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Title: One global movement, many local voices: Discourse(s) of the global anti-fracking movement

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Introduction

In this chapter, we “occupy the earth” with an overview of the anti-fracking discourse(s) of diverse local initiatives converging as a global movement opposed to fracking. By mapping the discourse(s) of the anti-fracking movement, the articulation of the problems and solutions associated with fracking raise questions not only about the environment but draw attention to a crisis of democracy and the critical need for social and environmental justice. With the help of Arturo Escobar’s insights about environmental movements and their role in articulating “alternative imaginaries,”; Michel Foucault’s conceptualization of power and (counter) discourse; and Giovanna Di Chiro’s depictions of the environmental justice movements in the United States, we analyze the framing of the anti-fracking movement: framing across the many local voices engaging in political struggles to sustain their communities, places and ways of life, and the global movement’s forum for collective solidarity, recognition and civic action. In this process, three important spheres of the movement are identified: 1) what constitutes knowledge

about fracking; 2) communities struggling in and across places; and 3) the explicit and powerful articulation of a resonant, alternative political and economic imaginary based on democracy and social equality.

Overview of Fracking

Hydraulic fracturing, also referred to as ‘fracking’ (or ‘fracing’) – a controversial high pressure, water (and often, chemical) based, horizontal drilling technique for removing oil and gas largely from shale – is engaged more and more across the globe. While the science and technology on fracking has been advancing for decades, it has only reached a point of recognition in this second decade of the 21st century as an energy “game changer” and the advent of a “New Gas Age” shifting the geopolitics of global energy. Fracking is currently widespread in the media and on the political agenda of major countries around the world, where the gas and oil industry and many governments are hailing it as: an economic necessity or even a boon (“Gas Rush”); an opportunity for energy security and independence; and a clean “transition fuel” to mitigate climate change. It has raised energy production capacity in the United States (US), where fracking is most widespread, to the point where the US is anticipating a role as a new major gas exporter. China, Russia, parts of South America and the United Kingdom and others are joining its leagues as they encounter great potential in their own territories.

As the gas and oil industry and governments get excited about the further prospects of

fracking, however, local and global communities have another story to tell. Fracking, they assert, damages their communities, consumes and/or pollutes precious water, air, and soil resources, causes earthquakes and creates noise pollution. Fracking, they say, will furthermore not solve unemployment problems and will further exacerbate climate change and deter the much needed attention to alternative, more sustainable, energy developments. Especially important, however, in the anti-fracking movement is the quest for (a real) democracy, less corruption, and the articulation of a better life and a better world.

Hundreds of local anti-fracking initiatives have appeared all over the world, and as these initiatives are increasingly creating links between one another, they are generating a truly global movement against fracking. Protests on the streets and in camps are popping up all over the world, as social media are flourishing with solidarity across movement activists working to organize their own communities and join and support other communities in their anti-fracking efforts. Many localities such as New York and Pittsburg, Philadelphia (see foodandwaterwatch.org for an exhaustive list) and countries (e.g., France and Bulgaria) are winning bans and moratoriums against fracking.

Such wins have been paramount in the global movement against fracking. Global Frackdown, Camp Frack and others have generated global forums for local and state anti-fracking initiatives to share information, find and generate solidarity, and record the strategies and successes to date. For example, according to the Global Frackdown web page, their first global effort in 2012 accounted for 200 actions across 20 countries. The organization Food and Water Watch quantifies moratoriums, bans, delays and other political successes, and

report 416 measures (to date) to prevent or stop fracking in the United States (Food and Water Watch, 2014). Thus, while the global movements coalesce anti-fracking efforts to promote solidarity, exchange, and widespread recognition, it is in the everyday of the people of the local initiatives that struggles for water, air, food and land in the after-waves of a severe financial crisis and an unprecedented gap in social inequality where the thrust of the movement gains resonance.

In these places and across these communities, people are not just struggling for the subsistence of their everyday lives, they have found themselves in the middle of a crisis of democracy where “truth” and “power” are one in the same; and where their “truths” about fracking confront and repoliticize a dominant global discourse on energy politics that is largely orchestrated and perpetrated by the gas and oil industry and various political entities at local, state, federal, and international levels. In this context, the movement is challenged to originate an “alternative imaginary” in which a different path, an energy path included, can be articulated to guide the movement as a force for change. In this chapter, we explore the counter-discourse of the anti-fracking movement from the perspective of local and global anti-fracking efforts. Through anti-fracking frames we discover the heart of the movement and shed light on “the power of the people” in a time of emerging hyper-globalization and consolidation of industry and governmental interests.

Analytical Framework

Much of social movement theory has sought to understand how and why people engage in collective action. Prominent theories along these lines include crowd theory, political opportunity structures, resource mobilization theory, identity formation, framing and others. Each has contributed to the knowledge base for understanding how people get together to assert change or maintain the status quo when confronted with change. Further work has delineated environmental justice movements centered around, among others, climate justice, water justice, defense of the commons, extractivism and degrowth movements (Martinez et al., 2014).

For our purposes, we engage the work of Arturo Escobar on environmental social movements. This analytical framework is further complemented by an understanding of power and discourse based largely on the works of Michel Foucault. Finally, we consider the work of Giovanna Di Chiro on environmental justice movements. It is our assertion that this multi-theoretical framework is the most appropriate for making sense of local anti-fracking initiatives and the global anti-fracking movement. We are thus particularly interested in the political strategies of these efforts manifested operationally through power and discourse and their implications for environmental and social justice, particularly through movement framing. And, true to the title of this chapter, we further explore some of the distinctions across local and global initiatives.

Articulating Place and Power through Social

Movement Mobilization

For Escobar, environmental social movements constitute particular relationships between nature and culture, or society characterized by political strategies that imagine alternative worlds (Escobar, 2001). While Escobar takes on the issue and politics of biodiversity, we similarly focus on (anti-)fracking and raise the question of whether or to what extent the anti-fracking movement can be categorically considered as an environmental movement (as it often is), and how (un)helpful it is to talk about the anti-fracking movement in this way. We are largely concerned with the articulation of a (counter)-discourse that brings (anti-)fracking into meaning through talk and texts, networks, institutions and practices.

