Competing Wind Energy Discourses, Contested Landscapes

Markus Leibenath[1]*, Antje Otto[2]

1 Leibniz Institute of Ecological Urban and Regional Development, Weberplatz 1; 01217 Dresden; Germany; +49 (0)351 4679-285; M.Leibenath@ioer.de

2 University of Potsdam, Institute of Earth and Environmental Science, Karl-Liebknecht-Str. 24-25, 14476 Potsdam-Golm; Germany; +49 (0)331 977-2542, anotto@uni-potsdam.de

Abstract

The impairment of landscapes is a concern constantly raised against wind energy developments in Germany as in other countries. Often, landscapes or landscape types are treated in the literature as essentialist or at least as uncontested categories. We analyse two examples of local controversies about wind energy, in which "landscape" is employed by supporters and opponents alike, from a poststructuralist and discourse theoretical angle. The aim is to identify and compare landscape constructs produced in the micro discourses of wind energy objectors and proponents at local level (a) within each case, (b) between the two cases and (c) with landscape constructs that were previously found in macro discourses. One major finding is that several different landscapes can exist at one and the same place. Furthermore there seems to be a relatively stable set of competing landscape concepts which is reproduced in specific controversies. The paper concludes by highlighting practical consequences and by identifying promising avenues of further research.

*Corresponding author. Email: M.Leibenath@ioer.de

1 Introduction

Many authors point out that the impairment of landscapes is a constant concern raised against renewable energy technologies in general and wind energy developments in particular (e.g., Nadaï & Van der Horst 2010; Wolsink 2007). According to Warren et al. (2005: 857), "opposition to the visual despoliation of valued landscapes" is the "key motivation for anti-wind farm campaigners." Wolsink & Breukers (2010) underscore the salience of landscape values for local protests against wind power. Likewise, Wüstenhagen et al. (2007: 2684) attest to the "crucial significance of landscape issues in the attitude towards wind power schemes."

But what do people mean when they talk about "landscape" or "landscape issues"? "Landscape" covers a wide variety of meanings. They oscillate, for instance, between a physical phenomenon and its image or visual impression. "Landscape is both the phenomenon itself and our perception of it" (Wylie 2007: 7). Hence there are authors who stress the material and functional properties of landscapes as do many landscape ecologists, while others treat landscapes as social constructions or try to integrate both views (for an in-depth discussion of possible meanings of "landscape," cf. e.g. Cosgrove 2003; Gailing & Leibenath 2012; Henderson 2003; Olwig 2001).

In this paper, we adopt a social constructionist view of landscape (for a comparison between constructionist and other approaches to landscape research, cf. Gailing & Leibenath 2010). More specifically, we look on the social construction of landscapes from a poststructuralist, discourse theoretical angle (for a more in-depth discussion of different types of constructionist landscape research, cf. Gailing & Leibenath 2013; Kühne 2009; Leibenath 2013). In this perspective, to put it simply, landscapes are conceptualized as relational systems of meaning (cf. Wylie 2007: 94)—or discourses—which consist of linkages between material objects, actions, words and subjects. This is a non-essentialist understanding of "landscape" because, as discourse analysts, we are describing second-order observations of what people call "landscape" or—in a broader sense—of

how people relate themselves to material objects and to others through words and actions. It is self-evident that such landscapes can be assessed neither mechanically, for instance by means of landscape metrics in combination with geographic information systems, nor "objectively" without consciously reflecting upon the perspectives of the observed and the observers, as well as upon the contexts in which observations are made (these and other tenets of post-positivist research are discussed in greater detail in, e.g., Fischer 1998). What is needed instead is an interpretive approach such as discourse analysis.

A number of authors have employed discourse analysis to study wind energy politics. Szarka (2004) examined wind energy policy discourses and related discourse coalitions in three European countries and at the EU level. Concepts of landscape, space or place play a marginal role therein and are mentioned only as part of anti-wind protest discourses (" 'industrialis- ation' of 'sensitive' landscapes by massive wind turbines": 325). Similarly, Jessup (2010) looked at macro discourses without reference to specific projects in Australia and the United Kingdom and established storylines in the discourses of objectors and supporters of wind energy. According to Jessup, landscape again appears exclusively in the objectors' storyline "valuing landscape and place" (26).

Gee (2010) analysed local "views of the landscape" (189) which emerged in discussions about wind power developments off Germany's North Sea coast and "whether the meanings given to the sea and the coastal landscape influence acceptance of offshore wind farms" (186). She speaks of landscapes exclusively in the singular. This is in line with her finding that even the supporters of the disputed wind farms basically adhere to the idea of protecting "nature or the seascape," although they "are willing to trade this for forms of energy generation that are safe and climate-friendly" (194). This means that all respondents basically share a common understanding of the North Sea and the coastal landscape.

Other authors also address landscape in wind energy conflicts. Wolsink (2007), for instance, stresses that investors and key stakeholders such as the members of an environmental organisation

evaluated a number of predefined landscape types such as "agricultural areas," "mound landscape," and "recreational areas" (2697) differently with regard to their suitability as sites for the construction of a wind farm. He thus states "that what matters is the type of landscape that is selected for the siting of wind turbines" (2696). And: "Hence, the planning and decision-making process has to focus on the type of landscape" (2702). Wolsink treats landscapes (or landscape types) as essentialist categories. There are given landscape types and there are the evaluations or assessments of these landscape types expressed by members of a major stakeholder organisation. In Wolsink's study, only the latter seem to be an issue of deliberation. Thus, in the case he describes, what landscape type a certain stretch of land represents and whether it has to be regarded as "nature area" or "industry, harbour area" (Wolsink 2007: 2697) are not contested.

