

Technologies of Existence: The indigenous environmental justice movement

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ABSTRACT Dana E. Powell argues that the Indigenous Environmental Justice Movement in North America is resignifying 'development' through emerging discourses and practices of 'environmental justice'. She focuses on the emergence of wind and solar energy technologies in the movement as technologies of existence, challenging a history of biopolitical regimes of natural resource development of indigenous lands and bodies while also proposing an alternative approach to cultivating healthy economies, ecologies, and cultures.

KEYWORDS social movements; Native America; biopower; renewable energy; development

Introduction

In her work with the indigenous movement in Ecuador, Catherine Walsh speaks of the movement's building of local alternatives as 'the resignifying in meaning and practice of 'development' (Walsh, 2002: 7). Development, with its long history of top-down, state-driven, regulatory, and often export- and expert-oriented goals, is being increasingly challenged by indigenous social movements in the Americas seeking to decentralize and gain local control over various aspects of governance, economic growth, cultural projects, and natural resources. Not completely unlike the Ecuadorian Pachakutik movement Walsh describes, the movement for 'environmental justice' in indigenous communities in the US is experimenting with alternative strategies to restructure the production of power to advance democracy and sovereignty for indigenous communities. This essay addresses the possible resignification of development being produced by the practices and discourses of a particular indigenous movement in the US, which addresses controversies over natural resource management on reservation lands. In particular, I consider the emergence of renewable energy projects within the movement as new modes of economic, ecological, and cultural development, countering the history of biopolitical regimes of natural resource extraction, which have marked indigenous experience in North America since Contact. I argue that these emerging technologies not only resist but also propose alternatives to the dominant models of energy production in the US.

Background

The Indian Self-Determination and Education Act of 1975 enabled American Indian tribes for the first time to self-determine their own resource policies and regulatory agencies, overseeing tribal programs, services, and development projects. In 1988, the Indian Gaming Regulatory Act opened the way for the development of casinos on reservations as a new mode of tribal economic development, and today 34% of all federally recognized tribes run full-scale (class III) casino gambling, although only a minute fraction of these represents the soaring economic success of places like the Foxwoods Casino and Resort on the Mashantucket Pequot reservation. These and other approaches to economic development – especially natural resource extraction and casino gaming – have become issues of intense debate among scholars and activists (LaDuke, 1999; Gedicks, 2001; Blaser *et al.*, 2004; Cattelino, 2004; Hosmer and O’Neill, 2004), as well as among tribal governments, federal agencies, and within the general population. In the cacophony of competing moral claims and recommended approaches elicited by these various controversies, the voices with alternative proposals are sometimes lost. Against these two dominant approaches, there is another trend in tribal economic development beginning to emerge, connected to the indigenous environmental justice movement (IEJM) in North America and critical of neo-liberal development models. Drawing upon an historical conflict over resource extraction on reservation lands (see Figure 1), this movement is turning towards what David Korten has called an ‘emergent alternative wisdom’ of development practice (Korten, 2005).

This trend, embedded in a broader network of environmental justice projects in Native America, is a move towards renewable energy technologies on reservations: wind power and solar power in particular. While these projects engage wider energy markets, global discourses on climate change and the ‘end of oil’, and funds from federal agencies, they also embody an alternative knowledge grounded in an historical, indigenous social movement in which economic justice for indigenous peoples is intimately intermeshed

with questions of ecological wellness and cultural preservation. As such, wind and solar technologies are being presented and implemented as alternative approaches to dominant practices of economic development and carry with them a history of centuries of struggle, as well as the hope for a better future.

These emerging practices of a social movement-driven development agenda draw our attention to the cultural politics, meanings, histories, and conceptual contributions posited by unconventional development projects. As part of an emerging movement in support of localized wind and solar energy production on tribal lands, these projects are responses to the biopolitical operations of 20th century development projects. They respond to a long history of removal, regulation, knowledge production, and life-propagating techniques administered on reservation-based peoples. The movement itself addresses controversies in a way that interweaves the economic, the ecological, the cultural, and the embodied aspects of being and being well in the world; as a member of the Indigenous Environmental Network (IEN) said to me:

The movement is really about health and people dying ... people can’t have an enjoyable life anymore. The work of the movement is never about the power plant itself, but about how all the EJ (environmental justice) issues come together and link up to affect people’s lives ... its about having a *good life* (B Shimek, 2004, personal communication).

