Moving beyond the hard boundary
Overcoming the nature-culture divide in the Dutch Wadden Sea area

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Abstract
Purpose – The purpose of this paper is to assess the consequences of a nature-culture divide in spatial policy on cultural heritage in the Dutch Wadden Sea area, which is protected by UNESCO for its ecological assets. Design/methodology/approach – This paper investigates this by discussing the international and national policy frameworks and regional examples of the consequences of the divide. Findings – The effects of the nature-culture divide appear to be negative for the landscape. Approaching the Wadden Sea Region as an agricultural-maritime landscape could help overcome the fixation on nature vs culture and the hardness of the sea dikes as spatial boundaries between the two domains. A reconsideration of the trilateral Wadden Sea region as a mixed World Heritage Site could lead to a more integrated perspective. Originality/value – These findings inform policy development and the management of landscape and heritage in the region. This case forms an example for other European coastal regions that struggle with conflicting natural and cultural-historical interests.

Keywords Cultural heritage, Dutch national spatial policy, Natural heritage, Wadden Sea area

Paper type Research paper

Introduction
At first sight, the Wadden Sea is a region of unspoilt nature. It is listed, primarily for its natural values, as a UNESCO World Heritage Site and protected on national and federal levels by three countries: Denmark, Germany and the Netherlands (see Figure 1). The listing defines a sharp boundary around the Wadden Sea as a protected area, excluding any inhabited areas. UNESCO describes the Wadden Sea as “the largest unbroken system of intertidal sand and mud flats in the world” and “one of the last remaining large-scale, intertidal ecosystems, where natural processes continue to function largely undisturbed” (UNESCO, n.d.). In the Netherlands, which is the focus of this paper, the national government has set out inter-sectoral policy since 1980, mainly to protect its natural assets.

But taking a closer look, it becomes clear that culture – the interaction of humans with their environments, for example though agriculture and fishing – is fundamental to what makes the Wadden Sea region what it is today. In the early middle ages, the Wadden Sea region was the most densely populated area in Europe, where people lived on dwelling mounds in a tidal landscape. The use and adaptation of this area over the centuries has created a complex and dynamic landscape unique in the world. In addition to natural heritage, there is cultural heritage – ranging from dwelling mounds and the unique chain of dikes in the landscape to historic elements, Romanesque church architecture (Vollmer et al., 2001) and maritime
archaeology – all of international value. The oldest lasting signs of human management of water and land date back around 2,500 years (Lotze et al., 2005).

The fact that the Wadden Sea is protected for its natural values, and little attention is paid to integration of cultural heritage assets, creates a challenge for the preservation and development of cultural heritage. This paper aims to increase understanding of the current challenges of integrating bio-geological values and cultural history in the context of this nature-culture dichotomy in Dutch national policy development. Moreover, I consider how a re-listing of the trilateral Wadden Sea region as a mixed cultural and natural heritage site could enhance the synergy between these two arbitrarily separated domains.

Methodology and study area
This paper is based on a literature study, using policy documents as its main source as well as academic literature, that reflects on the nature-culture dichotomy in landscape management. The paper focusses particularly on the Dutch Wadden Sea area, which stretches from Den Helder in the southwest to the mouth of the Ems estuary in the east, which forms the border with Germany. This paper adopts the wider definition of the Wadden Sea area that is used in National Policy Strategy for the Wadden Sea (VROM, 2006), which includes not only the Wadden Sea, but also the municipalities of the islands and a small part of the North Sea. The area has approximately 220,000 inhabitants (CBS, 2015). The current national policy itself, however, addresses a narrower boundary, excluding agricultural and populated areas as well as harbours and ferry ports (see Figure 1). These borders are based on ecological criteria and in line with the EU Habitats Directive, aimed at the protection of endemic animal and plant species (VROM, 2006, p. 60). This paper uses the term “Wadden Sea area” to refer to the Dutch Wadden Sea and its surrounding land (see Figure 1), whereas “Wadden Sea region” is used to address the trilateral coastal zone protected under UNESCO and stretching to Esbjerg (Denmark) in the north (see Figure 2). The German area under UNESCO protection is managed in three different national parks by the federal states of Schleswig-Holstein, Lower Saxony and Hamburg, which are grouped under the National Park Wadden Sea. The Danish sector has been managed through the Wadden Sea National Park since 2010.