There is accordingly a strand of literature (Gee 2010; Jessup 2010; Szarka 2004; Wolsink 2007) in which "landscape" appears to be a relatively homogenous, uncontested notion in wind energy conflicts. This is contrasted by the findings of Leibenath and Otto (2012), who scrutinized landscape constructs in German wind energy politics and basically discern two concepts which they label "landscape as beautiful, valuable area" and "landscape as an area shaped by humans" (126). The first of these two macro-discourses can actually be traced back to Germany's romantic landscape discourse, which has been described by historians such as Blackbourn (2007). A third landscape concept, which Leibenath and Otto (2012: 126) term "landscape as something which is subjectively perceived," occurred only marginally.

Against this background, the article pursues three research questions with an eye to local controversies about onshore wind energy projects in Germany. The first is whether there are local debates on wind turbines in which competing landscapes are constructed. The second question is what similarities and differences exist between landscape constructs from different local wind energy discourses. And, finally, the extent to which landscape constructs in discourses at the local level overlap with landscape constructs that have been identified in wind energy discourses at the macro level. To answer these questions, we present a case study on a dispute about a single wind turbine in the municipality of Ingersheim in Baden-Wuerttemberg, and contrast it with another case study on a planned wind farm in the town of Wolfhagen in Hesse (Leibenath & Otto 2013b; Otto & Leibenath 2014).

The findings are not intended to be generalised and to contribute to a general theory of landscape discourses related to wind energy developments which would allow predictions about other cases. Instead, our overall aim is to show whether and, if so, how landscapes become part of political conflicts about wind energy, to help better understand such conflicts and to examine the social construction of landscape from the viewpoint of politics and power.

The paper is organised in three parts. First, we outline our poststructuralist understanding of discourse, space and the discursive construction of landscapes. This sets the frame for the second part of the paper in which the methods, contexts and results of our empirical analyses are presented and discussed. Finally we draw conclusions on practical implications of our findings and further research needs.

2 Discourse, Space, and the Discursive Construction of Landscapes

Like most other scholars dealing with discourse (cf. the overview given by Feindt & Oels 2005), Laclau & Mouffe pay attention to the constitutive role of language in constructing social facts. However, they reject the distinction between discourse as something merely linguistic and an extra-discursive, non-linguistic reality. They take discourses to be structured totalities which relate linguistic elements such as words and utterances to objects and practices in a contingent manner (Laclau 1993; Laclau & Mouffe 1985).

From this perspective it is a characteristic of discourses that they imply the articulation of a political frontiers between the inside and outside, or "between insiders and outsiders, which exclude particular practices and possibilities" (Griggs & Howarth 2012: 309). A logic of equivalence to some

extent dissolves the differences between a number of elements by relating them positively to one element on the inside and negatively to elements on the discursive outside. Elements to which many others are related are called nodal points or, in the extreme, empty signifiers tending to be free of any particular meaning precisely because they are related to so many other elements (Howarth & Stavrakakis, 2000; Laclau & Mouffe, 1985).

It is in principle undecidable what a discursive element "really" means. Therefore it becomes a matter of power to institute a certain discourse, to establish an antagonistic frontier between inside and outside (cf. Howarth 2010: 309 f.) and to define—by articulating relations of equivalence or difference—what, e.g., a landscape is and what it is not. All these decisions are contingent in the sense that they are made on an "undecidable terrain. The conclusion is . . . that as undecidability operates at the very ground of the social, objectivity and power become indistinguishable" (Laclau 1993: 435). Every discourse privileges certain types of knowledge and devaluates others. It has its regime of truth which determines what can be said and what not. Hence, power and knowledge are inextricably interwoven (cf. Dryzek 1997: 9; Foucault 2005 [1976]; Waage & Benediktsson 2010: 5). This type of power is both repressive and productive. Moreover, power relations of this kind can be studied at any level or scale. For instance, Foucault (1983 [1976]) recommended to study the workings of power at the micro level of everyday practices and how they relate to more global strategies.

Poststructuralist discourse theory also offers a specific approach to landscape or space. Commonly, space is treated by many social scientists as a phenomenon with physical and social dimensions (cf. Bourdieu 1991; Lefebvre 1991 [1974]). By contrast, Laclau & Mouffe (1985) assert that no physical object can gain social presence without being mediated by discourses and that therefore all social facts are discursive facts (cf. also Laclau 1990; Natter & Jones III 1993). If one adheres to their anti-essentialist, post-foundational perspective, then space has to be regarded as a system of differential relations between physical objects, practices and linguistic elements—i.e., as discourse or as a part

thereof. In any case, it is impossible to draw a line between space and its representations, because physical space (understood as ensembles of material objects), practices, and linguistic elements such as place names are ineluctably intertwined. Another consequence is that spaces are not seen as something absolute, but firstly as contingent effects of power and secondly as contested or at least contestable phenomena (Jones III & Natter 1999). The same applies to landscapes.

As discourse researchers, we seek to deconstruct existing ontologies of "landscape" and analyse the power-laden mechanisms of inclusion and exclusion, as well as the relations between linguistic and non-linguistic elements by which they come to bear. In the following we speak of "landscape concepts," meaning specific ontologies of landscape, which we address as a discursive structure. These can either be supra-local concepts which include the word "landscape," or local, place-specific discourses in which toponymic expressions such as "Saxon Switzerland" or "North Kent Marshes" usually play a greater role.