Central to understanding environmental and social justice movements is the articulation of the relationship between nature and culture or nature and society. The case of anti-fracking is especially illuminated by these relationships. In this context, the negotiation of 'local' and 'global' worlds is further articulated. For while the dominant global articulations of the nature-society relationship tend to produce socially homogenizing views that obscure local (cultural, historical, ecological, economic, and political) differences; it is exactly these differences that are often at the forefront of local articulations. This is why Escobar, drawing on the work of Edward Casey, asserts the need of "getting back into place." "We are, in short, placelings" (Escobar, 2001: 143) and further referring to Casey, "To live is to live locally, and to know is first of all is to know the places one is in" (Casey, 1996: 18). Humanity is wrapped up

in a world of places that act as contexts for human experience and are thus bound up with personal and cultural identity. Place has everything to do with the everyday which is embedded in institutions and cultural practices. It is for this reason that “emplacement of all cultural practices” is often highlighted by anthropologists who see this emplacement as stemming from the fact that “culture is carried into places by bodies” and that “place, body and environment integrate with each other” (Escobar, 2001: 143).

The relationship between nature and society is further debated in the literature on environmental justice, particularly at the empirical level in the analysis of environmental justice movements. Di Chiro, for example, engages the environmental justice movement in the United States in which “nature” and the “environment” are those “places and sets of relationships that sustain a local community’s way of life” (Di Chiro, 1998: 300). Hence, environmental justice mobilization and activism can be seen as efforts to sustain places and relationships necessary for everyday life. Unlike mainstream environmentalism which emphasizes the protection of non-human “surroundings,” environmental justice activists see this separation of humans and nature as misleading.

Di Chiro further explains how the construction of environment as separate from society is associated with the need to control and dominate (“tame”) the environment. Alternatively, the environmental justice movement is engaged in countering this conception of environment and, as a result, changing the way we understand and relate to each other and the places within which we reside and sustain our lives. This reconceptualization, she argues, is the foundation for innovative political organization and action at the community level with regard to environmental

threats that is “diverse, egalitarian, and non-hierarchical” as compared to mainstream environmentalism which posits a “technocratic rationality and top-down managerialism” approach (Di Chiro, 1998: 306). As we will discuss later in our analysis, local anti-fracking initiatives are the ethnographic articulation of place in which people reinterpret their experiences and assert new meanings in the context of fracking which relate largely to everyday living, particularly with regard to the quality of water, air, and food, but also socio-cultural life more broadly.

Yet, as much as place may have “ontological priority in the generation of life and the real” (Escobar, 2001: 143), the hyper-connectedness of people and places in our 21st century world requires us to consider wider contexts and how places and identities are themselves, at least partly, structured by these ‘global connections’. In other words, while people and places are very much ‘local’, they are also interwoven in the fabric of globality. We find in these spheres of existence a bifurcated construction of social reproduction characterized by notions of locality and a dominant discourse of (neoliberal) capitalism, in which a market ideology characterized by hyper-consumerism, deregulation, state austerity, and privatization conceptually define the day.

At the global scale, we find fracking located in a discourse of “energy security,” “energy independence,” “clean transition fuel,” --a “shale gas revolution.” From an anti-fracking perspective, the global fracking world looks more like: “an obstacle to renewable energy development,” or as Food and Water Watch, an international non-profit non-governmental organization that works to protect and promote the safety of food, water and fish, put it, “Fracking takes a huge toll on affected communities, generates massive volumes of toxic waste,

creates hazardous air pollution problems, poses long-term risks to vital drinking water resources and threatens to lock in catastrophic changes to our climate” (Food and Water Watch, 2014).

A sense of and defense of place emerge especially noteworthy in the face of environmental threats such as mining. Not only are shale mining and fracking sites popping up in localities across the globe but these activities are also led by a very limited number of (multinational) global enterprises. This defense of place that is at once both local and global emerges in an evolving discourse that can be powered in part by the political strategies of social movements. In the context of anti-fracking social mobilization, what is contested is the energy production convening a localized extractive technology with global capital(ism). Anti-fracking movements intensify the politicization of energy production, and perhaps unlike climate change, assert (and experience) a clear connection between this struggle and everyday life.

Alternative Imaginaries and Power Struggles

Escobar points out that social movements create the possibility for the articulation of alternative imaginaries (Escobar, 1992). Through a plurality of people constructing an intensification of direct democracy, transformation becomes possible. And, this transformation is evident in the discourse and its inherent relationship to power. Social movements are thus constituted by discourses. Yet, while social movements do require attention to “resource mobilization” and issues of identity, they do not simply erupt (like volcanoes) nor do they necessarily fit the causal models or methodologies of measurement. They are waves that swell and gain force, and can rally forward the momentum of everyday life onto previously

unimagined shores. Further, counter to some common perceptions of social movements, they do not end when people stop hitting the streets with signs or when the media loses interest, rather they reverberate in their inevitable remolding of the discourse which may or may not be immediately evident in a policymaking framework. And even if corporate and/or governmental interests find a way to ultimately engage in further wide-spread fracking as the case may be (see, for example, Weile, 2014) or further implement policies in their own interests (see Gillens and Page, 2014) albeit even counter to the articulations of social movements, the social imaginary does not revert back, but rather persists in having reshaped or in reshaping the discourse.

While Escobar critically discusses different theories of social movements (i.e., Tourraine, Laclau, Mouffe, Melucci) in light of the specific social terrain of Latin America, he notes that, “Generally speaking, the task ahead is the construction of collective imaginaries capable of orienting social and political action” and that, “...politically, the task is to foster the democratizing potential of the new social subject” (Escobar, 1992: 41-42). In fostering this potential, power struggles are fundamental. But, what is the process whereby social movement activists politically engage?

Escobar refers to economic, political, and cultural transformation through articulation as a central activity of social movements. We explore and expand on this idea further in the realm of discourse and power. To the extent that social movements are power struggles, and in the case of anti-fracking movements we believe they are, we transfer the key elements of Foucault’s ideas about power and struggle to enrich our understanding of social movements as the potentially transformative articulation of political space through discourse. Ultimately, the

function of any successful social movement is to seize discourse in a generative fashion. Foucault writes, "...discourse is not simply that which translates struggles or systems of domination, but is the thing for which and by which there is struggle, discourse is the power which is to be seized" (Foucault, 1970: 52-53). In this chapter, we explore the anti-fracking movement in this context as the articulation of a counter-discourse.

