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The '*Dingpolitik*' of Wind Energy in Northern German Landscapes: An Ethnographic Case Study

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ABSTRACT *Germany has assumed a leading position in the global wind energy market, with its coastal districts of North Frisia and Dithmarschen as two outstanding locations. These coastal landscapes are literally the outcome of interaction between human and non-human forces throughout the centuries, and they are characterized by the wind, the tides and the sea as well as the building of dikes, technological innovations and the interplay of regional, national and trans-national forces. Against this background, the short but complex transition from a mainly agricultural landscape into a wind energy landscape is interpreted here following Latour's (2005b) concept of a Dingpolitik (politics of things) and complementary assumptions suggested by the European Landscape Convention. I will argue that the rise of wind energy in Northern Germany is not only the result of top-down governance strategies, but of a collective effort based on the dynamics of the collective of people and things that make up these landscapes. Based on ethnographic examples, this article analyses the emergence of wind energy landscapes in Northern Germany from the first implementation of wind turbines to civic wind parks as a form of social practice.*

KEY WORDS: Wind energy, Germany, Dingpolitik, anthropology of landscape, European Landscape Convention

Introduction

In the production of alternative energies Germany has assumed a leading position worldwide. The introduction of energy feeder laws and changes in communal spatial planning legislation as well as financial incentives fostered this unprecedented rise of wind energy. The implementation of the agenda has altered the appearance of landscapes, as any visitor to Northern Germany will immediately notice: wind turbines have re-structured the already geometrical laid-out coastal landscape, adding a vertical dimension to the level land under an endless sky. They join heaven and earth and transform wind into energy.

Wind turbines are a visible expression of change in energy policy, but they are not merely the unilateral effect of top-down initiatives. As I will show in this paper, the

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emergence of wind energy is the result of the complex interplay of individual initiatives, new technologies and politics on various levels. In analysing these dynamics, I will draw upon an understanding of landscape based upon my reading of Bruno Latour combined with the conceptualization of landscape as an expression of social and political practice developed in anthropology and related disciplines (e.g. Hirsch & O'Hanlon, 1995; Ingold, 2000; Olwig, 2007). This approach, judging from the analysis of Lionella Scazzosi, is in broad agreement with the general development of the landscape concept in European environmental discourse, as she writes:

> The meaning of the term 'landscape' has become broader than that of a view or panorama of natural scenery, which characterized many national protection laws and policies until the middle of the 20th century, and that of environment or nature, to which it has often been limited during the recent years of environmental battles. (Scazzosi, 2004, p. 337).

This approach can also be seen to be in substantial agreement with the definition of landscape articulated by the European Landscape Convention, to which the majority of European states subscribe (Olwig, 2007, p. 581). Here landscape is defined as "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors" (Council of Europe 2000, chapter 1, art. 1).

Based on ethnographic fieldwork in this coastal landscape, I will here analyse the emergence of wind energy from an anthropological grassroots perspective, with coastal inhabitants as actors in a complex web of power relations. I will show that wind energy in Northern Germany is part and parcel of the *res publica*, which Olwig (2007, p. 583) sees as the focal point of landscape understood as practice. Following Latour's (2005b) related concept of a *Dingpolitik* (politics of things), I will argue that the spectacular rise of this technology is not merely the result of (trans-) national governance strategies, but has to be analysed as a collective effort of the assemblies of people and things that make up this coastal landscape.

Methodological Background: Wind Energy and Landscape

Landscape environments are dynamic spaces shaped by the interaction of human and non-human forces. The North German coastal landscapes of North Frisia and Dithmarschen are an extreme example of this interaction in being explicitly 'artificial' landscapes: drained wetlands, land wrested from the sea, technological innovations in dike construction or in agriculture have changed space over time and turned it into an environment for those who live in it, shape, administer and maintain it. The philosopher Peter Sloterdijk reminds us that we do not simply live in a given environment, in a biological or physical space, but that rather "we are ourselves space-creating beings, and that we cannot exist otherwise than in these self-animated spaces".[1] Dikes, church steeples, grain silos, electric pylons or wind turbines are visible landscape signs of self-animation and are charged with meaning; they are at the same time political, legal, aesthetic, economic, ideological, material and symbolic variables that have to be reckoned with. They represent power in both senses of the word: as the transformation of energy for human purposes and as assets

in the web of power relations that shapes any landscape. Technology and power go hand in hand (Commoner, 1976). Thus, wind turbines change a landscape comprehensively not only in an aesthetic sense, but also with respect to power relations. They are according to Latour (2005a, p. 83) matters of concern, things that have to be discussed and to be decided upon. They are the things that Olwig is referring to when he interprets in accordance with Latour the power of the *res publica* as the core of landscape as defined, for example, by the European Landscape Convention:

> The power of the *res publica* stems from public discourse, that is, from a multivocal process of communication that ultimately generates a consensus concerning the things (*res* means thing) that are agreed upon. The *res publica* is a political community shaped through discourse and the core of its power is thus essentially invisible because it depends upon a process of agreement about things that comes about through deliberation—the kind of deliberation that takes place through a convention, for example. (Olwig, 2007, p. 583)

This definition goes far beyond concepts of landscape still prevailing in environmental (and climate) discourses and concepts, which are primarily based on scientific facts or material things and bring people only secondarily into play. Quite to the contrary, in Olwig's definition people's "'aspirations' with regard to the landscape" (p. 581) are equally important and inseparably connected to landscape as a conventional practice.

According to The European Landscape Convention, as interpreted by Olwig and others, it should not be primarily be the experts who are to plan and develop the landscape, "but rather the people whose daily practices and perceptions shape the social order and physical landscape" (Olwig, 2007, p. 581). This, however, is already a *de facto* reality in North German landscapes I have been studying. This was true for the conflicts surrounding the implementation of a National Park along the North Sea coastline, and it is true for the emergence of wind energy. As I will show in the prologue below, conflict, negotiations and tension between the coastal communities on the hand and the administrations, scientists and national policies on the other were crucial in the National Park conflicts; in the case of wind energy, conflict also was a constant, and it was local pressure that forced legislators and administrators to act.

In cultural anthropology, the 'people-and-things' centred approach to landscape has a tradition of its own (Hirsch & O'Hanlon, 1995). The anthropology of landscapes focuses on the perceptions of indigenous people living in specific environments or, as Feld and Basso (1996) term it, on 'the senses of place'. Taking (1) their narratives seriously has important consequences, not at least for the presentation of the data: these narratives are not standing for something else, but they are realities in their own right. The ethnographic method thus follows the stories, the plots or the symbols in order to trace the connections between the local and the global, between places and spaces. For Latour (2005a, p. 128) people are actors in their own right, with their own theories and metaphysics, and the task of the researcher is to follow these actors and their often-time surprising decisions.[2] In accordance with Sloterdijk he suggests that people create the spheres they inhabit,

and it is the actors who connect their sphere to other spheres, be they national or global. Wind energy was not merely imposed on the people in North Germany, but they implemented wind power through own initiative and clever interaction with national and global policies. Thus, landscape understood in anthropological terms also means relocating the global and redistributing the local (Latour, 2005a, p. 173). A new challenge such as the production of wind energy in times of climate change cannot be addressed with old concepts. Neither oppositions such as nature and culture or science and society nor the focus on merely aesthetic aspects of landscapes can help to explain the emergence of wind energy landscape and their dynamics.

In the first part of my paper, I will show that there are lessons to be learned from the conflicts surrounding 'Nature' and the National Park; lessons that are also important for the implementation of alternative energies. In the second part, I will sketch a short history of the German ambivalent relation to technology and nature, exemplified at the coastal landscapes of Northern Germany. These chapters will serve as the background for the subsequent steps of the development of wind energy from individual initiatives to the rise of well-ordered and implemented civic wind parks in Dithmarschen and North Frisia. Finally, I will draw some general conclusions from this case study in respect to governance strategies and the local implementation of alternative energies.