3 Data and Analytical Methods

The empirical findings are based on case studies in two German municipalities: Ingersheim and Wolfhagen. Departing from a comprehensive survey about local debates on wind energy in Germany (Leibenath & Otto 2013a), the two cases were chosen because they were among the few in which "landscape" figures prominently in the discourses of both objectors and proponents. This is an embedded multiple-case design, as each of the two cases comprises several embedded units of analysis, i.e., several discourses (cf. Yin 2003: 42). The cases were selected according to the logic of the "most different systems design" rather than the logic of the "most similar systems design" (Blatter et al. 2006: 177 f.): They "share certain family resemblances" (Howarth 2005: 334) with regard to the phenomenon of interest (i.e., landscape discourses produced by opponents and supports), but differ in many other ways (e.g., different size of the schemes, different physical environments, different histories, different

political conditions at state level etc.).

In both cases we adopted a multi-data approach (see table 1). We relied primarily on non-reactive linguistic data such as websites of the organisations involved, leaflets, local newspaper reports, and letters to the editors of local newspapers. With regard to this type of written material, we tried to establish as comprehensive a corpus as possible.

Furthermore we conducted semi-structured, open-ended interviews with key persons. They were selected on the basis of our empirical knowledge gained from document analysis. Moreover we asked interviewees who else we should talk to in order to get a fuller picture. The interview guidance included questions on the personal background of interviewees, the linguistic structures of the given discourse (e.g., "Why are you [Why is your group] fighting for [against] the wind energy scheme?"), related non-linguistic practices, the historic development of the discourse, context conditions, potential turning points, and the coalitions that the discourse produced.

Table 1: Overview of analysed documents and conducted interviews in the case studies

	Ingersheim	Wolfhagen
Document analysis	Corpus of about 300 documents mainly from 2010-2012. In-depth analysis of ten written documents: ▪ four leaflets (EGIU 2010a; Müller 2010a; 2010b; 2010c), ▪ one website entry (EGIU 2010c), ▪ one open letter (Huber & Huber 2010), ▪ four letters to the editors of local newspapers (Eisenmann 2011; Grimm 2011; Haecker 2010; Schieber 2010), and ▪ two press releases (SHB 2010; SPD 2011).	Corpus of 500 documents dating from 2008-2012 In-depth analysis of eight written documents: ▪ two leaflets (BI 2010a; Götte & Degenhardt-Meister 2009), ▪ a series of leaflets (SVF 2010), ▪ two brochures (BI 2010b; SWG 2008), and ▪ three letters to the editor of the local newspaper (Dux 2009; Kneißl 2009; Wassmuth 2009).
Semi-structural interviews	Three interviews with six persons: ▪ one individual interview with the mayor of Ingersheim, ▪ one multi-person interview with three representatives of the local energy cooperative that runs the wind turbine, and ▪ one multi-person interview with two members of the anti-wind protest initiative.	Eight interviews with eleven persons: ▪ five individual interviews with supporters of the proposed wind park, ▪ one individual interview with an objector, ▪ one individual interview with a local journalist, and ▪ one multi-person interview with four objectors.

All interviews were intended to be individual. However, some interviewees proposed bringing one or more others, which we accepted. As a result, interviews were both individual and collective. They were conducted in July 2012 for Ingersheim and from July to September 2011 for Wolfhagen. They lasted between one and three hours and were all taped and transcribed verbatim.

In applying Laclau & Mouffe's logics of equivalence, we sought to identify the main nodal points and establish the antagonistic frontiers between inside and outside in objectors' and proponents' discourses on the wind power scheme, focusing on discursive constructs of landscapes. The following quote from the Ingersheim case shows how an antagonistic boundary is constructed between the discourse's inside ("the landscape up there") and outside ("perfect idyll"):

"We find the landscape up there . . . the landscape is already impaired by three parallel high voltage power lines and by intensive farming. This is certainly not a perfect idyll" (interview statement).

Nodal points are those elements that appear repeatedly in the texts and which are related to many other elements. For instance, the following quotes from different texts were the basis for us to identify "health risks of wind turbines" as a nodal point in the objectors' discourse in the Ingersheim case:

▪ "Long-term health risks are looming because of harmful immissions (noise, infrasound and others) from wind turbines, which are not yet sufficiently researched."

▪ "The wind turbine has significant negative effects, e.g., harmful immissions (infrasound, noise, shadow, electric smog) and resulting health risks for citizens living in the vicinity."

▪ "The considerable harassment and the health risks of wind energy were played down."

▪ "There is no doubt that wind turbines produce infrasound. [...] A growing number of scientists points to the health risks of infrasound."

Nodal points structure and organise a discourse. In our analysis, they were the key to deriving discursive structures from individual texts and interviews. For this purpose, we analysed the entire corpus and examined statements for and against the wind energy scheme. Furthermore, we examined a small number of key documents in more detail. These texts were chosen firstly because they included the major nodal points of the discourses in question and secondly because they offered rich chains of equivalential elements in relation to the nodal points.

4 Ingersheim

4.1 Context of the Case

Ingersheim is a municipality with a population of 6000 (Gemeinde Ingersheim n.d.). It lies 25 km to the north of Stuttgart. A nuclear power plant is located in Neckarwestheim, only ten kilometres from Ingersheim, see figure 1. The giant steam cloud emerging from its cooling tower can easily be seen from there.

In 2002 a group of citizens who had previously dealt with photovoltaic projects identified the elevation between Ingersheim and neighbouring Besigheim as a promising site in terms of wind conditions (interview statement). In 2010 this group proposed to establish an energy cooperative and to erect a wind turbine there with a tower height of 138 metres, a rotor diameter of 82 metres and a total height of 179 metres—700 metres from the village and only 450 metres from some detached farmsteads. The generator was supposed to have a capacity of two megawatts. The estimated construction costs amounted to € 3.6 million and were to be recovered by selling shares at € 2500 each (EGIU 2010b).