Such an analysis resonates with Arturo Escobar’s emphasis on a framework of a ‘political ecology of difference’ and the need to consider ‘cultural distribution’ conflicts in studies or other engagements with natural resource issues (Escobar (2006) Introduction). Concerns of ‘cultural distribution’ have become crucial work for the IEJM as it seeks to resignify development as ‘environmental justice’ in the context of a particular history of illness and disease, environmental contamination, poverty, and place-based worldviews. I argue that the way in which the IEJM has coalesced around these alternative development projects suggests that these projects are ‘technologies of resistance’ (Hess, 1995) to dominant forms of

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Figure 1: Some existing or proposed threats to native lands in western North America, Zoltan Grossman, (1995). The Evergreen State College, <http://academic.evergreen.edu/g/grossmaz>.

economic development, but also – and perhaps more significantly – imaginative *technologies of existence*, mediating a particular discourse of natural resource controversies, including values of a ‘good life’. As such, renewable energy technologies are resignifying the politics of ‘sustainability’ through the movement’s concept of ‘environmental justice’, which cuts across reductive interpretations of economy, ecology, and culture.

Development as a biopolitical operation

In analysing development as a biopolitical operation, I follow other feminist scholars and development critics who have considered the biopolitical effects of particular development discourses on women’s bodies and movements (Harcourt, 2005) and labour and corporations (Charkiewicz, 2005). As they argue, the post-World War II model of development as a project driven by Western states to modernize other ‘emerging’ states and bring them into a geopolitical sphere of economic control is, at its base, an exertion of biopower on particular (gendered, raced, labouring) bodies. Michel Foucault described biopower as the power of the state ‘to make live and let die’, in contrast to the disciplinary power of monarchical states, which exerted a sovereign’s power ‘to make die and let live’ (Foucault, 2003). In other words, the king controlled his subjects by the threat (and occasional enactment) of killing some and letting others live, in order to maintain control, whereas the modern state makes less of a spectacle out of individual killings and exerts its force over populations instead, managing the species through techniques of regulating birth, mortality, biological disabilities, and the effects of the environment. The significant shift to a regime of biopower is the new target of control: the population. When viewed as a biopolitical operation, development programs of the post-war model (which has lingered and reproduced itself in various forms on into the 21st century) are revealed as schemes to control populations – in particular, ‘Third World’ populations defined by

the West as political problems and scientific problems, as well as economic opportunities.

A similar history runs through Native America, as this ‘Fourth World’ population was a target of regulation, management, and biological speculation from the moment of Contact, over 500 years ago. Indigenous populations worldwide have experienced the effects of biopower, especially in terms of the management and extraction of natural resources (including bodies and, more recently, genetic information), but in the Americas the situation is geo-historically particular, given the sweeping catastrophe of disease, decimating what some have estimated to be 95 per cent of the pre-Contact population. Another particularity of the North American situation is that, over the long history of occupation since 1492, tribal populations have been alternately exterminated, removed, recombined, relocated, and politically reorganized by state institutions, often under the guise of care and patrimony. In the 19th and early 20th centuries, tribes as populations were regulated and made to live through land enclosures, creating spatial patterns of security, on frontier lands considered undesirable to European colonists. This desirability was, however, based on the visible alone; the resources that laid beneath the surface of the often barren, dry reservations would emerge in the 20th century as some of the most coveted commodities on earth (Figure 2).

In sum, thinking of the history of development as a biopolitical operation to manage the life of



Figure 2: ‘Natural Resource Management’, Bunky Echo-Hawk (2006).

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populations of indigenous peoples in the Americas allows us to see the regulatory operations of the state, sometimes glossed as integrationist policies, as has been the trend in Latin America with the history of *indigenismo* (Sawyer, 2004), and sometimes framed as patrimony and treaty responsibility, as in the United States, with the 'Indian New Deal' in the 1930s (Collier, 1938). Moreover, it provides a way of understanding the history of state-driven development models as regimes of controlling, regulating, and organizing particular bodies and environments – the antithesis of the liberal, humanitarian projects these regimes have often claimed to be. Finally, as I move to discuss the IEJM and the emergence of wind and solar power projects on reservations, these technologies of resistance and existence can be thought of as counter-projects to the biopower of 20th century models of development, which have exacted significant ecological and cultural costs from tribes, in service of a reductive, disembedded view of economic growth.