The cultural and natural in landscape
The apparent juxtaposition between nature conservation and culture/agriculture is a well-known issue in western thought, deeply rooted in Christian attitudes towards
humanity’s relationship to nature (White, 1967) and in processes of modernisation, through which nature has come to be regarded as opposite to culture. It presupposes human exceptionalism: a conviction that humans are essentially different and superior from other species, leading to an attitude in which nature is a field of opportunities for exploitation for economic gain. At the same time, the configurations that define and transform what is seen as nature are culturally determined. Nature, even at its most violent, is culturally, politically and economically shaped by humans (Lash and Urry, 1994, p. 293).

The concern for the environment is framed in terms of this constructed juxtaposition between culture and nature, significantly expressed by the popularity of programmes of “rewilding”. Paradoxically, humans create nature, something that in itself is a product of culture, with the intention of letting it find its own way (Procter, 2014). Cronon (1996) states (p. 81):

To the extent that we celebrate wilderness as the measure with which we judge civilization, we reproduce the dualism that sets humanity and nature at opposite poles. We thereby leave ourselves little hope of discovering what an ethical, sustainable, honorable human place in nature might actually look like.

Fervent and romantic advocate of rewilding George Monbiot (2014) argues for an approach to nature that overcomes this nature-culture/agriculture dichotomy (pp. 12-13):

Rewilding, paradoxically, should take place for the benefit of people, to enhance the world in which we live, and not for the sake of an abstraction we call Nature.
In his view, rewilding should not happen at the expense of productive lands, but should exist simultaneously, as a new way for humans to re-engage with the natural world. Landscape archaeologist Kolen recently argued that social networks also constitute part of Dutch landscapes. These have been formed and reformed at the most profound level by human hands. By creating new nature in which humans supposedly play no role, the rich tradition of intervention in the landscape is broken. These new natural landscapes often show less resilience and biodiversity than the cultural landscapes in which the co-existence of humans and nature is cherished (Kolen, 2016).

Nature and culture in trilateral preservation
This nature-culture dichotomy is ingrained in the knowledge and policy frameworks that underlie the heritage management in the Wadden Sea area. This is the case on all management levels, as regional and national policy forms the basis for the complex UNESCO management framework (During et al., 2014). It is also inherent to UNESCO’s system of selection and protection and appears hard to address in practice. This is illustrated by the IUCN-ICOMOS Connecting Practice Project (2013-2015), which is aimed at connecting the protection practices of World Heritage Sites that are protected for their natural as well as cultural assets (IUCN and ICOMOS, 2015).

The nature-culture dichotomy becomes strikingly clear when looking at the boundaries of the World Heritage Site. With the exception of the Lower Saxony area, it includes only the sea and excludes the inhabited parts of the islands and the mainland, making and creating an artificial border between culture (on land) and nature (at sea). The consequence is that the natural assets outside the dikes are protected under the banner of UNESCO status, whilst the areas behind the dunes and dikes are considered the opposite: a cultural landscape, on which farmers have a major impact. This divides the Wadden Sea region in two. The border is arbitrary, as the (previous) impact of the sea is evident all over the land, for example in the dwelling mounds that reach far inland. The line of the current sea dikes are a snapshot in time, as the position of the dikes have been dynamic over the course of history (Krauss, 2005). Moreover, the recent underwater excavation of unique items of clothing from the seventeenth century in a Texel shipwreck illustrates how culture has been and is present even at sea (NOS, 2016).

A more developmental perspective on the Wadden Sea area has been taking shape in the Wadden Sea Forum (WSF), an independent platform for stakeholders in the trilateral Wadden Sea area, since 2001. It aims at developing Integrated Coastal Zone Management, which has a more flexible and inclusive definition of its working area than the protective boundaries of UNESCO: it encompasses not only large parts of the North Sea, but also provinces, municipalities and counties (or parts thereof) adjacent to the Wadden Sea, as well as all the islands. It considers both cultural-historic landscapes and healthy ecosystems as having an equal interest in protection. Its aim for 2030 is to “help achieve a sustainable society by 2030 in which economic activity supports social development and safeguards healthy ecosystems and cultural historic landscapes throughout the Wadden Sea Region” (Wadden Sea Forum, 2013, p. 12). Moreover, it argues that “the landscape and heritage of the WSR should be managed as one coherent natural and cultural heritage in a land-sea interface” (p. 18).