Shortly after the plans were first made public in March 2010, the citizens' group organized public meetings (or hearings) in Ingersheim and neighbouring communities. The energy cooperative was founded by 11 persons the same month and formally registered in December 2010. Finally, permission to construct the wind turbine was given by the district authority in January 2011. In April 2011 membership of the energy cooperative had reached 350 and sufficient funds were thus available to finance the project. The members of an action group lobbying against the planned wind turbine, which had already
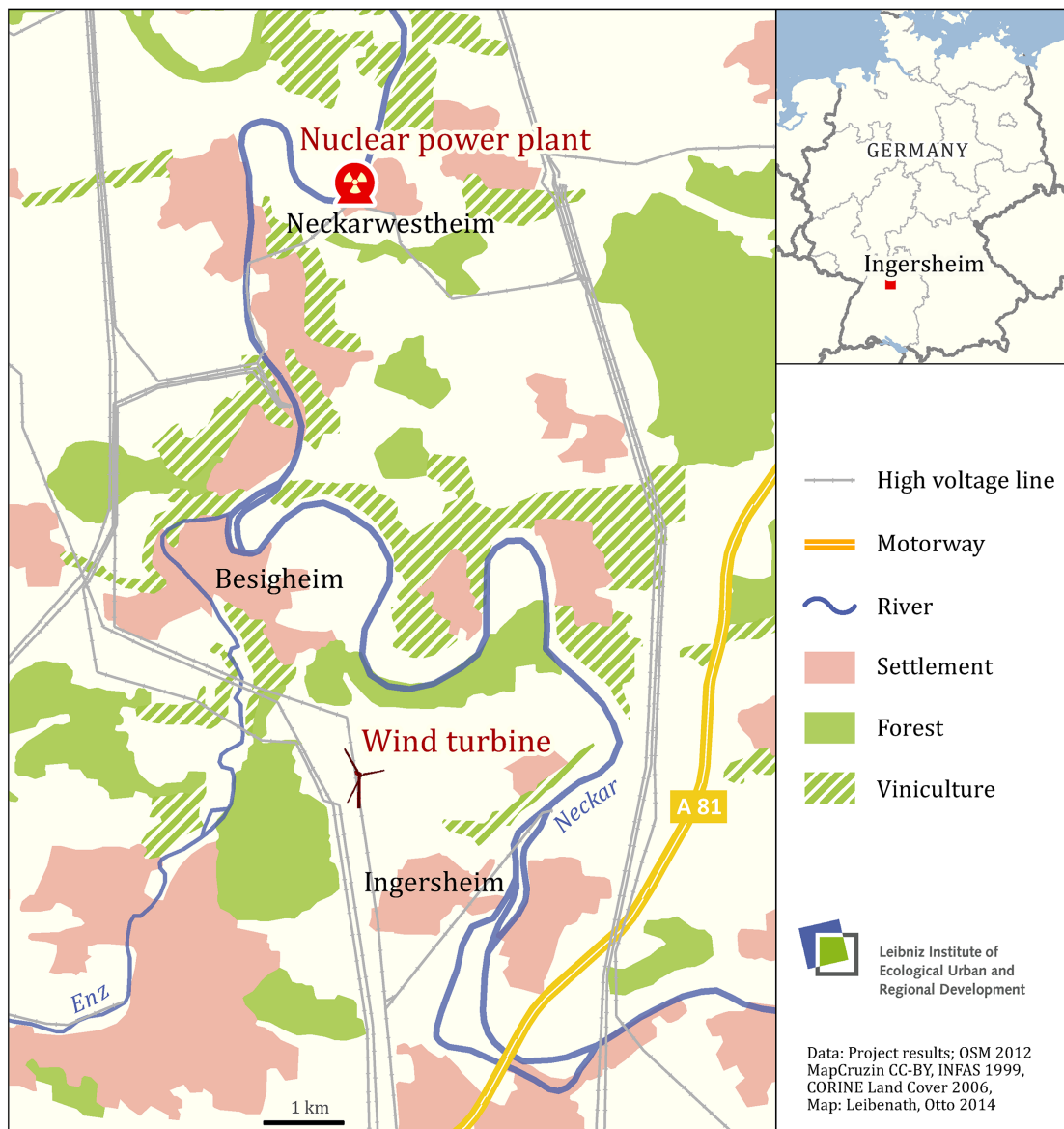
Figure 1: Location of the Ingersheim wind turbine.

formed in February 2010, tried to stop installation by, among other things, legal action. However, their efforts failed. The turf-cutting ceremony for the wind turbine was therefore celebrated in September 2011 and the facility was finalised in March 2012.

4.2 Discursive Constructions of Landscapes in the Proponents' Discourse

Let us take a look at who belonged to the discourse coalition in favour of erecting the wind turbine. First of all there was the energy cooperative with a core group of 10-20 people. It enjoyed the support of all political parties represented in the Ingersheim council, Ingersheim's mayor, the head of the district authority, and representatives of the local parish. Media, such as local newspapers, but also public radio and TV stations advocated building the wind power plant. This was also the case for the newly elected state government, state and district organizations of the environmental non-governmental organization BUND (one of Germany's major environmental NGO's), and the German Wind Energy Association.

