

Shortlisted for the Award for Innovative Findings



Powering Conflict, Fuelling Resistance: Wind Energy in Western Sahara

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Abstract: I argue that wind imaginaries should be considered an integral part of any energy system. My research explores how wind imaginaries affect the development, management and promotion of windfarms, the distribution of energy that windfarms produce, and, vitally, the type of politics mediated by all these elements together (the energy system). By 'wind imaginaries' I refer to the meanings we attach to wind and the ways we understand wind in any given culture. I find that oppressive, colonial energy systems produce, and are produced by, very different wind imaginaries to egalitarian, decolonial energy systems.

I focus on the wind imaginaries of various cultures and communities across different time periods in one space, Western Sahara. I use Spanish government archives and colonial-era science writings to show how colonial understandings of the Sahara as an aeolian world and the winds as wild, barbaric and pathological, shaped the first (wind-powered) electrical installations in Spanish Sahara. The common colonial tropes that the Spanish applied to the wind and windblown desert became tied up with an energy system that colonised land, wind and people, and mediated racial segregation. Remaining in the same territory but moving forward in time, I use discourse analysis to explore the Saharan wind imaginaries of multinational corporations partnering with the Moroccan King in Moroccan-occupied Western Sahara, one of the worst places in the world for human rights violations. An ethnography of the colonial and violent (wind) energy regime there allows me to draw out the links between colonial desert wind imaginaries and oppressive wind energy politics. Finally, I combine an ethnography of the energy system in the Saharawi state-in-exile (in Algeria) and of nomadic, decolonial renewable energy developments in Saharawi-controlled Western Sahara with an analysis of Saharawi nomads' wind-infused poetry. This poetry is used to transmit intergenerational knowledge about using the winds to live in, and look after, the desert, and informs the decolonial, egalitarian, Saharawi energy developments.

Why is innovative research needed?

From the mining of rare earth materials for solar panels (Klinger 2017), to livelihoods endangered by wind farms (Franquesa 2018), and landgrabs to make way for biofuel plantations (Fairhead, Leach and Scoones, eds. 2013), renewable energy transitions too often rely on the dispossession of, and violence against, vulnerable communities. Researchers working on such renewable energy injustices have suggested that we might create a more just renewable energy transition by exploring and incorporating indigenous forms of knowledge (Dunlap 2019), by looking at the potential for a political transition that puts peasants' and indigenous people's

needs at the foreground and recognizes plural forms of energy (Lohmann 2015), and by focusing on indigenous understandings and imaginaries of energy (Szeman et.al. 2016). However, these suggested lines of future research have not yet been pursued.

Given this focus on (indigenous) knowledge, imaginaries and understandings - the traditional realm of the humanities - there is a lack of research on how we understand and imagine the renewable sources to which we wish to transition. While researchers in the field of energy humanities have carried out rich research on our cultural entanglements with oil with a view to contributing towards the energy transition (see especially Szeman and Boyer, eds. 2017), there are

very few studies of solar imaginaries (Williams 2019) and none on wind imaginaries. Consequently, we do not know how (historic) wind imaginaries have influenced renewable energy developments to date, or what sort of wind imaginary might contribute to a more just energy transition.

What is innovative about this research?

Findings

- My work engages with the research gaps described in the above section by exploring the role of wind imaginaries in renewable energy injustices, and the potential offered by indigenous wind imaginaries for contributing to a fairer energy future.
- I show that wind imaginaries are central to the politics mediated by energy systems: an oppressive wind energy system will draw on, and produce, wind imaginaries that are strikingly different to a politically and socially just energy system.
- My work is to my knowledge the first to engage with how indigenous knowledge of the winds can be (and is being) used to develop an energy system that mediates egalitarian, decolonial politics
- My work offers innovative insights into how refugees are developing a portable and resilient energy system, adapted to the lives of nomadic pastoralists of the Sahara Desert.

Methods

- To my knowledge, this is the first Energy Humanities project to consider wind imaginaries rather than representations of fossil fuels in cultural production
- Bridging energy imaginaries with energy politics has necessitated a unique blend of interdisciplinary tools, from ethnography, to archival research, to political discourse analysis and poetry analysis.

How does this innovation help address the Priority Questions?

What are the climate, environmental and social injustices associated with renewable energy? (“Renewables” Question 44.)

My research has allowed me to better understand how energy (supply) is used for political ends in a context of military occupation and war, and how renewable energy developments are seen to be tied up with questions of self-determination, oppression and colonialism.

How can new renewable energy landscapes generate new discourses on the perception of territories by their inhabitants? (“Renewables” Question 28.)

I like to think of territories as ‘weather-worlds’ (Ingold 2010) in order to make room for thinking about the wind and how it intermingles with the landscape, and the beings and non-living things in it. My research project argues that wind energy injustices are encouraging Saharawi poets to reflect on, and communicate, the Saharawi nomadic community’s own wind and windblown desert imaginaries. In doing so, the nomad-poets claim ‘their’ weather-world of Western Sahara on the basis of love and respect for all elements of the desert ecosystem, including the wind, through a poetic aesthetic that relies on the wind. Hand in hand with such wind imaginaries, Saharawis in exile are developing a nomadic and radically egalitarian renewable energy system of their own.

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