The generative aspect, as Escobar notes, is the ultimate seizure in which "categorically subalterned" people can imagine their own existence on their own terms, a re-imagining of the world that both reflects and builds on the everyday and where scalar spheres (i.e., local and global forces of a cultural, political and economic nature) gain their most resonant meaning (1992). Foucault asserts that,

...to speak ...to force the institutionalised networks of information to listen, to produce names, to point the finger of accusation, to find targets, is the first step in the reversal of power and the initiation of new struggles against existing forms of power (Foucault, in Bouchard, 1972).

This is the "first step." This first step is operationalized as an exercise in framing, particularly in what is known as diagnostic framing (subsequently defined).

Escobar adds in the context of social movements in Latin America, however, that "... social movements are not ruled by the logic of all or nothing; they must consider the contradictory and multiple voices present in such experiences without reducing them to an unitary logic" (Escobar 1992: 48). Hence, social movements may not only call into question the dominant categories constructing their activist subjectivities, but engage in a generative process

of forging “new ways of seeing” and ultimately themselves and their communities. What then are the “new ways of seeing” that are forged by anti-fracking movements? Again, we look to framing as a way to explore empirically this aspect of the generative process of the anti-fracking movement, and in forging “new ways of seeing,” we engage the concept of prognostic framing (also subsequently defined).

We find in this everyday life a new manifestation of the global market-centered mentality and its technological constructions and exploitation. Hydraulic fracturing drills installed in communities, next to people’s homes, eek out the last drops of gas and oil hiding mostly in the fissures of shale rock. The question is can anti-fracking movements overcome the dominant politics and logic that justifies and affirms the exploitation of shale gas and oil by fracking? Does the counter-discourse of the anti-fracking movement make visible the current power relationships structured by global capitalism as well as reconceptualize a more meaningful self-proclaimed existence that simultaneously embraces antagonistic plurality? If so, how? Before turning to the particular framing engaged by the anti-fracking movement, we clarify the terms, “discourse” and “counter-discourse.”

Discourse and Counter-Discourse

Discourse, rather than being simply linguistic, constitutes the social spheres of knowledge. Social knowledge is thus constituted by discourse(s) and both creates and limits what one can say, write, and even think within a historical evolution of disciplines. McHoul and Grace summarize Foucault’s conception of discourse this way,

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“Thus both ‘the world’ and our consciousness of it are effects of the kinds of representations we can make of it. But, at the same time, discourse is not just a form of representation; it is a material condition (or set of conditions) which enables and constrains the socially productive ‘imagination’” (McHoul and Grace, 1995: 34).

Discourse(s), they add, are bodies of knowledge revealed by corollary “statements” and their conditions. Statements bounded by disciplinary and discursive knowledge function as the parameters of possibility and impossibility. The fracking debate is an antagonistic zone in which knowledge on the implications of fracking is contested, but also the rules for what constitutes knowledge are asserted. And, as we discuss later, while fracking discourse and counter-discourse debate on the former level, contesting the “truth” about fracking; the discourse and counter-discourse are both stuck in a contradictory methodological quagmire in which the rules for asserting “truths” are both mutually affirmed as well as challenged.

Discourse is characterized by the forces of formation, transformation, and correlation. These forces make it possible for certain objects and concepts to emerge and define the delimiting factors of their evolution and relationship to other discourses and other “nondiscursive contexts” (McHoul and Grace, 1995: 44). Thus, discourse is not only what can and can’t be said, written, or thought but also has within it the rules for such events and their latency. Thus inherent in a discourse is the nature of its own preservation. The will to truth enunciated by institutions such as science, for example, increasingly is reflected in the social structure of discourse and counter discourse in which politics is an arena for the struggle to define what is true and what is false based on the common enterprise of reason. For example, “Radical ideas

that advocate resistance to the scientific management of everyday life are not restricted but remain unheeded, because they seem illogical, irrational, nonsensical, disorderly, and uncivilized (Powers, 2007: 31). While individual narratives about the experience of fracking are asserted by both dominant and counter-discourses, they are also challenged by the dominant discourse on the grounds that they do not constitute truth about fracking because they are not scientific. Claims made by homeowners who assert that their water is contaminated by fracking, for example, are “tested” and “contested” by authorities such as the United States Environmental Protection Agency and industry, respectively.

We link this conceptualization of discourse to social movements through Foucault’s idea of counter-discourse. A counter-discourse is the act of people asserting their own voice in contradistinction to a dominant or authoritarian discourse which “speaks for them.” Counter-discourse is the constitution of political action against oppression and the “indignity of speaking for others”¹ (Moussa and Scapp, 1996). In this way, it can be said that, a counter-discourse breaks the transformative nature of a dominant discourse.

¹ The “indignity of speaking for others” was asserted by Gilles Deleuze in a conversation with Michel Foucault in 1972. The transcript is reproduced here

<http://libcom.org/library/intellectuals-power-a-conversation-between-michel-foucault-and-gilles-deleuze> (last visited April 4, 2014) and was published in Foucault, M. 1980. *Language, Counter-Memory, Practice: Selected Essays and Interviews*. Cornell University Press.

Framing

Collective action frames are a fundamental aspect of the discourse of social movements. In the context of fracking, we uncover a, “frame war” or what we refer to as an agonistic zone. This zone is characterized by the anti-fracking movement and others (e.g., real-estate interests, food enterprises) and a “counter-discourse” and the dominant discourse perpetrated by others, particularly government and gas and oil industry. Before investigating these discourses in more detail, we look at some of the research on framing and fracking to date² to demonstrate our contention that there is a dominant discourse and a counter-discourse on fracking that reflect power in the Foucauldian sense, and locate the anti-fracking discourse within what Escobar refers to as an “articulation of alternative imaginaries.”

Framing is widely considered to be the thrust of social movements as movement actors articulate a basis for collective action. Frames, “schemata of interpretation,” allow people to interpret and assign meaning (Goffman, 1974: 21) while generating support and “demobilize antagonists” (Snow, 2004: 384). Furthermore, inherent in frames are the articulation of a problem and its perpetrators and also can include the realm of potential solutions.