The proponents of the project do not use any place names but simply speak of "the landscape," "the landscape here," "the landscape up there" or "up there on the site." They reject the notion that this was an "unimpaired landscape," a "retreat for birds and fauna" or part of a "major flyway of migratory

birds." "They [i.e., the opponents] claim we were destroying an unimpaired landscape, a recreational area, and we were expelling pedestrians, walkers and tourists." These elements in the discursive outside are articulated as equivalents of "nature conservation," "conserving everything" and "making believe there was a perfect idyll." Instead they argue that "the landscape is already impaired by three parallel high voltage power lines and by intensive farming" and that "landscapes have to change." According to them, this is a "cleared usable area," a "densely populated suburban area" and a "cultural landscape, characterized by settlement, industry and infrastructure," which "has been modified again and again." Should there be any wildlife, it would surely be compatible with the new facility: in other areas "nests of the threatened skylark have been found between wind turbines." Furthermore, supporters of the wind power scheme point to the mandatory "compensation measures such as planting orchards and transforming intensively used areas into semi-natural fallow and meadow areas." This exemplifies two major antagonistic nodal points in the proponents' discourse, namely a "used and usable landscape which has been modified many times" (inside) and "perfect idyll" (outside).

Concerning the question as to how the landscape is affected by the wind turbine and how this has to be evaluated, three different and slightly contradictory nodal points can be observed in this discourse's inside: "The wind turbine represents a landmark, a symbol of innovation and of the future," "lesser evil" and a "matter of taste."

▪ The nodal point "landmark" amounts to an outright appraisal of the wind turbine as "aesthetically beautiful." This statement is connected to an equivalential chain of elements such as "the wind turbine integrates well into the landscape," "the colours are fitting," "tourist attraction," "Ingersheim acquires a more positive image because of the wind turbine," and "the wind turbine represents a landmark, a symbol of innovation and the future." It also includes non-linguistic elements, for instance spontaneous barbecues on the building site during the construction phase and it being a popular destination for walkers, a public celebration shortly after the facility was activated, romantic photos

of the new wind turbine as well as photos taken from the top of the tower, presentations and public discussions on the ground floor of the power plant, which also serves as an exhibition space—and of course the turbine itself as a material object.

▪ The nodal point "lesser evil" is articulated as an equivalent of "the view of the wind turbine has to be preferred to the cloud of the nuclear power station Neckarwestheim," "it has to be compared with the nuclear power plant" and "the nuclear power plant can do much more damage to the landscape than a wind turbine."

▪ Statements related to the third nodal point "matter of taste" stress the importance of individual attitudes and judgements, for instance: "depending on the personal viewpoint, the cultural landscape is upgraded or disturbed by the wind turbine," "how to assess changes in the landscape is a question of personal attitude" and "some people like wind turbines and regard them as symbols of progress."

All three nodal points are positively related to the overarching nodal point of installing a wind turbine while being opposed to "nuclear power."

Indeed "getting rid of nuclear power" is articulated as the central nodal point in the supporter's discourse. "Nuclear power" is "symbolized by the steam cloud of Neckarwestheim always in sight." It also corresponds to "iodine tablets have been distributed here in case an incident happens," "the nuclear disaster of Chernobyl when our children could not play outside," and "Fukushima."

Another pair of contrasting nodal points is "good wind conditions" and "false data." Those in favour of the wind turbine articulate equivalences between the said landscape and elements, such as "professional wind measurement," "wind forecast from a renowned expert," "good wind condition proven through long-term measurement in 2002/2003" and "sound data." By contrast, they accuse the opponents of using "false data"—an element which is related to "insufficient wind conditions for operating a wind turbine economically."

4.3 Discursive Constructions of Landscapes in the Opponents' Discourse

This discourse is produced mainly by inhabitants of Besigheim. The protest is led by a citizens' initiative which has about 100 members and more than 1,400 supporters who participated in a petition against the wind power scheme. According to initiative representatives, most of their supporters are from the centre-right political camp of the Liberal Democratic Party FDP and the Christian-Democratic Union CDU, including the mayor of Besigheim (interview statement). Many of these persons identified themselves publicly with this discourse through actions such as attending the handover of petitions to the head of the district authority in December 2010. The discourse coalition also includes the long-time chairpersons of Ingersheim's BUND chapter and the board of the "Schwäbischer Heimatbund," a traditional non-governmental organisation with more than 5,000 members, which advocates the preservation of Swabian historical landscapes and monuments.

The opponents of the wind power scheme raised a broad range of concerns. However, some issues are brought up repeatedly by many different speakers and can thus be regarded as the nodal point of this discourse. One of them is the site and the surrounding landscape, which is termed a "century-old cultural landscape." Furthermore it is articulated in an equivalential chain of elements such as "poor wind conditions," "unfavourable topography with steep valleys," "open land with high visual sensitivity," "century-old cultural landscape with steep-sloped vineyards, orchards and agriculture," "nearly undeveloped rolling hill," "farming," "regional green belt," "particularly lovely landscape" and finally a "landscape worth protecting." According to the objectors, this landscape is "home" and "our native landscape," and it provides "identity."

The corresponding nodal point in the discursive outside can be labelled "irreparable disfigurement." It is related to "large-scale technical intrusion," "monster plant," "impairing the visual quality of the landscape in an irreparable way," "total blight," "permanent mutilation of the scenery," "loss of valuable farmland," and "the claim that it was possible to compensate for this intervention." An interesting non-linguistic element in this regard was the action of demonstrating the height of the planned wind turbine with the help of a helicopter (Willy 2010).

Another important nodal point in this discourse's interior is "energy transition" in combination with "wind energy" and "climate protection and nuclear phase-out." Almost all objectors argue that "we accept the energy transition . . ., we are basically in favour of renewable energies," that "wind energy is an important element of energy generation" and that "supporting the energy transition is positive." However, this principal backing of wind energy hinges on the condition that "it makes sense economically." Therefore the equivalential chain further extends to elements such as "areas with constantly high wind speed," "other locations with better wind conditions in other parts of Baden-Wuerttemberg," "in eastern and northern Germany or England" and "wind power offshore, in England or Scotland."