Emergence of wind and solar power projects in the IEJM

In 2003, the first utility scale, indigenous-owned and operated wind turbine in the US was installed on the Rosebud Sicangu Lakota reservation in South Dakota. The project took eight years of organizing, fundraising, and coordinating among the tribal government, the Intertribal Council on Utility Policy (ICOU), the Department of Energy, local activists and indigenous non-governmental organization Honour the Earth (HTE). Rising to 190 ft tall, the 750 kW, Danish-manufactured wind turbine was installed with ceremony and great expectation as the first of many to come. As the closest structures to the turbine site, the Rosebud casino and its adjacent hotel will consume the wind's power until new lines are constructed to carry it deeper into the reservation to individual homes. The turbine at Rosebud was installed as the first among several emerging wind energy projects on Native American reservations from the Dakotas to Montana and Colorado. Bob Gough of ICOU explains that this technology

is being used to promote a wider campaign for renewable energy on other reservations:

This turbine could have been simply a stand-alone project and the tribe would have been pleased enough. This is really a show horse. It's there at the casino to get high visibility – we're going to have information kiosks to teach people about it. But this project was also designed to take us through all the steps we need to learn to build more of these. There's a lot more than just putting up a wind turbine and connecting a few wires. With wind turbines you're connecting into the North American electricity grid, the largest machine in the world, which involves a lot of rules and policies. We've used this as an opportunity to learn how to do this on a larger scale, and we are sharing that with any of the other tribes that are interested (Tidwell, 2003: 3).

Situated within the broader IEJM in North America, these projects mark a shift towards wind energy activism within the movement, which traces its own history of resistance to the recent action of the 1960s and 1970s, but more deeply to the resistance that has always been a part of the colonial experience of being occupied and 'developed'. The Rosebud turbine is a community-based development project imagined and executed by local and regional activists and engineers, but funded by a combination of national foundations and federal agencies, including the Environmental Protection Agency, the Department of Energy, Department of Interior and US Department of Agriculture, making for complex and contradictory alliances between tribes and the state. The project is also situated within the context of environmental and political debates on energy development around the state of South Dakota, where plans are underway to develop 2000 MW of coal-fired power by the end of 2010 (LaDuke, 2004). The wind turbine is moving to centre stage as a potential solution to many of movement's primary concerns: climate and ecological change, natural resource conflicts, cultural preservation, globalization, and tribal sovereignty.

Twenty years earlier and 1100 miles south, Hopi engineers, activists, and tribal leaders began to install solar photovoltaic panels on rooftops of residential homes, bringing electricity to families who had been living off the grid, without electricity.

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Projects on the Hopi and Navajo reservations have proliferated over the past two decades, with the Hopi solar business NativeSun and engineer DebbyTewa leading the way. In recent years, these projects have connected with the emerging wind power projects in the Plains region, through the work of the national Native NGOs, HTE, and the IEN, and have become central to these groups' common visions and overlapping strategies of environmental justice and sustainable development on tribal lands. In the last two years, these two national networks have collaborated with grassroots environmental and cultural protection organizations to install additional technologies on *Newe Segobia*, or Western Shoshone territory, on the Pine Ridge Lakota reservation, and on the Navajo reservation. These installations have become intermeshed with ongoing indigenous environmental justice campaigns focused on conflicts centring primarily on aspects of energy production, such as the recent conflicts over the proposed mining of the sacred Zuni Salt Lake; the proposed federal nuclear waste storage sites on the Skull Valley Goshute reservation and at Yucca Mountain, Nevada; and uranium mining on the Navajo and Hopi reservations. In several of these cases, the environmental justice activists are challenging tribal governments' contracts with regional utilities and/or federal agencies. Without a long digression into the history and politics of natural resource use and development on reservation lands, suffice to say it is not always but is often a site of intense internal debate and conflict for tribes themselves.