The hard boundary in the UNESCO designation process
In the listing process, the Common Wadden Sea Secretariat expected that the understanding of cultural heritage protection required further development, and protection of the area based on its natural values could form an incentive for this. As the nomination feasibility report illustrates, the recommendation was to integrate traditional ways of life of the larger Wadden Sea area once management frameworks for these values were established (Burbridge, 2000, pp. 24-25). In part, this is an understandable position, because academic research into cultural history lags behind other knowledge areas. The area is one of the most
intensively researched wetlands in the world for its natural aspects and, to a lesser extent, in terms of culture, history and landscape. For the latter aspects, the trilateral LANCEWAD Project and LancewadPlan (1999-2004) have been of particular importance, as it investigated and mapped the cultural and landscape characteristics of the area. However, the implementation of this knowledge is lagging. Interaction between scientists, civil society, politicians and policymakers plays an important role in sustainable development, as it contributes to legitimacy, salience and credibility of knowledge (Cash et al., 2003). However, apart from the LANCEWAD projects, organisations for cultural history and heritage are fragmented or locally organised. By contrast, ecological organisations such as the Dutch Wadden Sea Association (Waddenvereniging) are well-organised, meaning they have more access to and influence on knowledge production and form a strong lobby in politics. Several boundary organisations operate on the interface between policy and science. Whereas a number of these focus on nature and sustainability in the Wadden Sea area (Van Enst et al., 2016), only the Wadden Academy specifically aims to enhance science-policy interaction in the field of cultural heritage and history. In some cases, strategic use of scientific knowledge by stakeholders has resulted in symbols that obstruct an integrated approach to nature and culture. Van Enst et al. (2016) refer to the example of how the idea of the Wadden Sea area as “unspoilt nature” has influenced the perception of the general public. These factors contribute significantly to the manner in which cultural history is often overlooked in national and trilateral policy.

Unfortunately, the UNESCO nomination process based on ecological values had a polarising effect, quite the opposite of the integrative future perspective the Secretariat had hoped for. The nomination process of the trilateral Wadden Sea area as a natural World Heritage Site passed with resistance among inhabitants and local stakeholders in all three countries.

The contestedness of the nature reserve has a much longer history than the nomination by UNESCO. In Schleswig-Holstein for example, a National Park was founded in 1985 to protect the biosphere and geological values of the Wadden Sea, most importantly the resting place the ecosystem offers to migratory birds. Since then, the population has protested against conservation measures, as they feared restrictions on activities like recreation, fishing and hunting. Krauss (2005) argues that ecologists and conservationists focussed on a notion of “pure nature” during the implementation of the National Park. This evoked a counter-notion of “pure culture” among the population, who propounded a regional identity discourse based on essential “Frisianness”. In order to avoid any new conflicts over the UNESCO nomination, the decision was made to adhere to the same boundaries as the National Park. Denmark’s Wadden Sea Region was added to the existing World Heritage listing in 2014. In 2009, the Danish national park promotes not only natural landscape and ecosystem, but also its cultural heritage (see vadehav.dk/en). In the Netherlands, citizens objected against the nomination, as they feared a loss of autonomy by new actors from outside entering the regional stage (Van der Aa et al., 2004). This discourse changed after the Dutch UNESCO centre forecasted a growth in tourism in the area after the designation (Folmer et al., 2016). Nevertheless, there is no management structure in place that enables citizens to benefit from the UNESCO status and potential economic or ecological developments (During et al., 2014).

Currently, discourse between nature conservationists and local populations in the three countries seems very similar, but there are differences as well. The German mainland, with its historical landscapes and towns, is perceived as an integral part of the attractiveness of the Wadden area, as became clear in the discussions during the Waddenland Symposium in 2016. Moreover, Lower Saxony includes its inhabited islands in the protected zone, distinguishing between quiet areas, zones where human activity is firmly regulated, and leisure areas (Nationalpark Wattenmeer, 2018). Local and regional initiatives illustrate how cultural and historical values have been successfully integrated in the management of
Danish coastal zones as well (Christensen and Guldberg, 2004). The Danish Wadden Sea National Park emphasises the interrelationship between natural and cultural heritage. On its visitor homepage, for example, natural heritage and cultural history are presented as equally important elements of the vast tidal landscape (Vadehavet, 2018). It seems as though there is the most ground to be gained in the Netherlands on the perception and management of the Wadden Sea area as a maritime-agricultural landscape, although small steps are being taken in the development of new national policy.