This nodal point, too, has a clear-cut counterpart in the discursive outside, namely to erect a wind turbine at this location. Thus, the wind turbine as such and the action of building it together constitute a nodal point that is often related to the slogan "ecological and economic nonsense" (in German: "Ökologie- und Ökonomie-Unfug"). It is further articulated as part of an equivalential chain of elements such as "building wind turbines at sites which neither make sense in economic terms nor in terms of energy policy," "the energy yield does not justify the damage to the landscape" and "doing the energy transition a disservice." Many other economic items are articulated in this context, for instance "inefficiency," "waste of governmental subsidies," "the profitability of the scheme is out of proportion to the environmental intrusion," "devastating cost-benefit ratio at this location," "devaluation of real estate" and "marginal benefits for a few investors [that] does not justify disadvantages at the expense of the entire population of Ingersheim and Besigheim."

The last major nodal point to be discussed here has to do with human health and the quality of life. It is subsumed under the statement "health risks of wind turbines" and belongs to the discursive outside. It is articulated as an equivalent of "health effects of

the planned turbine were not assessed," "negative effects of infrasound," "shadow flicker can lead to concentration disorders," and "loss of quality of life." This nodal point with its equivalents corresponds weakly to elements on the discursive inside such as "the distance between the wind turbine and residential buildings has to be enlarged," which cannot be regarded as a nodal point. Instead, "harmful effects on health" is chiefly articulated in an equivalential relation with the other nodal points on the outside, namely "irreparable disfigurement" and "ecological and economic nonsense."

The opponents' discourse displays a number of breaches or contradictions. For instance, while most members of the discourse coalition reject nuclear energy by employing terms such as "nuclear energy plight" and "the devil of nuclear power," others speak of nuclear energy as a "helpful transitory energy." Another example can be seen in statements such as "new wind turbines lead to additional carbon dioxide emissions because backup power plants have to operate" or "photovoltaic panels and wind mills . . . [are] sacred buildings of a new creed" which stand in stark contrast to the nodal point "energy transition."

5 Wolfhagen

5.1 Context of the Case

The town of Wolfhagen has approximately 14,000 inhabitants (SWDM n.d.) and lies 20 kilometres east of Kassel in northern Hesse, see figure 2.
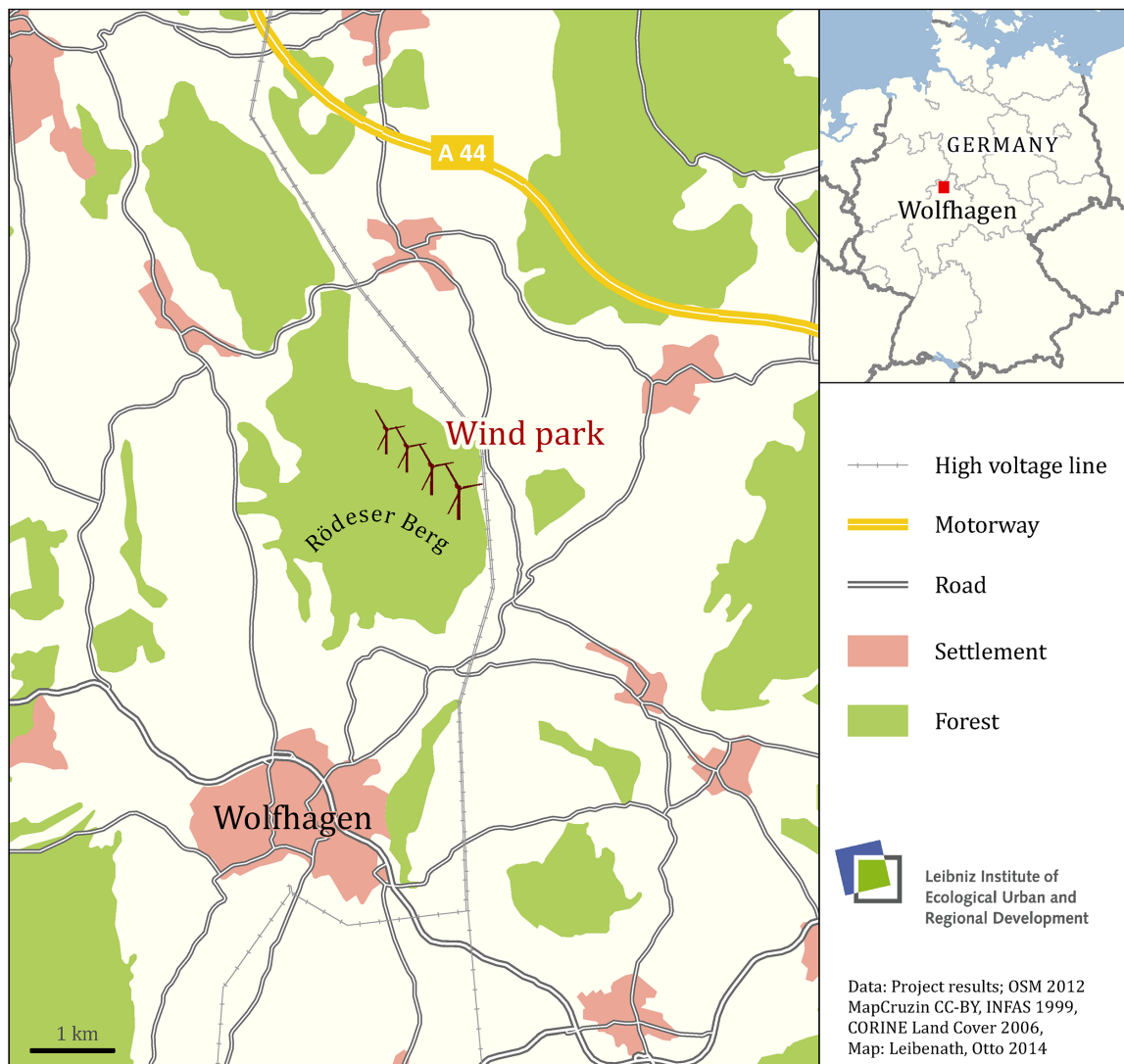

Figure 2: Location of the Wolfhagen wind park.