Prologue to Wind Energy: Contested Nature

For several years I carried out long-term field work in the North German coastal region, during which I followed various trails. My starting point was the conflicts over the 'National Park Scheswig-Holsteinian Wadden Sea' that had been established there in the mid-1980s, placing the seaward coastal shelf under protection and arousing vehement protest on the part of the inhabitants. At the centre of these conflicts was the question of whether the so-called Wadden Sea was a natural or a cultural landscape. After nearly two decades and many embittered negotiations and compromises, this strife has now largely abated and the National Park accepted. It is still nature that is being officially protected, yet in the course of the debates 'nature' has suffered a loss of discursive authority.[3] Oddly, the manifest wind power boom in the region played no role in these debates, even though it witnessed a form of ecological stewardship, in terms of the global environment, that ought to have given the environmental concerns of the local population credence. Invoking the opinion of scientific experts, representatives of the National Park presented a concept of nature as an authoritative factor that was not the provenance of the local population; nature was written with a capital N, backed up by science with a capital S. At the same time, the nature conservationists tended to discredit the coastal population as no longer being a traditional community because it believed in progress, and thus failed to be a potential candidate for ecological stewardship.[4] The fact that these presumably innovation-mad coast dwellers had just entered the market in alternative energies, and so were already actively taking part in the new concern about climate change, found no place in this mindset. When implementing the National Park, the scientific and administrative experts on nature acted in the top-down fashion that The European Landscape Convention tries to overcome.

It was only through local resistance that they were forced to change their strategies and entered into negotiations with the coastal population.

In the beginning of the debates surrounding the National Park, nature proved to be a one-dimensional and inflexible concept, or as Latour (2004, p. 303) puts it, the concept of nature was used primarily in order to reduce political life to a mere torso and an authoritarian concept. Nature, in this Latourian sense, does not represent a domain of reality but rather functions as an instrument of depoliticization by separating the objective and indisputable from the controversial and subjective. In the name of a 'Nature' that rests on unquestionable scientific knowledge a discursive hegemony was imposed upon the 'crotchety' coastal population, without ever showing an interest in their actual activities, perceptions and interests. It was the coastal population who forced the experts to listen and to act, and locals broke the hegemony and made themselves heard.

During my fieldwork I could minutely follow how conservationist discourse and practice diverged. Being under pressure from local resistance, the representatives of the National Park visited each mayor of the local communities and made compromises with the angry townships. They allowed selected access to areas of communal use, and in doing so they established themselves within the regional network that administers this landscape. After imposing themselves above common law and local practices, they were now literally forced into the net of regional power relations. The settling of conflicts over the National Park did not come about by solving the question of nature, but thanks to the inner and outer flexibility of local and regional networks; for all concerned, compromises were earned the hard way by means of politics. When everybody found his place at the negotiating table, the mayor and the National Park director, the fishermen, hunters and farmers, but also the birds, the wind and the sea (represented by scientists or NGOs), it was at last possible to find closure for this conflict. The crisis, as Latour (2004, p. 302) says, was not really a crisis of nature at all, but rather a crisis of objectivity.

It is the negotiations, assemblies and networks that make up the coastal landscape—the landscape, that is, understood as practice, as a dynamic process, as an activity. A landscape is neither natural nor cultural; it designates that activity which brings forth the 'animated space' in which we can live our lives and live them as securely as possible. This idea of landscape has historical models on the North Frisian coast: here the German word for landscape, *Landschaft*, was also the literal designation of that political unit which made the regulations in respect to questions of taxation, property and public order. Landscape in this sense brokers the *res publica*; it always concerns something, a conflict, a dispute, a thing, a *res*. Each of these matters of concern calls for new assemblies that take up these concrete problems and questions. Networks have to be re-aligned when new issues, such as wind energy emerge; new actors have to be integrated into the power relations that make up this landscape.

Power Landscapes

As said before, my curiosity about wind energy was first aroused in the course of studying the conflicts over the Wadden Sea National Park, in which the subject of wind energy was oddly absent. Why was that so? One reason is surely the dilemma

that wind energy represents for nature conservation. The use of space and land is a complex challenge for conservationist groups and environmental organizations. The production of wind energy has brought with it a new wave of industrialization for rural and even maritime spaces, which have at the same time become an object of conservationist efforts. This dilemma is obvious, but in its basic constellation it is by no means new. Following Blackbourn (2006), we might say that it is a fundamental constant of the German relation to nature. In his book *The Conquest of Nature*, Blackbourn has written a history of German nature chiefly from the view of the engineer as the constructor of landscapes. By means of this specific approach, he shows that German landscapes could be the result of sometimes vehement interventions and re-shapings of previous landscapes as well as the material for sublime experiences of nature, a hoard of patriotic feeling and a sense of homeland. Blackbourn concludes that though "[t]he German landscapes were many things: unchanging was not one of them" (2006, p. 5).