The significance of the relatively recent emergence of wind and solar technologies as tribal development projects is that tribes are increasingly connecting into this network of renewable energy activism as a means of economic growth, ecological protection, and cultural preservation. Seemingly an oxymoron – to preserve 'tradition' with the use of high-tech machines – advocates of wind and solar power emphasize that cultural preservation is itself about flexible practices, change, and honouring worldviews in which the modernist distinction between nature and culture is nonsensical. In

cultural resources are the land itself (i.e., mountains for ceremonies, waters for fishing, soils for growing indigenous foods), to protect nature is also to protect culture. As Bruno Latour has also argued, this natures-cultures epistemology is also ontology – a different way of knowing, inhabiting and engaging the world (Latour, 1993, 2005). Wind turbines and solar photovoltaic panels are articulating with this worldview, and at the same time articulating with many tribes' desires to move beyond fossil fuel extraction as a primary means of economic development, and towards natural resource practices that are more 'sustainable'. The wind and the sun introduce new elements of common property to be harnessed for alternative development projects and increased decentralization and ownership over the means of power production.

Technologies of existence

This recent emergence of renewable energy technologies on reservations inspires analysis of natural resource conflicts to move beyond models of resistance in understanding controversies and social struggles over resource management and energy production to seeing the ways in which concepts such as 'sustainability' are being resignified through the introduction of what I argue are imaginative technologies of existence. I stress existence over resistance not to obscure the contestations of federal, tribal, and utility consortium proposals for natural resource development, which have been importantly detailed elsewhere (Gedicks, 2001), but to emphasize the creative, imaginative work of the movement in envisioning and enacting alternative ways for tribes to self-sustain and grow healthy economies, ecologies, cultures, and bodies in an integrated manner. There are other technologies of existence engaging particular, situated natural resource conflicts within the movement: recovery of customary foods and harvesting practices, coalition-building around water rights and resources, restoration of salmon and sturgeon populations, and projects involving information and film media as a means of preserving and producing the 'natural' resource

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of culture itself. This constellation of resources – energy, food, water, and culture – are of central concern to the IEJM and creating sustainable methods of generating each advances the ‘good life’ towards which the movement’s work strives.

In this sense, wind and solar projects on reservations are not technologies of existence to ‘make live’ in the biopolitical sense of a population’s ensured biological survival and micro-practices of regulation, but technologies that articulate with desire, history, localization, imagination, and being in a way in which the meaning of ‘existence’ exceeds a definition of continued biological survival or reproduction. These technologies are about a particular quality of existence that speaks to the late Latin root of the word, *existentia*, which comes from the earlier Latin *existere*, meaning ‘come into being,’ itself a combination of *ex*– ‘out’ + *sistere* ‘take a stand’ (O.A.D., 2001). Thus, when ‘existence’ recovers the notions of coming into being, externality, and taking a stand, what it means to live and to grow is inherently active and perhaps even risky. Sustainability, then, in the context of the IEJM, is a bold existence and set of practices informed by a particular history of struggle and oriented towards a future of well-being, in which the economic, the ecological, and the cultural are interdependent and mutually constitutive.

The movement’s concept of ‘environmental justice’ conveys such a non-reductive understanding

of sustainability as a certain quality of existence. The concept proliferates and circulates through the geographically dispersed installations of wind turbines and solar panels (among the other technologies of existence) and is reinforced at national and transnational gatherings of HTE and the IEN. As an enunciation of sustainability, ‘environmental justice’ recalls specific cases of contamination on indigenous lands, articulates with broader environmental and anti-racist movements worldwide, and critiques dominant approaches to development by posing concrete alternatives. This is a critical, alternative knowledge being produced through the networked practices of a specific social movement. It is not the sustainability of the ‘triple bottom line’ in neo-liberal theory that self-congratulates its attention not only to capital but also to pre-figured notions of the environment and society; though it is also not a romanticized ‘traditional’ wisdom of indigenous people, endowed with some sort of essentialist knowledge and protective role for the natural world. It is, instead, a sophisticated hybrid concept – in which knowledges of wider energy and trade markets, science and engineering, local resource management issues, global processes of climate change and wars for oil, and the relational knowing that comes with enacted attachments to place, converge to inform and generate a call for ‘environmental justice,’ implemented through specific material technologies.

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