The argument about wind turbines in Wolfhagen is embedded in a public debate on climate change, climate protection and renewable energies. In 2008, the local council unanimously passed an energy concept, according to which all of Wolfhagen's households were to be provided with locally produced electricity from renewable sources by 2015. To this purpose, a wind power scheme provided for the erection of four turbines with a capacity of three megawatts each and a total height of 186 metres. It was planned for the facility to be built and operated jointly by the municipal utility company and a local energy cooperative. But where were the wind turbines to be constructed? A commission was established to answer this question. It included "representatives of potentially affected municipal districts, of the Climate Offensive Wolfhagen, of the municipality, forest owners, conservation agencies as well as of other organisations" (SWG 2008: 2). After several months of discussing, assessing and weighing up the facts, the commission agreed on the Rödeser Berg—a wooded hill or low mountain not far from the town centre—as the preferred site of the wind park.

After the siting decision was made public in late 2008, several citizen's initiatives and other organisations were founded, which lobbied for or against the planned wind park. The final permission to build the wind farm was issued in January 2014 and the four turbines, which are currently under construction, are to be completed by the end of 2014 (SWG 2014).

5.2 Discursive Constructions of Landscapes in the Proponents' Discourse

The discourse in favour of the wind park was produced by a coalition comprising council members from three parties (Social Democrats, Christian Democrats and the so-called Wolfhagen List), the independent mayor, the initiative "ProWind Wolfhagen—Energy Transition Now" and an informal group of citizens who prepared the foundation of the local energy cooperative.

The proponents' discourse centres on the municipal energy concept and the planned wind farm as its cornerstone. The energy concept is articulated as an equivalent of "security, jobs,"

"necessary climate protection," "responsibility," "sustainability," "independence," and—regarding the prospect of supplying energy by means of a civic cooperative—"democratization." The wind turbines are depicted as "beacons of progress," "pillars of climate protection" and "symbols of acting responsibly and sustainably at the regional level." The related antagonistic nodal point is "climate change" in combination with "not protecting the climate," "multinational corporations," and—especially since the Fukushima disaster on February 11, 2011—"nuclear power."

This is the background for articulating a very distinct toponymic landscape concept of the Rödeser Berg, the area where the wind park is supposed to be built. According to the supporters, the Rödeser Berg is a place where a significant contribution towards saving the world's climate can be made. This nodal point is intertwined with the municipal energy concept and the issue of climate protection. Consequently, it is opposed to "not protecting the climate" and related elements such as "growing numbers of extreme meteorological events" and "Mediterranean brushwood on the Rödeser Berg instead of the forest we know."

The second nodal point "commercial forest" is positively related to "created and shaped by humans," "ready to be harvested," "devastated by the latest hurricane," and "one of many similar forest complexes." This is underpinned by photos such as an aerial image of the windthrow areas on the Rödeser Berg. The proponents maintain that the Rödeser Berg is neither a "primary forest" nor a habitat of threatened species. The attitude of conservationists who claim that the Rödeser Berg was a "hunting habitat of red kite" or a "resting area of wild cat" is classified as "ignorance," "local egoism" and "romantic transfiguration by certain nature lovers."

Finally the supporters of the wind park describe the Rödeser Berg as the most promising and appropriate site. Such statements belong to an equivalential chain which also includes "effective," "sufficient distance to other buildings," and "least environmental problems." By contrast, any alternative site would imply "building more facilities," having a lower

energy yield, and aggravating the conflicts with nature conservation.

5.3 Discursive Constructions of Landscapes in the Opponents' Discourse

The opposing discourse coalition has enlarged gradually. At the end of the analysed period it comprised the council members of the Green Party and their newly founded local chapter, the citizen's initiative "No Wind Power in our Woods" and the "Wolfhagen Civic Alliance," which is also represented on the local council.

The objectors' concept of the Rödeser Berg is even more elaborate than that of the supporters. The Rödeser Berg functions as a kind of master signifier in this discourse. First it is termed an "intact beech and oak forest." Furthermore it is described as "large," "silent," "valuable," "natural," and as a "resting area for animals," as well as the "habitat of many threatened animal and plant species." Cases in point are the red kite whose population density in this area is "three times higher than the Hessian average," black stork, "rare bat species," and the wild cat. The opponents of the proposed wind scheme invested much effort in proving the existence of cats, kites and bats by means of sophisticated techniques. They argue that the wind park is going to cause the "destruction of the forest ecosystem," a "permanent disturbance" and an "impairment or destruction of species diversity." This is also illustrated by photos, e.g. by one of a natural-looking deciduous forest which is juxtaposed to another one showing the massive concrete base of a wind turbine amidst spruce trees.