German landscapes have always been landscapes of power, and this certainly did not change with the first hydraulic projects and contemporary wind energy landscapes. A constant in this long process of interventions in landscapes, in the ongoing construction of landscapes, is conflict. Each new dam, each dike, each straightening of a river triggered conflicts between local and national powers. In river regulation, the lines of conflict ran between fishermen and farmers, then between farming and industry, and today between, for example, nature conservation and farming. The establishment of wind energy is a further step in this complex development of new landscapes, their construction and reconstruction. This development has not taken place linearly but has rather taken a zigzag course; it has changed the old constellations of power and created new networks, and again the one side sees in this progress and the other a threat to the naturalness of the landscape. In any case, the change took place in a short space of time, in which trial and error was the rule and regional practice and state control were not always coordinated, yet extremely productive. A constellation that is not new to the inhabitants of the coast.

From Growian to Butendiek: A Short History of Wind Power in Germany

Since the 1990s, the history of wind energy in Germany has been a success story. Today Germany produces one third of the world's wind power and over half of the wind power in Europe.[5] Although natural circumstances are not everywhere as good as they are on the North Sea coast and in many other European countries, a legal framework has ensured that wind energy is profitable. Above all, the Feeder Act (Stromeinspeisungsgesetz) of 1991 and the Renewable Energy Act (Erneuerbare Energien Gesetz) of 2000 have ensured that energy providers are constrained to pay a good price for electric power produced by wind energy. This policy has not made wind energy completely independent of the wind (even if sceptics have spread rumours that, thanks to the subsidy policy, wind turbines were built even in nearly windless regions), but it has created the foundation for establishing wind energy.[6]

The key data of the German success story point to the North German coastal region with its high concentration of wind turbines. At the beginning and the end of the history of the large-scale production of wind energy stand the names 'Growian'

and 'Butendiek'. 'Growian' is an acronym standing for *Großwindkraftanlage*, a large wind energy station, and was an initial experimental project of the German government in Dithmarschen in the 1980s. Not only do the symbolic beginnings of wind energy lies on the western coast of North Germany but also its future, bound up with, among others, the name 'Butendiek'. The future of wind energy is off-shore, in the North Sea, once wind turbines on the coast have reached the socially tolerable saturation point. 'Butendiek' is the name for a civic project in North Frisia that was one of the first pilot projects to receive authorization for this bold move out into the open sea.

From Growian to Butendiek, in a time span of merely two decades, the western coast of North Germany has increasingly developed into a producer of wind energy. In the northern German state of Schleswig-Holstein, about 30% of primary energy is generated by wind energy, produced by 2595 wind energy stations. Of these, 623 are in North Frisia, about 800 in Dithmarschen. In many respects, the coastal region has assumed a leading role in Germany, and the county seat Husum claims for itself the title of wind capital of the world. According to the town's own advertisement, it is home to the world's most important wind energy fair, the 'HUSUMwind'. Some 520 exhibitors from 29 countries are impressive numbers, and whoever imagines an alternative wind farmer with long hair when he thinks of wind power will be surprised by the look of the representatives of big companies who come here.

It has long been more than only the wind turbines that have made wind energy a promising branch of the economy in this region. Ever more businesses for the production of wind power technology have settled here; according to the district of North Frisia's website, they have created over 1600 jobs in recent years. If Germany was previously largely dependent on Danish wind power technology, it has now developed more and more into a leader on the world market and made wind turbines into a export hit, while the region hopes its harbours and proximity to the planned off-shore projects will further increase its revenues from trade taxes and create more jobs. What here reads like a nearly non-stop and consistent success story proves, on closer examination, to have been a zigzag with many diverse and unintended consequences of action.