Nature and culture in Dutch national policy
Dutch national policy on the Wadden Sea area is based on the Physical Planning Act and the Nature Conservation Act. The Wadden Sea area has the status of a special region, as the government established a National Policy Strategy for the Wadden Sea (Structuurvisie Waddenzee) in 2006 and is working on the development of a new policy framework. Two earlier national policy strategies on spatial planning (Planologische Kernbeslissing) of the Wadden Sea area were implemented, in 1980 and 1992, respectively. The National Policy Strategy is mainly aimed towards preserving geomorphology, flora and fauna and integrating sector policy on many spatial, economic and nature preservation issues. The dominance of the nature preservation perspective is reflected in the plan’s borders, following the sea dikes and excluding the land behind the dikes as well as the Wadden Sea Islands. This document is the main basis for the UNESCO designation for the Dutch part of the Wadden Sea region (RHDHV, 2015).

Cultural heritage is not a prominent factor in National Policy Strategy for the Wadden Sea (Egberts, 2018). Landscape qualities were defined in terms of open horizon, darkness at night and “naturalness”. Archaeological heritage and cultural historical values were mentioned as an addition of minor importance (VROM, 2006). Between 2014 and 2016, this policy was evaluated, anticipating a new policy strategy under the Environment and Planning Act, coming into effect in 2019. In that context, the Living Environment and Transport Inspectorate (2014) published a highly critical report on the effect of the strategy in municipal and provincial policy. It appeared that the strategy has hardly been integrated into spatial planning policy behind the dikes at all, even where considering highrise construction along the coastline and industrial activities that cause light in the darkness that can be seen from kilometres away. The outcomes of the policy orientation process that followed point towards a focus on preservation and thus a lack of developmental perspective. It also seemed that heritage has gained a more prominent position in Dutch spatial policy, but appears to be treated as a sector, rather than an intersectional subject that is involved in all considerations in the area[1]. However, it also became clear that cultural heritage has been addressed in provincial policy documents, but barely at all in national ones (Rho, 2016, pp. 23-24).

Landscape consequences
The effects of the hard boundary of the nature preserve become apparent in the landscape in various ways and I want to discuss some of them briefly. There are few areas where culture and nature are as diametrically opposed as in the case of commercial fishing in the Wadden Sea. Fishing has become strongly regulated to protect fish and shellfish, and this has been implemented in policies like the National Policy Strategy for the Wadden Sea (VROM, 2006). The measures have proved rather successful, thanks in no small part to the nature protection movement.

However, these protective policies are aimed at reducing human influence in the Wadden Sea, the cultural-historical values of the sea-bound life of fishing communities have not been taken into account. For example, fishing quotas and bans on cockle picking and mussel seed collection overlook the values of traditional ways of life in which fishing was pragmatically considered an agricultural activity (Bremer, 1978, pp. 434-440). On the former island of Wieringen local organisations seem to have realised this and have taken various initiatives to
promote the fisherman’s tradition. The municipality started a weekly fish market in the port of Den Oever, and a Wieringen cookbook has been published, focussing mainly on local and historical recipes using fish and shellfish. Here, a focus on nature preservation clashes with the goal of preserving culture: on the one hand fishing needs to be restricted, but from a cultural point of view it must be encouraged, albeit with more attention paid to sustainability than in the past. Initiatives such as the Integrated Fishery Working Group, which works hard to combine nature conservation, employment opportunities and the cultural-historical value of the fishing tradition, offer hope for a constructive dialogue. Nevertheless, the problem remains that a dialogue is missing in which human activity in the Wadden Sea is seen as an inextricable part of the region’s landscape values, including fishing activities (Bazelmans, 2009).

