🤍 С О М М Е N T A R Y

ENERGY AND ENERGOPOLITICS

Ethnographies of Wind and Power

Dorle Dracklé U Bremen

Werner Krauss Helmholtz-Zentrum Geesthacht

Due to global acceptance of the reality of global warming and the imperative of changing energy sources, more and more countries are implementing renewable energies such as wind power. As the transformation of space is a consequence of these newly established alternative energy policies, we looked at the deployment of wind power in Northern Germany and in Texas through the lens of ethnographic landscape studies. A comparison of the differences, commonalities and potentials for the production of wind energy points to important distinctions in energy governmentality.

The global demand for a low carbon future and its successful implementation are highly dependent on national cultures of administration as well as on the respective practices, initiatives and perceptions of space on the local level. The ethnographic focus on landscape directs attention to people's relations with their environment, which are crucial for the transformation of rural spaces into renewable energy landscapes. The global energy transition occurs in specific local settings with their own histories of people, common laws, rules of ownership and material cultures. This process encompasses a transition of power as energy and as political power relations, thereby making possible an anthropology of energy. The implementation of wind energy changes the way we inhabit, shape and administer space.

Wind and Power in Germany

Germany has taken a leading position in the global wind energy market. The successful institutionalization of wind technologies is a result of legal measures such as the Energy Feed-in Laws and of flexible adaptation in spatial planning. These new energy scenarios result from the oil crisis, mass protests against nuclear energy and the burgeoning environmental movement. In the formative phase between the 1970s and 1980s the government reacted only reluctantly to pressure from non-governmental organizations and grassroots initiatives, while putting its bets on nuclear and coal options. Regardless, these early initiatives fostered institutional and political change. Energy Feed-in Laws guaranteed wind farmers prices and access to the power grids and created financial incentives for new wind turbines. Within a few years, these legal measures turned wind energy into a powerful economic asset. By 2020, Germany wants to produce 30% of its energy by renewable energy sources, and 80% by 2050.

But there was also a price to be paid: some German landscapes changed dramatically due to the mushrooming turbines. Initially, a "one turbine on every farm" policy led to what is called "asparagus-ization" (*Verspargelung*) of the landscape, creating many conflicts at the local level about ownership and about landscape aesthetics as a marker for cultural identity. It was mostly the subtle interplay between municipalities and the regional and the national administrations which made possible an administrative and legal framework for the transition from these "wild" policies to an orderly process of spatial planning. In densely populated Germany, new laws encouraged municipalities to allow wind farms in specially allocated areas in order to design and control the visual consequences of this new industry.

The landscapes in Northern Friesland reflect this development both visually and with respect to ownership rights. While in areas of unregulated implementation it was mostly investors from outside who owned the turbines, other municipalities organized civic wind parks with exclusively local ownership. This is especially true for some areas in Northern Germany, where *Landschaft* always meant a polity and a practice, and is closely related to questions of ownership. Space is scarce in Germany, and conflicts were avoided in those areas where people owned the turbines.

However the future of wind power in Germany lies off-shore. With the transition from landscape to seascape, the nature of ownership changes: off-shore wind farms are financed by energy providers and oil companies; private or communal ownership cannot afford to do so. Thus, off-shore wind energy is no longer alternative energy in terms of ownership. Instead, it is big business now with wind as a new substitute (or supplement) for fossil fuels.

Wind and Power in Texas

Nolan County in Northern Texas-home to one of the world's largest wind farms-is called the "wind turbine capital of Texas." Blessed by strong winds from the North American wind corridor, innovators in local government and business communities attracted capital and technology investments. Local farmers, under pressure from the global market and threatened by the downturn of the US family-farm model, welcomed investors wholeheartedly. In contrast to Germany, local governments in Texas do not regulate land and property. Instead, the investors simply make a contract with the owners of the territory and start erecting turbines. No governmental entity is involved, no official expert opinion has to be requested-neither with reference to spatial planning nor nature conservation. In Texas, abundant space is available, and as new energy brings employment opportunities and decent incomes to the local population, there is no serious opposition against this thorough transformation of the landscape. Difficulties and the need for governance only develop in the process of commercialization. The few energy providers monopolize the grid and the electricity acquisition; no long-term purchase guarantee is given. What is more, the grid is hopelessly old-fashioned-at the moment it is unable to capture the energy harvested by the thousands of turbines and too inadequate to transport it to the energy-hungry city centers.

The state capital Austin is home to the main governmental institutions and organizations connected to the state's policy concerning the energy transition. Austin is also a political microcosm of its own. In terms of energy politics, the city is a hub for a large number of specialists concerned with energy issues who are eager to make their own visions of a low-carbon society come true. For many Austinites, energy transition stands for an alternative way of life which is to be defended against the old elite, the oil establishment and the conservative politicians who govern the state. At the same time, some famous oil barons already heavily invest in wind energy. As soon as the grid is able to absorb the electricity produced, wind turbines will turn into real "moneyprinting machines" and are likely to alter power relations in unexpected ways.

Windscapes

It is the wind that drives the turbines, be it in Texas or in Germany. In Texas, wind brings tornados and dust. In the 1930s, the dustbowl emptied many areas of their inhabitants. Today it is the wind that brings people back to Nolan County, where wind energy boosts economic growth. Wind turbines, which were once used to water the dry land, nowadays go hand-in-hand with the oil pumps and may one day even replace the oil.

In Northern Germany, the wind is an overpowering force of nature. The permanent danger of storm surges driven by the moon and the wind shaped this unique landscape which lies below sea-level. Wind has always been part of this landscape marked by a unique material culture, the dikes. From early on, these highly productive dike societies made use of the positive power of wind: first, windmills served to dry the marshes and turn them into agricultural land; today, they supplement and sometimes even shape the landscape. Thus *Landschaft* is understood not only in a visual sense, but as a practice, a *res publica*. This landscape has always been a windscape, and wind today is more rooted than ever in this uniquely wind-based society.

The global energy transition challenges local landscape cultures, power relations and networks. The oil industry and risk capital harvest the wind in Texas, as an addendum to the oil business, while still maintaining old power structures and networks. In Germany, with the shift to off-shore wind energy, corporate energy industries are in charge. The case studies of Texas and Germany thus reveal that energy means power, whether it is oil running through our veins or wind blowing through our hair.

Dorle Dracklé is professor and chair of anthropology at the University of Bremen, Germany. She is past-president of the European Association of Social Anthropology and editor of its journal Social Anthropology. Her research includes the anthropology of energy and infrastructures as well as media practices.

Werner Krauss is a cultural anthropologist at the Helmholtz-Zentrum Geesthacht/Institute of Coastal Research. Currently his main interest is the anthropology of climate change. He has published widely on climate science, coastal landscapes, environmental conflicts and renewable energies.