Growian, *Verspargelung*,[7] and Local Strategies

Wind power in Germany has many precursors and progenitors, ranging from mechanical windmills to ultramodern wind farms. Dithmarschen and North Frisia played an important role in this history. The wind power station Growian,[8] which went into operation in the 1980s in Dithmarschen, enjoyed little success, but because of the national interest it attracted, marked a turning-point in the history of wind power in Germany. With Growian, wind power began to gain momentum; a movement that often went in every which way, motivated by the oil crisis, the resistance against nuclear power stations, technological innovations, state interventions and the political tendencies of the time, but also steered by clever mayors and value-conservative farmers. Wind energy was in the air, at the same time a strong counter-wind blew (Jensen, 2005, p. 252).

Growian was a publicly sponsored wind power station of astonishing dimensions (hub height 100 m) erected on the Kaiser-Wilhelm-Koog[9] in Dithmarschen in order

to test wind technology. At this time the public mood was by no means unanimously in favour of wind power; in the neighbouring federal state of Lower Saxony, bitter battles raged over the nuclear power station Brokdorf, and many upright citizens and politicians were allergic to anything that was marked 'anti-atomic energy'. Once again the state had put its money on the apparently unshakeable faith in technology, in science and progress, and ran into a mass protest movement with which it had not reckoned. Yet civic pressure demanded some response in the form of political measures, and so the state planned Growian. While the project was still looking for a suitable site with a good deal of wind, the mayor of the Kaiser-Wilhelm-Koog in Dithmarschen piloted Growian onto his own farmland. The station became known all over Germany, but it was to have little success: after only 420 operating hours it had to be shut down. Public acceptance had been done a disservice, and that on the land of the mayor.

The mayor used Growian to make his tiny township known throughout the country, compared the gigantic windmill to the Eiffel Tower and the Prater, and thereby earned himself, initially at least, only a great deal of conflict—conflicts that pointed to the future. Conservationists regarded the station warily and succeeded in putting through a measure that spanned a gigantic net before the turbine to protect birds from the rotor blades; politically active opponents of atomic energy saw the project as a feint on the part of the state designed to prove that wind power was a lame duck. At the same time, the idea caught on that smaller wind stations based on the Danish model would be a better solution. Soon there were experiments everywhere, and the mayor stuck to his guns. He had been acquainted with wind energy since childhood; as in many places in Germany, here too electricity was a prized commodity, especially in times of war, and many a farmer helped himself with small wind turbines to keep the generators running. But the mayor also had other useful experience with the trio of technological innovations, state subsidies and agricultural practice. Coastal politicians have fine flair for the wind that blows from above, and for the limits, weaknesses and possibilities of state policy. After the unsuccessful grand project, the government tested small wind turbines, and the mayor skilfully succeeded in piloting the first German wind farm after Growian onto his land once more. Shortly thereafter, there followed an experimental wind power station with small turbines, which is still operating today (Jensen, 2005, p. 253). At the same time, the mayor proclaimed a new slogan: "A mill for every farm!" In doing so, he not only undermined state policy concerning the wind farm, but he initiated a whole new chapter in the development of wind energy in North Germany. The consequences can still be seen in Dithmarschen today—individual turbines cover great swathes of land.

The zigzagging course of German subsidy policy was reflected again in the history of wind power in Dithmarschen. Legislation obliged the electric companies to buy wind-produced current at a high price and to feed it into the grid. It was worth one's while to erect an individual station on the farm because "the money came out of the wall socket", as a newspaper article[10] of the time is captioned, and the mayor himself was soon the proud owner of a wind turbine. New prospects thus opened up for this structurally weak area, but they had their downsides. Many farmers leased their land to outside investors, of whom many were operating companies whose members were in turn themselves organized into companies. Farms in Dithmarschen became a

lucrative investment for investors from all over Germany, who profited in turn from the arrangement by which the electric utilities had to turn over to them 90% of the price for which the utilities bought power (an arrangement that customers began to feel). In this way the profit often did not remain in the region and became instead a nationwide ecological investment. This was just one downside of the initial development. In no time, the slogan "A mill for every farm" had obvious aesthetic consequences: wind turbines are spread out every which way over the region without any visible trace of land-use planning. Critics were soon at hand, talking of uncontrolled growth and coining the expression *Verspargelung* for a process that made the whole landscape look like parcelled fields of giant asparagus. This phenomenon was soon to be seen in Germany wherever wind turbines were erected; wind power opponents organized and today still constitute a lobby, which is well represented in the media. In particular, the most important German weekly, *Der Spiegel*, has repeatedly published articles against *Verspargelung* and detailed reports not only about the destruction of landscapes but also about the consequences of wind turbines for health and quality of life of people who live in their vicinity.[11] Noise pollution, rotating light effects and health problems have led to the filing of lawsuits. The motive behind these lawsuits is varied—many of the claimants are members of elites in urban centres who have weekend houses on the North Sea coast and feel they have been cheated of their experience of nature.