Where human activity is excluded from the Wadden Sea by nature preservation measures, the influence of the sea is also excluded from the land behind the dikes. The marine-clay areas of the northern Netherlands are an important region for the Dutch agricultural sector (NAKZ, n.d.), but are affected by salinisation (LTO, 2016). Salinisation is a consequence of land subsidence and climate change and requires constant attention. A defensive strategy is employed: fresh water is pumped into the ditches to keep the salty water away from the crops. Maintaining this costly hard freshwater boundary is a very recent feature when looking at the long-term history of the region (Jeannette Hoek, cited in Noordhoff, 2015, p. 12). Robust measures to prevent salinisation only became necessary over the course of the twentieth century with the introduction of agricultural crops that do not tolerate salty water around their roots well. The maintenance of what is referred to as the freshwater bubble only became possible with the construction of the sea dike (Afsluitdijk) in the 1930s, that turned the water from the IJsselmeer from salty to fresh. This way, agriculture has distanced itself relatively recently from the nearby Wadden Sea, through which the landscape was largely shaped.

On the sea dike itself, the boundaries of the nature preservation areas in policy are slowly becoming a physical reality: gradually they are being inscribed in the Wadden Sea landscape. Along the sea dike in Groningen, large wind farms have been planned and constructed by power companies, stimulated by government funding schemes for renewable energy. And at the Eemshaven, power company RWE is currently expanding the existing wind farms on the sea dike. In preliminary studies the policies regarding the mainland are taken into account (Arcadis, 2015), presenting the sea dike as the edge of the landscape. The sea side of the dike is left out of the analysis, despite the fact that the construction of windmills on the edge of the nature reserve dominates the sea views from kilometres away (see Arcadis, 2015). The narrow borders and definitions of the Wadden Sea area have made the coherence between nature and culture, sea and land a blind spot. These examples illustrate how the hard boundary between nature and culture/agriculture, and salty and fresh water, are hardened.

The landscape concept as a bridge

The question is: how can we overcome this ingrained juxtaposition in an area that has high natural as well as cultural values? Is it possible for academics and policymakers to frame the Wadden Sea region from the viewpoint of the natural-cultural interconnectedness?

Despite its complexity and manifold connotations, the concept of landscape can be a good point of departure. In the Anglophone world, the landscape concept gained a visual and aesthetic meaning after the emergence of Dutch landscape paintings: “a cultural image, a pictorial way of representing, structuring and symbolizing surroundings” (Cosgrove and Daniels, 1988, p. 1). But in its earliest use, the concept incorporated not only a part of the earth’s surface, but the integration of a community, the land they used, and the territory they demarcated (Olwig, 1996, pp. 630-633). In continental Europe, landscape (Landschaft in German, landschap in Dutch or Landskap in Swedish) still carries this meaning, referring not only to a territory, but also to the communities and governing institutions of the land (Jones, 2003, pp. 458-459). Researchers have already used the landscape concept to call for a more
inclusive approach in managing the Wadden Sea region. Anthropologist Werner Krauss (2005) argues for overcoming the essentialist notions of nature and culture by using the term “political landscape”, as it encapsulates the intertwined nature of bio-geological processes and human interventions over the course of time, but also addresses the region as a political entity (p. 44).

A further specification of the landscape concept for this unique coastal area is necessary in order to better frame the specific characteristics of the area based on the complex entanglement of natural and cultural processes. Therefore, the term “maritime-agricultural landscape” could arguably open up new possibilities for new integrated perspectives on the Wadden region. This concept is based on the work of the Scandinavian archaeologist Christer Westerdahl, who described the rocky Scandinavian coastline as a “maritime cultural landscape”, referring to the “human utilisation (economy) of maritime space by boat: settlement, fishing, hunting, shipping and its attendant subcultures” (Westerdahl, 1992). The problem with Westerdahl’s term is that it overemphasises cultural values and disregards the natural ones. This is one reason I advocate not speaking and writing about cultural landscapes, but just of landscapes as such. Moreover, the term “cultural landscapes” suggests that their opposite (namely, natural landscapes) can exist outside the cultural realm (Widgren, 1997).

The Wadden Sea area is notable for having an agricultural character as well as a maritime one. In the past, the island inhabitants mainly combined seagoing life with a farming existence, while today the agricultural identity has the upper hand: many inhabitants live with their backs to the dike (Westerdahl, 1992). Nevertheless, the maritime relationship with the Wadden Sea area is still present far inland: the trade connections via inland waterways bear witness to this, but generations of successive (sleeper) dikes also reflect the dynamic relationship with the sea that makes this region so unique. As Smit (1976) argues, the term “maritime-agricultural” is more suitable here.