The particular success of a social movement is said to be contingent, in fact, on the actors’ ability to produce frames that resonate and are aligned with public concerns in what is known as “frame alignment” (Benford and Snow, 1988). Frames can be considered the building

² Note that the published research on this topic to date is largely focused on the United States and European context.

blocks of a discourse which further delineates what constitutes “truth” as well as what doesn’t and thus inherently delineates the boundaries of understanding and what is and isn’t possible.

Framing has been discussed in different ways, but central to framing are diagnostic and prognostic frames. Diagnostic framing refers to the articulation of a problem, whose fault it is, and its resolution. Prognostic framing emphasizes a solution to the problem.

Anti-Fracking (Counter) Discourse: Problems and Solutions

Without denying the fundamental role that environmental concerns have played in mobilizing various local communities in their protests against fracking (and other methods of unconventional oil and gas production), we posit that it is through the local and global constitutions of the anti-fracking movement that it transcends mainstream environmental movements and finds itself to be more closely aligned with environmental justice and global social justice movements in which “diverse, egalitarian, and non-heirarchical” forums engage “places and sets of relationships that sustain a local community’s way of life” (Di Chiro, 1998: 300, 306) whereby people could imagine their own existence on their own terms. We particularly focus on systems of “truth” and of knowledge production, especially in the movement framing of problems and solutions, structures of blame, and scenarios of hope.

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The central frame of the anti-fracking counter-discourse is that fracking is unsafe; negatively impacts the environment (water, soil, air and noise pollution) and consequently - human health; creates earthquakes; and that it does not help us move toward a clean(er) and (more) sustainable energy future. These arguments do not solely rest on anecdotal (or personal experience) evidence but also often tap into scientific studies which are then both challenged, especially by industry, on various fronts, but particularly their methodological vulnerabilities. Still, research has shown that while frames across anti-fracking initiatives are similar, their ability to influence decisionmakers and degree of resonance varies, for example, in a study comparing the United States and Europe (Bomberg, 2013). In Europe, economic benefits at the state level were emphasized over local benefits (which were consistent with the different revenue structures in Europe versus the United States); support from politicians and the low-carbon industry is more forthcoming in Europe; at the same time, pro-fracking interests are more strongly aligned in the United States; the risks of fracking and general trust in states to secure the public interest are more questioned in Europe than in the United States; and renewables to avoid “fossil fuel lock-in” have stronger traction in Europe (Bomberg, 2013). Other research also affirms the importance of a number of factors in public perceptions regarding fracking which is consistent especially with the movement’s framing of the problems with fracking. Research at the Durham Energy Institute for example, concludes that while risks are important, “other factors like perceptions of the industry structure, judgments about the likely efficacy of regulation, the perceived trustworthiness of government decision making processes, or feelings of alienation and dependency in relation to seemingly remote expert discussions, are also likely to play a role in structuring public responses to hydraulic fracturing and unconventional fossil

fuel exploitation” (Durham Energy Institute, 2014).

Further, under a strong neoliberal-based regime, characterized by deregulation, privatization, commercialization and consumerism such as the United States, government and industry work from a pre-existing dominant discourse of market benefit in which environmental resources are framed as “sources of profit” which “ensures capital's ability to redefine humans' relationship to land, air, water, each other, and self...” (Hudgins and Poole, 2014: 317). Further, the dominant discourse, in which “the indignity of speaking for others” is manifested, portrays people who oppose fracking as “uneducated” and not getting “the facts” about fracking. The assumption is that if people could really understand fracking, they wouldn't be against it. This is further backed up by challenges to the validity of community-based risk narratives. Interestingly enough, however, statistical research on the public perceptions of fracking in the United States concludes that those who are more familiar with hydraulic fracturing and associate it with environmental impacts versus economic benefits, (among other factors such as sex, age, and sources of information) are more likely to be against fracking (Boudet et al., 2013). Hudgins and Poole conclude hence that the assertion that if people just knew the facts about fracking, they would not oppose it “may serve as a form of silencing, as the discursive terrain is claimed by those with an ability to speak a specialized language” (Hudgins and Poole, 2014: 311). Still, the “discursive terrain” of the anti-fracking movement is not silenced, and has a “specialized language” of its own. In this next section, we engage some of the anti-fracking framing to shed light on the anti-fracking discourse emerging at local and global scales. By engaging an analytical framework using the concept of framing, the discursive terrain of the movement is

mapped and the strategy of the movement becomes more evident.

Diagnostic Framing: What is the Problem?

Diagnostic framing is a key part of the local anti-fracking initiatives. It is here where people articulate the problems of fracking that they experience in their everyday lives or their fears and concerns associated with fracking. The specific issues of concern articulated by the anti-fracking movement include: health and safety issues, impacts on climate change; a distrust of government and industry; and questions about the economic benefits. However, an emerging dominant frame amongst local anti-fracking initiatives is that fracking destroys communities.

Health and Safety Issues

Health and safety issues asserted by anti-fracking initiatives are dominated by stories that depict the experiences of those living next to drilling sites, especially experiences with water. Many of the slogans of local initiatives have a water theme: “No Water. No Future.” “What part of turning water into toxic sludge makes sense?” “You can’t drink money,” “Love your lake... Don’t frack it!” “Water & Fracking Don’t Mix,” “Let Them Drink Gas,” “Fracking Creates A River of Doubt,” and “Keep The Frack Out Of My Water.”

One of the most impressive visuals used by the movement shows people lighting their tap water on fire. This visual became especially prominent through the movie “Gasland”, written and directed by Josh Fox, that won several awards including the 2010 Sundance Film Festival Award (Figure 1.).



Figure 1. Photo: “Gasland” Source: Josh Fox

There have been several key scientific efforts regarding the issue of water (as well as air and soil) contamination and fracking, including studies by the United States Environmental Protection Agency (2004 and 2014) and Duke University (Osborn et. al., 2011; and others), but due to the highly controversial nature of the issue, scientists and their work emerge as political actors more than anything else. While the formal science on fracking and contamination is inherently contested (see, for example, Everley, 2013), experiential knowledge generated by community members is conveyed through stories about flammable, bubbly water, illnesses associated with the introduction and proximity to drilling sites, sick livestock and other animals, soil pollution with fracking chemicals or through oil spills, terrible odors, increased seismic activity, and noise pollution from increased truck traffic.