In 1997, the state responded to the critique of wind turbines with a change in the law, according to which townships are instructed to designate areas for wind farms. Here again the township of the Kaiser-Wilhelm-Koog responded swiftly, designating community land in which now also small investors from the region could put their money. During these stormy beginnings of wind energy production, with its rapid technological and legislative innovations, initiative, chutzpah and administrative skill were essential. The legislation had difficulty keeping up with the practical reality, so that many a gap in the laws emerged along with a dense meshwork of often bewildering regulations. The role of the district administration in all this should not be underrated. Not only in North Germany, close relationships between local citizens or officials and the district administration are at the core of landscape as a social practice. Individual administrative officials developed into specialists in the field of authorizing wind power and became coordinating points for a development that has lastingly shaped the North German coastal landscape. Even more, national legislation in many cases only followed already established practices on the regional levels in order to fully legalize a process which was already underway. The Dithmarschen landscape reflects this development, in all its contradictoriness. The idea of a civic wind farm, however, enjoyed an astonishing blossoming, as the following examples from North Frisia will show.

Wind Energy in North Frisia: The Rise of Civic Wind Farms

In 2003, when I took part in a session of the town council in the self-administering township of Reussenkoege, a vote on the authorization of a wind turbine on the farmland of one of the citizens stood on the agenda. The mayor asked those among the 12 councilmen who were themselves owners of turbines, and so might be biased in the question, to leave the room. Only three then remained. The vote went against

the applicant: in the 1990s the township had already prepared a land-use plan that designated land parallel to the dike lines as building area for wind turbines, and today 60% of the households are members of one of the four civic wind farms.[12] In this example, the town council routinely put into practice what a new legislation from above had suggested as a reaction to the ''a wind mill on every farm'' boom: townships and communities are allowed to designate outskirt areas for the exclusive use of wind energy. Reussenkoege too can self-consciously claim to reflect and have co-written the history of wind energy in Germany. Flat land and a high average annual wind velocity are prerequisites, but it is equally the assemblies who shape and administer this coastal landscape.

One of the farmers of Reussenkoege was inspired early on by the tender bud of wind energy.[13] That wasn't difficult: during an interview he showed me an old photo of his farm where I could see the 24-rotor wind turbine of his grandfather, who used it to run a grist-mill. As a young man, he had studied agriculture and spent several years abroad as a development aid worker in Madagascar and Cameroon before he returned to his farm. With his wife, whom he met at an event held by an organization for the preservation of Frisian culture and language, he runs a farm for sows and grain. Like all farmers in this coastal landscape, he confronts the dilemma of farming in a competitive European market, but with restricted access to land in these coastal polders. This dilemma is expressed in the motto ''If you won't expand, then go''. Instead of buying or leasing land from one of his neighbours, he pioneered in finding new energy solutions for producing high quality agricultural products: ''We wanted to produce energy in an ecological way without economic losses'', as he puts it (quoted in Jensen, 2005, p. 232).[14] At the environmentally minded end of the 1970s and beginning of the 1980s, wind energy was in the air; he visited wind power stations in other places with farmer friends and caught the fever. He liked the look of a pilot project of the German Federal Ministry of Research and Technology[15] for setting up a small wind converter: as the state reimbursed him for 50% of the costs, he could afford to buy a 20 kW machine from a German manufacturer. When later the Feeder Act made possible the purchase of a larger turbine, he paid for a 250 kW Danish machine. Looking back, he smilingly regrets not having invested in three of them; but it was still an emerging market and he had shied away from the potential risks.