Approaching the Dutch Wadden region as a maritime-agricultural landscape brings the interaction between humans and their living environment to the fore. This could also be of benefit to nature preservation: once humans and the relationships they have to their surroundings are no longer excluded, but included in preservation of natural values, discourses on Wadden Sea protection could take a less defensive shape.

The landscape concept also opens up the possibility of viewing the current sea dike as only one dividing line in an ever-dynamic landscape, in which the boundary between land and sea shifts constantly. The current sea dike is only one of many since the coastline has been pushed further out into the sea through land reclamation.

By approaching both the sea and the land of the Wadden Sea area as one contiguous landscape in which both nature and culture have a place, nature conservationists, fishermen and agrarians could open up the debate and jointly work on ways to keep the area arable and liveable, while protecting its natural values at the same time. New economic initiatives that embrace the essentially maritime-agricultural character of the area point in a hopeful direction. For example, small-scale entrepreneurs are trying to overcome the nature vs culture deadlock, such as the members of Geïntegreerde Visserij (“integrated fishery”, www.geintegreerdevisserij.nl): coastal fishermen using small-scale and flexible working methods that respect the natural values of the Wadden Sea. On the island of Texel, adventurous farmers have stopped battling the salinisation of their lands and are experimenting with crops that are halotolerant or even halophilic, such as particular potato and carrot crops, as well as seaweed and salicornia (De Vos et al., 2016). And there are also opportunities for generating renewable energy without windmills on the dike: scientists are experimenting with generating energy from tidal movement, and osmotic power production (from mixing fresh and salty water) is an even more promising scenario (Post, 2016). These new sources of energy suit the characteristics of this particular landscape well.

These experiments are more compatible with the cultural-historical Wadden landscape than those that focus on either the seaside or landside of the Wadden Sea area.
Current national and trilateral policies do not yet facilitate such an integrated approach. The listing of a site as a World Heritage Site signifies international recognition with great potential symbolic impact, as its assets are described in terms of “Outstanding Universal Value”. But the focus on natural heritage alone creates a problematic situation for the preservation of cultural heritage. UNESCO’s categories of cultural landscapes and mixed sites: both offer opportunities to reframe the Wadden Sea region’s heritage. Re-listing the area as a mixed site would offer interesting opportunities to redefine the outstanding values of the area. Examples from Scandinavia, such as Lofoten and Laponia, illustrate how landscapes with high cultural and natural values can benefit from the recognition of the interrelatedness of natural and cultural heritage (Sande, 2015).

A great deal needs to be done before the Wadden Sea region can be reclassified. A first challenge would be to create more cohesion in the knowledge about cultural-historical assets in the Wadden Sea region, and to stimulate science-policy interactions in the field of cultural history and heritage. A second challenge would be to shift focus to inhabitants, who identify deeply with cultural history – perhaps more deeply than with nature (Burbridge, 2000). Resistance to, as well as cooperation with, spatial changes are very often based on this identification with the landscape. Acknowledging the values inhabitants attach to their living environments by integrating them in future policy for the Wadden area could increase the support for the preservation of the landscape in not only its cultural but also particularly in its natural assets (Ratter and Gee, 2012). Community-based governance would enable citizens to benefit more from the UNESCO status in ecological and economical terms. Moreover, the integrity of the area’s management would be stimulated (During et al., 2014). Elsewhere, some hopeful steps are already being taken. The mandate of the WSF integrates natural and cultural heritage in its trilateral agenda. And examples from Denmark and Germany could give concrete indications of how to achieve a maritime-agricultural landscape perspective (Plate 1).

Plate 1.
The Wadden Sea dike in the province of Groningen

Note: Wadden Sea on the left and the historic village of Wierum on the right
Source: Image taken by the author, 2016
Note
1. The essay that gave rise to this article was part of the policy exploration process, initiated by the Ministry of Infrastructure and the Environment. By giving this assignment, the Ministry gave an important signal of the intention to integrate cultural heritage in future policy for the area.

References


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