While in many ways, fracking could gain framing resonance as a NIMBY issue (Not in My Backyard), focused at the collective community level with industrial counterparts. For

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example, while individual photos of individual homes and drilling apparatus can be found, the more meaningful visual frames are projected in collective protests, landscapes, and industry imagery. A prominent visual of the fracked landscape is seen and shared in the landscape swirls caused by fracking in Wyoming (Figure 2) and the massive numbers of trucks hauling toxic chemicals used in the process of fracking.



Figure 2. Photo: Fracking Drill Sites in Wyoming, Pinedale Anticline and Jonah.

Source: EcoFlights.

Climate Change and Clean Energy

While the dominant pro-fracking discourse asserts that fracking reduces the impacts on climate change because gas is cleaner than coal, and gas is a viable transition fuel, the scientific debates on this assert otherwise. A controversial study was published from Cornell University and concluded that from a life-cycle standpoint, fracked gas does not comparatively reduce the impacts on climate change when it comes to emissions (Howarth et al., 2011). True to the “frame war,” the study was contested by opposing interests (see, for example, Entine, 2012). The anti-fracking movement, however, often approaches the climate change issue differently and rather than ‘quantifying’ the emissions of CO₂ and other greenhouse gases, asserts that fracking exacerbates climate change by taking us away from developing the renewable energy sector.

Wittmeyer asserts that, “The [anti-fracking] movement seems to have reconnected culture with climate” (2013). Still, it is difficult to articulate climate change as a pressing local issue, and these arguments especially find resonance in the global anti-fracking campaigns. For example, Camp Frack asserts that, “Shale gas directly competes with investment in renewable technologies vital for combating climate change.” Global Frackdown writes on their web page, “On October 11, 2014, the GlobalFrackdown will unite concerned citizens around the globe to tell elected officials that we want a future lit by clean, renewable energy; not dirty, polluting fossil fuels. The journey to a renewable energy future will not be fueled by shale gas. Take a stand against fracking — stay tuned to find a Global Frackdown in your area!” Camp Frack asserts the problem: “Here the maths is unambiguous – we have insufficient budget for the carbon we are already emitting. By the time shale gas is produced in any quantity (five to ten

years) there will be no emissions space left for it” (Camp Frack, 2014).

Communities and Renewable Energy vs. Jobs and Cheaper Energy

The economic benefits are core to the framing debate between pro and anti-frackers. An entity known as EnergyFromShale, an American conglomerate of pro-fracking interests, sums up the benefits of fracking this way, “Fracking has unlocked massive new supplies of oil and clean-burning natural gas from dense deposits of shale — supplies that increase our country’s energy security and improve our ability to generate electricity, heat homes and power vehicles for generations to come. Hydraulic fracturing has also boosted local economies—generating royalty payments to property owners, providing tax revenues to the government and creating much-needed high-paying American jobs.” (EnergyFromShale, 2014). The academic research on economic benefits at the local community level, particularly regarding employment, however, raises questions on the topic (see, for example, Mauro et al., 2013;³ Araya et al., 2014). The industry is accused by the movement and some scientists alike of over-estimating benefits to local communities.

As social inequality expands across the globe (with an especially significant gap between the rich and the poor in the United States) coinciding with widespread social unrest (e.g., Occupy Movement, Arab Spring, Indignados, etc.), the case of fracking provides an

³ Scientific studies that challenge the gas and oil industry’s position tend to illicit a response: see <http://naturalgasnow.org/multi-state-shale-research-collaborative-phony-political-outfit/> (last visited April 12, 2014).

interesting comparison in the mainstream media: “The chief executive of Frac Tech International LLC [Marcus Rowland], a relatively small oilfield services company, earned \$24.4 million in 2010, putting him among the highest paid U.S. executives” (Gold, 2011) while a global information company known as IHS asserted that the average household income increased by 1200 USD in the year 2012 (Efstathiou Jr., 2013). Social inequality is further engaged as struggling landowners and farmers see no other way out but to accept the much needed upfront economic benefits of leasing land for drilling. According to the New York Times, one landowner put it this way, “a lot of people who, when we signed and got the upfront money, were going to be losing their land and couldn’t pay their taxes” (Hakim, 2012). During the Occupy movement protests in the United States, “no fracking” was prominent among protest themes that generally targeted government corruption and the failing democratic hold of the people on the country.

Anti-fracking is Pro-democracy

What is often questioned locally is not only the ‘environmental sustainability’ of fracking technologies, but also social and economic impacts of these technologies and the very democratic arrangements of our societies and the countries in which we live. Movement antagonists, while targeted for their pro-fracking stance, are especially meaningfully targeted for obstructing or impeding democracy and justice. This is most clearly visible in eastern-european “new democracies” such as Romania and Bulgaria where alongside ‘environmental demands’ for clean/unpolluted water, soil and air, questions of distribution of economic benefits are often raised and demands for transparency, corruption-free government and protection of citizens over

corporate interests are just as prominent (Devey et. al., 2014; Besliu, 2013; Oprea, 2013; Summerchild, 2013; Frack Off Romania, 2014; O'Brien, 2014). Romania proves to be a particularly interesting case, where three 'separate' movements and protests that emerged in 2012 and 2013 (the anti-government protests in Bucharest, the protests against fracking in Pungesti, Barlad and other towns, and the protests against gold mining in Rosia Montana) all merged together based on their shared concerns with democracy and corruption (Devey et. al. 2014). Furthermore, Vişan (2013) writes that the Romanian Orthodox Church has also, for the first time since the fall of communism, sided with civil society organizations on these Issues. Vişan also interestingly summarises the Romanian anti-fracking movement by calling it "a heterogeneous movement whose environmental core is strengthened by opinion-leaders of leftwing, nationalistic, or anti-capitalist beliefs [...], disgruntled citizens who feel disempowered and [...] a young generation of Romanians who are fed up with Romania's endemic corruption and lack of accountability of the current political elite" (ibid., p. 3). The specificity of the Romanian anti-fracking struggle and the importance of democracy and corruption concerns/frames within it, are also well captured in one of the main slogans used by anti-frackers in Romania, which says, "Stop hydraulic fracking, stop fracking our democracy!" (Frack Off Romania, 2014).