While the political landscape in Germany in the 1980s was dominated by the question of 'eco or not-eco', in-between a new field of opportunities opened up. Among the highly industrialized farmers of this polder there is quite definitely resistance against the constant constraint to growth, to constant modernization. Wind energy offered an alternative by means of growth upwards and use of a resource that had always been available and was now re-discovered to a hitherto unknown extent. While the idea of sustainability and renewable energies also prevailed among some of the coastal farmers, this did not prevent them for fighting against the powerful intervention of nature conservationists in their landscape. Ironically, they had to keep the 'Greens' out of their land in order to further expand their investments into wind energy; green legislation might have prohibited this new kind of industrial use on the farming lands. This is at least true for the implementation of the National Park, which had to be restricted under all circumstances to the area beyond the dike, to the seaside. There are many shades

of green, and in the case of wind energy it was not one of exclusion (as with the National Park), but one of a booming industry. My interlocutor exemplified this continuity in opposing the National Park and investing in renewable energies; organized protest against the conservationists and organizing on a communal level the transformation of this coastal landscape into a wind energy landscape is no contradiction at all.

Reussenkoege's website announces proudly that here, on this polder, the first standard wind power station in Germany was erected in 1983, and nine more followed, all built to supply some of the power needed for agricultural businesses. The Feeder Act of 1991 suddenly made wind turbines attractive in quite a new way: wind energy became a new potential source of income; the farmer could now also harvest wind and be a wind farmer. Reussenkoege was active early in directing the subsequent desire for profit into orderly channels by designating building areas. In 1993, 28 wind power stations owned by individual operators went onto the grid under the umbrella of an administrative corporation. This process, however, did not take place without incident; many citizens eyed the development with suspicion and estimated the prospects of the hype as slight. In addition, the first law suits about noise and visual pollution came up. Some were filed by residents of the polder and found a hearing in the courts. Smiling to himself, one citizen told me that compensation against potential law suits was always included in the sales price of a turbine—which is one way of resolving conflicts.

In the following years, Reussenkoege citizens developed three more operating companies, which built wind power stations capable of producing 600 to 1650 kW. At the same time, the older turbines were dismantled; there was, as the website remarks, "a fluent transition into what is known as 'repowering'". The 28 old turbines belonging to individual operators were also dismantled, and today the owners form their own company group with 17 turbines on the same area of land that generate three times the power of the old ones. The residents of this polder have developed into specialists in the field of wind energy, and they appear to have succeeded in keeping profits in the township through strict regulations. They manoeuvre skilfully between changes in legislation and rapidly improving technology, and have adapted themselves to both in their political infrastructure. Local networks have proved to be flexible, and their ramifications are global.

The dismantled 'old' wind turbines have a high market value. A deal with an African country was nearly sewn up when the state minister concerned had to resign because he had promised the turbines to his friends. But the global market is big and buyers are easily found, especially in Eastern Europe. An 'old' windmill can still bring in well over 100 000 Euro. In Burma, such a windmill from Reussenkoege generates the power for a luxury hotel.[16] Global networks are nothing new to coastal residents whose foremost line of dikes was already financed a hundred years ago by diamonds from South Africa. Today, the export of first-generation wind turbines serves as an economic surplus and is reinvested into the next generations of wind turbines.

The local networks have many ramifications. Historically, a line runs from the wind turbine operated grist-mill to the high-power turbines of today; another from the dikes and wind powered pumps to the wind farms; and another connects Reussenkoege to places in Africa, Asia and America. At the same time, the township

has bridged its internal conflicts and created the opportunity for every resident to have a windmill by designating ever more community land for wind farms. The residents appear to have tapped the optimum potential of this source of income without turning the landscape into 'asparagus fields' of turbines and without letting capital flow into outside pockets. The limits of the 'civic wind farm' model have yet to be reached, but the citizens of Reussenkoege are competing in a market onto which transnational companies are increasingly pressing. This is at least true for the jump over the dike, from onshore to offshore wind energy. The next wind energy boom will take place on the seaside, with heavy investments from transnational companies. Coastal inhabitants from Reussenkoege are trying to export their civic wind park model on to the seaside; the project called Butendiek already has received permission to go off-shore. But up to now, none of the competitors has risked doing so, and Butendiek already faces financial problems. A transnational energy provider bought itself into the project, and the start to go offshore is planned for 2010. Most probably, off-shore wind will be harvested by transnational corporate industries, while on land it had empowered and enriched its inhabitants as well as their very peculiar form of collective. Civic wind parks serve both new forms of energy production and the people who implemented the wind turbines. Additionally, they will have their share in the big off-shore business in providing the necessary infrastructures.