Another nodal point is "alternatives," although on the discursive inside (and not on the outside as in the supporters' discourse). By this the opponents mean "sites which are already impaired" such as "commercial and industrial areas" and existing wind power sites, which could be upgraded. They reject "massive intrusions in our nature and our landscape scenery." They also doubt the suitability of the Rödeser Berg in terms of wind conditions. For them, installing wind turbines on the Rödeser Berg amounts to a "catastrophe for the landscape." In the objectors' discourse, the Rödeser Berg is "our

beautiful landscape," characterized by "uniqueness," "recreation," "tourism" and "home." By contrast, the planned wind turbines are denoted as "monsters," "atrocious," "gigantic," "visual madness," and an "extremely dubious industrial project."

Although the Rödeser Berg plays a key role in the opponents' discourse, there are other nodal points that are differently accentuated by different speakers. One is the planning and decision-making process for the wind farm so far, which they relate to "misleading people," "political pressure," "blocking out critics," and "retaining expert assessments." Instead, they demand a referendum and the acknowledgement of the "technically due assessment."

6 Discussion

Both Ingersheim and Wolfhagen are examples of local controversies about wind energy in which "landscape" is employed by supporters and opponents alike. Our first research question was whether the opposing camps discursively construct the same or different landscapes. We found that different landscape concepts, which are intertwined with opposed political claims, were produced in each of these debates. We are therefore confronted with political landscapes, laden with power. Seemingly neutral statements such as "there is always a strong wind blowing up there" or "the rare bird xy is nesting there" are highly political because by uttering these phrases speakers position themselves on one side or the other of a battle about wind turbines at a specific location.

With regard to the second research question, which concerns the similarities and differences between landscape constructs from different local wind energy discourses, it can be said that in both cases the discursive constructions of landscapes are integral components of the respective discourses. In the Wolfhagen controversy, they are related to the conflict between local conservation and global climate protection that, e.g., Gee (2010) also identified in her study. By contrast, in Ingersheim these issues figure only on the margins of the discourses. Here,

the entire debate is literally overshadowed by the cloud of the nearby nuclear power plant. Therefore it is to some extent logical that the opponents of the Ingersheim wind turbine stress the harmful effects on human health that possibly emanate from wind turbines. Notwithstanding the different contexts of the cases, the landscape concepts of objectors and proponents display striking similarities in cross-case comparison. In both cases the opponents of wind schemes construct an idyllic, beautiful, and valuable landscape, which is home to both humans and a rich biodiversity of plants and animals and in need of protection. In the proponents' discourses, by contrast, cultivated and exploited landscapes appear that are constantly undergoing changes.

This leads to the third research question regarding possible overlaps between landscape constructs at the micro and macro levels. Our brief literature review in the introductory section showed that there is one macro discourse about landscape which focuses on the notion of "landscape as beautiful, valuable area" (Leibenath & Otto 2012: 126). The landscape discourses produced by those who oppose wind energy developments in our cases overlap broadly with this macro discourse. The same holds true for the supporters' landscape discourses in relation to the second macro discourse of "landscape as an area shaped by humans" (Leibenath & Otto 2012: 126). Thus there seem to be a relatively stable set of landscape concepts that is reproduced in specific controversies. However, this hypothesis needs to be assessed in further empirical studies.

7 Conclusion

Our analyses of the debates about wind energy schemes in Ingersheim and Wolfhagen demonstrate that landscapes can be a contested issue in such controversies at the local level. If this is the case, it becomes almost impossible to speak objectively or neutrally about the sites in question. This has direct practical consequences. First, if basically all landscapes are political and contingent constructs, virtually any landscape can be contested, even if it not actually is. Therefore

almost any argument about visual despoliation and disfigurement of landscapes by wind turbines can be countered by (re-)producing a different discourse of landscapes as dynamic and of wind turbines as enhancing the scenic quality of a given landscape, and vice versa. Secondly, Wolsink's (2007) recommendation to consult key stakeholders in the process of wind power planning and to select the types of landscape with the highest acceptability in the eyes of the stakeholders has to be questioned, because it cannot always be said in the first place who the relevant stakeholders are and what landscape type category a given site falls into. For instance, in the Wolfhagen case, the local council and the municipal utility company set up a site-finding commission which was supposed to represent all relevant stakeholders and to identify a site that would be acceptable to everybody. However, after the decision had been made, a range of new interest groups was established who voiced quite opposite views of the Rödeser Berg landscape.

There are many promising avenues for further research. One is to shed more light on the role of key actors in producing wind energy-related landscape discourses in local conflicts. Although discourse theory assumes that all subjective identities are discursively constructed and that discourse therefore precedes individuality (Howarth 2005: 317 and 320; Howarth 2010: 314), it would be interesting to combine inquiries into discourses with other branches of social scientific research and raise questions such as how the commitment of key stakeholders is linked to their personal biographies and how they became stakeholders at all. In order to obtain a fuller understanding, it would also be revealing to take the relations and interactions between stakeholders into account and to assess the degree to which their involvement is influenced by categories such as trust. This would help close the neglect of individual agency in discourse analytical research often lamented (cf. Leipold 2014: 18). Another possible direction for future inquiry is to conduct longitudinal analyses of the intertwinement of energy and landscape discourses and to see how they develop over time. It is likely that new conceptions of landscapes, of generating and using energy, and of spatial planning and decision-

making will emerge and influence each other. The prevalence of certain concepts and discourses among given groups of interest could be mapped repeatedly by means of quantitative tools such as Q-methodology (Ellis et al. 2007) or surveys (Smith & Hay 2008). Finally it would be promising to elucidate why landscapes are only in a few local wind energy debates explicitly contested and why this issue is considered by just one of the conflicting parties or even entirely ignored in most cases.

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