Devey et. al. (2014) also discuss the case of Bulgaria, showing how political questions are equally important, if not even outweigh environmental ones in the Bulgarian fracking debate. They assert that, "The shale gas issue did not stand on its own but was enmeshed in much larger controversies about the country's politics and future." (ibid., p. 51). Like in Romania, anti-fracking protests in Bulgaria (e)merged with anti-government protests, and while the

protests remained relatively small in size they were “perfectly organized, coordinated and publicized in the media” (Daborowski, 2012). Culminating in January 2012, the protests resulted in an indefinite ban that was placed on fracking by the Borisov government (Devey et. al. 2014).

To a somewhat lesser degree, similar frames are also observable in the ‘older democracies’, particularly the UK, where fracking is also often contested on political grounds and government representatives are accused of being too closely tied to and having financial interests in the fracking industry. One of the largest corruption scandals, uncovered in 2013, is that of pro-fracking Conservative Party’s elections advisor Lynton Crosby whose lobbying firm, as it turns out, represents the Australian Petroleum Production and Exploration Association, an oil and gas lobby group campaigning aggressively for fracking (Dugan & Morris, 2013). The news came out at the same time when conservative MP George Osborne, the Chancellor of the Exchequer and Second Lord of the Treasury of the United Kingdom, announced the 'most generous tax breaks in world' for fracking (Macalister & Harvey, 2013). Similar concerns with corruption were more recently raised in South Africa (Prinsloo, 2014).

Corruption scandals have not only enraged anti-fracking protesters/movement but also many citizens who are more broadly concerned with government corruption and questions of democracy, and who now see and support the anti-fracking movement in raising these concerns. It has thus also had the effect of strengthening and further bringing to the fore the democracy and corruption frames within the anti-fracking movement. “Frack Off”, the leading national anti-fracking network in the UK, identifies 20 major impacts of shale oil and gas, and among the many impacts relating to the physical environment they also point to the multiple social and

political issues, not least of which include, “corporate profits vs. community costs” (Frack Off, 2013). In effect, they articulate a large base of issues associated with fracking, which extends beyond what might be considered ‘standard environmental concerns’, thus creating a wide platform for involvement of diverse social actors. Citizens are invited to join the protests regardless of what their main concern may be (‘environmental’ or otherwise) and ‘solidarity’ indeed became a major theme in these articulations that operates not only within the national borders but also across them. ‘Solidarity protests’ have been held in the UK for both the anti-fracking struggles in Romania and Bulgaria (Occupy London, 2013), and this has echoed back recently with Romanian citizens protesting in solidarity with the people of Barton Moss in the UK (Frack Off Romania, 2014). Barton Moss solidarity protest saw people from across several cities and towns within the UK who joined the protest on that same day, January 26, 2014, the so-called “Solidarity Sunday” (Frack Off, 2014; Greenpeace, 2014).

France, which is considered to hold amongst the largest source of shale gas deposits in Europe next to Poland, now has a ban on fracking despite legal challenges from the Schuepbach Energy Corporation. It is widely hailed amongst the anti-fracking community as a success story and source of inspiration. The British Broadcasting Corporation (BBC) reported that the French Green Member of the European Parliament, José Bové, attended an anti-fracking gathering in the UK at Balcombe, where anti-fracking protests were launched against Cuadrilla (an independent UK energy company)⁴ for test drilling (BBC, 2014). Whereas, the United States, where fracking

⁴ Cuadrilla has several gas exploration sites in Lancashire and West Sussex in the UK according to their web page <http://www.cuadrillaresources.com/our-sites/> (last visited April 28, 2014).

is most widespread, is used repeatedly by movement activists as an example of the negative impacts of fracking and something to be avoided. Interestingly enough, however, in France where a successful ban was introduced despite their fracking potential, the government (which provides the bulk of the country's energy supply with nuclear energy) was considered supportive and aligned with the movement's general anti-fracking goal. Without such support, however, it is a question whether the movement could have achieved similar results which indicates the key role of governmental interests in promoting or preventing fracking.

The case of Bulgaria, Romania, as well as the UK and France, signal a shift in how the anti-fracking movements in these countries, but potentially across the globe, constitute themselves and operate. Rather than engaging in reactionary protests that emerge ex-post fracking operations and centered largely on 'environmental concerns,' the movements in these countries are articulating a wide range of concerns highlighted by 'fracking' and thus attempting to mobilize a larger and more diverse set of actors to join or support these movements. Through these diverse articulations, fracking emerges not only as a cause of environmental and social degradation but also as an effect, a symptom as it were, of more durable and structural societal problems that have to do with a crisis of democracy and its manifestations: corruption, violations of human rights and unequal distribution of goods and ills across different parts of society. Such framing of the 'fracking issue' has not only enabled wider engagement of national and international citizens but has also resulted in wider institutional support for local anti-fracking protests. The Pungesti anti-fracking protests in Romania, for example, have received support from the European Green Party (EGP, 2013), but also the European Peasant Movement (ECVC, 2013) as well as Human Rights organizations such as the Helsinki Committee (APADOR-CH,

2013a, 2013b).

What then constitutes the “truth” about fracking?

Diagnostic framing brings to the fore the “social spheres of knowledge” on water contamination (and other health risks) and fracking as they are contested across the antagonistic spheres of industry, government, academia, and communities, whereby the latter two are less cohesive. The debates reflected in knowledge claims on fracking have very specific dynamics that indicate what Foucault would assert are the boundaries of what constitutes “truth” and what doesn’t, and what can and can’t be said and by whom. The conflict over fracking unveils these boundaries, which put communities in an especially vulnerable position with regards to asserting the “truth.” For, the realms of what constitute knowledge marginalize the very methodological resources that community “truths” rely on most: select individual or localized cases; and evidence based on anecdotes and personal experience, what is sometimes also more generally referred to as endogenous knowledge. The global anti-fracking virtual forums, such as Global Frackdown, are often a platform ultimately for sharing multiple “truths” about fracking and its dangers.

