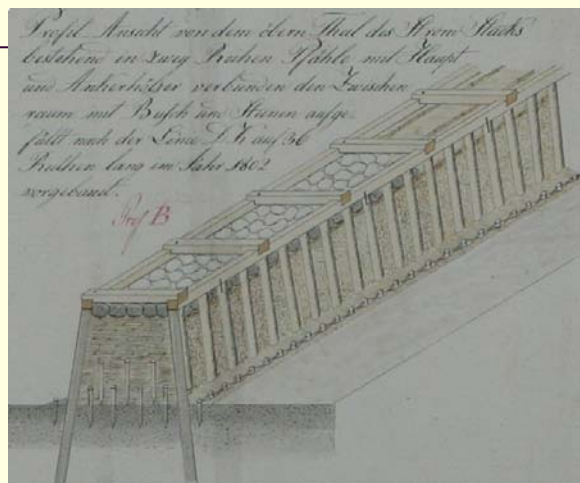
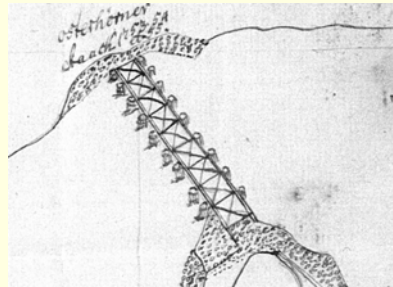
## Shoreline Protection in c. 18th: Groyne Building



- Building of Groynes to shelter threatened dikes (Kehdingen, late 18th century)

## Groynes near Cuxhaven

- „Osterhörner Stack“,  
Cuxhaven, Mouth of  
River Elbe
- 1753



## The world turning upside down: A new wilderness inside (since late 20th century)

- Inside the Dikes: Nature Reserve Areas
- Speicherkoog Dithmarschen (near Meldorf), finished 1978
- Nature Reserve Area sheltered by dikes



## Summary

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- Seen from a technical perspective, dikes on the North Sea coast separate the land from the sea. Dikes are one of the most significant elements forming coastal landscapes. They have created complex boundaries symbolizing spatial, social and cultural aspects of the North Sea coast-al region. Dikes divide agricultural land from the Wadden Sea, analogous to dividing 'civili-zation' from 'wilderness'. Storm tides and changing currents have caused dike lines to break down and have forced them to be rearranged. Both old and new dikes are visible to this day. They symbolize a cultural landscape heritage on their own.
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