Conclusion

The European Landscape Convention is a political response to the increasing expropriation of public space, the ''animated space'' of which Sloterdijk writes, from its inhabitants. In my case study from North Germany the National Park served initially as an example of this kind of top-down conquering of space. But in time, local resistance over almost two decades ultimately made the National Park part of its landscape and its local assemblies. Seen from that perspective, the simultaneity of protest against the National Park and the rise of wind energy, both initiated by the very same agents, no longer appears paradoxical. The central question is not nature versus culture, science (or ecology) versus (backward) locals, but how the coastal dwellers can maintain, shape and administer the environment they live in. Their initiative and sense of the coastal landscape is not a negligible quantity to be displayed in folk museums. Quite the contrary, the thread from land reclamation and dike maintenance leads directly to the transformation of the landscape into a civic windscape.

Dingpolitik means that there is always something at stake, be it the threats from nature such as storm surges, the costs of dike building and maintenance or the miraculous ways of European or global politics concerning agriculture, environmental conservation or renewable energies. Each of these often incalculable factors have to be considered, to be discussed and to be integrated into the system of assemblies of people and things that make up this specific landscape. The implementation of wind energy is *Dingpolitik* in the true sense of the term: wind turbines are things that bring forth new assemblies and changes in power relations. In my case studies, coastal dwellers appeared not only as the profiteers of a new technology, but they took initiative in its development, with high risks involved.

The anthropology of landscapes enables to focus on the dynamics of the landscape's "animated spaces" under various guises without having one sphere eclipses the others. This was the case in the debate about the National Park, where the concept 'nature' initially eclipsed the reality of already existing networks that made up this particular landscape as a practice. In Northern Germany wind energy emerged successfully not because the planners, scientists or administrators gave rise to this spectacular boom, but due to the subtle interplay of individual initiatives, regional routines in balancing people and things and external forces that regulate the process, often times in retrospect. Thus, the implementation of wind energy and civic wind parks is *Dingpolitik* in the strict sense of the term. The European Landscape Convention already reflects some of these insights; there are many lessons to be learned from it for future energy policies. Alternative energies will not flourish through top-down governance strategies only, be they global or not. As I showed in this paper, wind energy additionally has to be seen through the lens of specific landscapes in order to make it part and parcel of the real world we live in.

Notes

1. Available at http://www.petersloterdijk.net/ (accessed 6 June 2009).
2. See also George Marcus (1998) *Through Thick and Thin*, whose "multi-sited ethnography" pursues a similar approach.
3. See Krauss (2006).
4. Fabian (1983) calls this mechanism for producing unequal power relations "allo-chronism". See also Heatherington (2001).
5. When not otherwise indicated, the following remarks on the history of wind energy are based on Schlegel (2005). See also http://www.wind-energie.de/
6. The following data are taken from the official website for the district of North Frisia, available at http://www.nordfriesland.de/index.phtml?La=1&NavID=29.44 (accessed 6 June 2009).
7. In this expression, windmills are metaphorically compared to asparagus; *Verspargelung* thus means 'asparagusization'.
8. 'Growian', an acronym standing for 'big wind power station' (*Große Windkraftanlage*), sounds like the German word for 'ruffian' (*Grobian*).
9. 'Koog' means 'polder'; Kaiser-Wilhelm-Koog is the name of the community.
10. By Frank Zabel in: *Kieler Nachrichten* (no date), available at http://www.kn-online.de/news/print/2238655 (accessed 6 June 2009).
11. 29 March 2006, *Der Spiegel*, 'Der Windmühlenwahn. Vom Traum umweltfreundlicher Energien zur hochverschuldeten Landschaftssubventionierung' ['Windmill Madness: From the Dream of Environmental Friendly Energy to Highly Subsidized Destruction of Landscapes'].
12. See website www.reussenkoege.de
13. The following information comes from my interviews or, where indicated, from Jensen (2005).
14. Translation by the author.
15. Bundesministerium für Forschung und Technik.
16. *Kieler Nachrichten* (no date)

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