However, as the anti-fracking movement is thereby critiqued on methodological grounds, the movement itself is challenged to overcome the more dominant discourse on what constitutes “truth” by simultaneously exploiting the scientific method for all its weaknesses and strengths. For example, the anti-fracking initiative in South Africa known as Treasure Karoo

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Action Group, writes on its web page, “South Africans may be well advised to request scientific proof that shale gas is the best option to create sustainable jobs, energy and allow our children to live out the promise of Section 24 of the Constitution of the Republic of South Africa” (Treasure Karoo Action Group, 2014). As noted in the earlier discussion on diagnostic framing regarding the problems associated with fracking, however, scientific works (i.e., involving researchers with academic affiliations relying on the scientific method and involving peer review processes) are also contested based on methodological grounds. Still, despite the highly contested knowledge base of fracking, pro and anti-frackers still mutually prioritize the notion of scientific knowledge when it comes to the risks of fracking. Mainstream environmental movements have historically depended on arguments that rely on the findings of environmental science and its correspondence paradigm of knowledge (Di Chiro, 1998) – accepting the possibility of direct access to ‘reality’ and assuming that this (scientific) knowledge is neutral, therefore ignoring the connections between ‘knowledge’ and power. They thus operate within a positivist paradigm that sets hard science as a standard against which other forms of knowledge are evaluated. Such an approach produces several outcomes. On the one hand, the privileging of ‘hard science’ also means a privileging of quantitative ‘knowledges’ and an accompanying devaluing of other forms of knowledge, research and argument-making (Bacchi 2010).

This hierarchization of knowledge further results in the enshrining of a top-down managerialist form of governance that simultaneously displaces ‘lay knowledges’ (Popay et al. 2003) and puts emphasis on professionalization with an accompanying decrease of commitment to democratization (Parsons 2002). And, if we have learned anything from the debate on climate change, knowledge-based conflicts throw and take their biggest punches not strictly in

peer-reviewed and reputable academic journals but also in the quantity and prominence of mass media generated across the internet.

Both the role of ICTs in anti-fracking movements and the various and multiple texts on fracking reveal multiple sources of information and knowledge. Knowledge production, widely considered the domain of scientists in the ivory towers of objective academic institutions, is now increasingly pluralistic in its origins. Even as we assert our ongoing faith in modern science, where we get our knowledge is increasingly diverse and ambiguous in terms of its scientific origins. Tim Boersma, a prominent author of several journal articles on fracking, claims in his own profile that he is also affiliated with the Dutch national gas company, Gastera and that, “Before becoming a full time academic at the Brookings Institute, Boersma spent five years in the private sector, working as a corporate counsel to the electricity production sector in the Netherlands” (Boersma, 2014). Two of the main sources on fracking on google are Chevron and Exxon Mobil, the latter being at first obfuscated by its title, Europeunconventional gas.org. Much of the anti-fracking fervor is tied to a documentary film called, “Gasland” by Josh Fox who is identified as a film director and environmental activist. Another source on fracking is a briefing paper entitled “Old Story, New Threat: Fracking and the Global Land Grab” from the Transnational Institute Agrarian Justice Programme written by “activist-scholars” who claim among their resources: Frackaction and Friends of the Earth Europe. The media frequently picks up reports from various consulting firms to assert scientific study results that make various claims about fracking.

A common thread across these realms is the assumed bifurcation of objectivity and

subjectivity. In this way, especially academics and community members can be equally challenged from pro and anti-fracking standpoints. Hence, the antagonistic spheres of fracking reflect a frame war that is mutually challenged along the same grounds in the ways that knowledge is produced and shared. Hence, the “truth” on fracking only emerges as a consensus in its mutual use and distrust of the same epistemological and methodological approaches, especially across the dominant discourse and the global anti-fracking movements. In this next section, we explore this diagnostic framing aspect of the movement in which the targets of the anti-fracking movement are articulated.

Diagnostic Framing: Anti-fracking Movement

Antagonists

Diagnostic framing also delineates the “sacred and the profane,” and defines who is to blame for the asserted problem(s). As a process and a strategy, diagnostic frames “delineate the boundaries between ‘good’ and ‘evil’ and construct movement protagonists and antagonists” allowing activists to target their grievances toward a culpable entity (Benford & Snow, 2000: 616). When it comes to blaming someone or something for fracking, the targets are the same across local and global efforts: government and industry. However, while movement frames are consistent in their identification of the antagonists, local actors within the movement are confronted with antagonists in place, while actors organizing the forum for the global movement, largely located in Washington, D.C. in the US and London in the UK, engage their antagonists from a virtual platform. Local anti-fracking struggles do not solely seek

national/supranational/global responses in the form of informed and consensual policy solutions, but they articulate and uphold the inviolability of places in which they emerge, of local histories and communities.

Government and industry have long been revolving doors whereby government representatives have industrial links before and/or after their public service terms and vice versa and that they tend to come from the upper income brackets overall. Government officials can move across the boards of gas and oil companies and others related to energy extraction technology (e.g., former United States Vice-President Dick Cheney and Haliburton). As personal financial disclosure data revealed, most members of the US Congress in 2014 are millionaires (see an analysis, for example, by the Center for Responsive Politics). In the case of government, the question of a sound regulatory framework arises.

In this context, diagnostic anti-fracking frames particularly articulate a crisis of democracy through various slogans such as, “Listen To The Many, Not The Money!” “They Get Rich. You Get Cancer.” “I Couldn’t Afford My Own Politician, So I Made This Sign Instead,” and referring to the water and other environmental health issues, “Health Over Wealth,” “You Can’t Drink Money,” or “Let Them Drink Benzene!” And, as one Camp Frack activist Tina Rothery, among 500 protesters at an anti-fracking camp in Lancashire, United Kingdom, asserted, “...we don’t imagine our Government to be squeaky clean with regard to fracking” (Lancashire Evening Post, 2013). Another anti-fracking activist from Ireland put it this way, “A lot of things happen under the radar.”

Global Frackdown draws further attention to the issue, “The oil and gas industry has

spent millions of dollars on slick PR campaigns and high-profile lobbying efforts to buy the ability to extract fossil fuels from our communities with as little government oversight as possible, all while destroying our water resources and our climate” (Global Frackdown, 2014). Global Frackdown ultimately pits the oil and gas industry against communities and the environment, “It’s time to expose the oil and gas industry’s desire to profit at the expense of our communities and our environment” (Global Frackdown, 2014).

Global Frackdown and Food and Water Watch point out the collision of government and industry interests which is most widely evident in what is considered a weak and insufficient regulatory structure. Food and Water Watch write, “The industry enjoys exemptions from key federal legislation protecting our air and water, thanks to aggressive lobbying and cozy relationships with our federal decisionmakers.” Through the introduction of the 2005 Energy Policy Act of the United States, in what has become known in the United States as the “Halliburton Loophole,” fracking has been exempted at the federal level from certain water protection policy frameworks. Halliburton refers to former United States Vice-President Dick Cheney’s affiliated corporation, Halliburton, which is strongly associated with the development and implementation of fracking technology and related services.

Ultimately, anti-fracking initiatives assert a dichotomy in which the struggle is one of communities versus corporations (Figure 3). The Lock the Gate Alliance, a coalition of anti-fracking initiatives across Australia describe it this way on their web page, “In a David-and-Goliath struggle of farmers against mining giants, everyday citizens against global corporations, our communities are choosing grace under fire and displaying incredible courage,

integrity and imagination” (Lock the Gate Alliance, 2014). At the global level, Food and Water Watch asserts, for example, that ”the industry is aggressively clamping down on local and state efforts to regulate fracking by buying influence and even bringing lawsuits to stop them from being implemented. That’s why fracking can’t be made safe through government oversight or regulations. An all out ban on fracking is the only way to protect our communities” (Food and Water Watch, 2014).



Figure 3. Photo: Fracking or Community? (Source: Wendy Lynne Lee, Raging Chicken Press)

And while diagnostic framing serves to identify and articulate the problems and targets, prognostic framing is where movement members point towards the solutions (Benford and

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Snow, 2000). In order for these frames to be effective, they require internal consistency. That is, the solutions must address previously identified problems. But, herein, also lays the possibilities, the anticipation and vision, the “alternative social imaginaries,” that are to guide the way towards a different and brighter future and away from the nightmarish arrangements of the contested present.

Prognostic Framing: What is the Solution?

Already by advancing a particular way of seeing ‘the problem’, the possibilities for delineating change emerge, because inherent within the problem is also the solution. For example, if the problem is a question of ‘dirty fracking technology,’ then the solution may simply be to make fracking “cleaner” while still maintaining a momentum in favor of fracking. This technocratic framing of the ‘fracking problem’ was for the longest time most prominent within the [anti]fracking discourse and even actively engaged and reproduced by the industry who is willing to accept that fracking is ‘dirty’, but also quick to assert that it is still ‘safe if done right’.

Prognostic framing on fracking from an antagonistic perspective affirms that discourse, as Foucault asserted in his conceptualization of power, is indeed the very thing to be seized. And, consistent with Foucault’s conceptualization of power and discourse, the delimitations and connections to other discourses are inherent in the articulation of the problem and its related “objects and concepts.” Hence, to assert or agree on the problem is to define the parameters of

the discourse on the solutions. For this reason, among others, the anti-fracking movement is increasingly making use of a multitude of frames, many of which do not lend themselves to easy technological or isolated policy fixes. As we discussed earlier, the anti-fracking movement(s) simultaneously ‘diagnoses’ fracking as an energy, climate change, environmental health problem, and beyond that, a problem of democracy and social and economic relations within global neoliberal capitalism.

Different solutions correspond to each of these diagnostic frames. The energy and climate change ‘prognosis’, for example, is particularly engaged at the global level, with calls to sustainable and renewable energy resources such as wind and solar power. Global Frackdown summarizes it this way, “The only way for countries to ensure energy independence and security for future generations is to get off fossil fuels and pursue truly sustainable sources of power like wind and solar energy” (Global Frackdown, 2014).

Yet while the delineation of the fracking controversy as an energy/climate change issue or even strictly an economic or an environmental one is a core aspect of the attempt to “seize the discourse,” the most important power struggle at the core of the movement lay in its central implicit prognostic frame in which communities, not the elite interests of corporations and government, actively decide on their own fates within an institutional context of nurtured capacities and opportunities. This terrain is most resonantly contested through the local anti-fracking initiatives where citizens, as community members, find their democratic role (and livelihood opportunities) most challenged and most at stake.

As we’ve discussed earlier, various local anti-fracking struggles are increasingly

uncovering this most important theme in which fracking is not just about energy, economic development, and the environment (health), but that at the root of the problem is a fundamental crisis of democracy in which people experience a lack of self-governing power and constrained opportunity or choice, especially through a policy framework that benefits elite, upper-class interests (namely, the one to ten percent). From this perspective, the problem of fracking is immediate and situated in the effective socio-political alignments and relations sustained by contemporary neoliberal capitalism, which not only promote and allow for the practice of fracking, but also further exacerbate social, economic and environmental inequalities. Through such articulations, local initiatives are progressively taking on the special role of “foster[ing] the democratizing potential of the new social subjects” (Escobar, 1992: 41). Their “repertoires of contention”⁵ include gathering and sharing information, raising awareness, getting together in rallies, vigils, demonstrations and sit-ins, as well as engaging legal remedies where possible.

Such framing of the ‘fracking problem’ does not lend itself to easy technocratic policy fixes but brings proper politics back into the arena of contention. It further bridges the global-local and ‘disciplinary’ divides by articulating a shared ‘social imaginary’ that enables coalitions between the anti-fracking and other new social movements such as the alter-globalization or the Occupy movement, for example. Such coalitions indeed proved both possible and successful in newer democracies such as Romania and Bulgaria, but are realized in older democracies and wealthier nations too, such as the UK and US. Further, as stories from

⁵ For an overview of “repertoires of contention,” see Snow, D., S. Soule, and H. Kriesi. 2008.

The Blackwell Companion to Social Movements. John Wiley & Sons. pg. 271.

these countries are being shared within global anti-fracking platforms and networks, they are inspiring other initiatives to expand their framing efforts and make similar coalitions possible. In this way, diagnostic and prognostic framing come together especially when it comes to designating the responsible target and the proposed solution. For, one of the key solutions to fracking lays within the scope of democracy and an engagement in proper political (antagonistic) discussions.

Still the solution to fracking also lies in the details. For, the boldest force to counter fracking and promote democracy and justice is on the ground in particular places where people need to be able to drink, eat, breathe, and sleep in peace. And, such basic everyday life activities, that constitute the foundation of our survival link fracking to the democratic subject and the ability to contest violations against the capacities to meet those needs. This is why it is not so shocking perhaps that the homeowner (and CEO of ExxonMobil), Rex Tillerson and his wife, Renda, joined a lawsuit against the local water company (Bartonville Water Supply Corporation, Texas) contesting a water tower construction that will reportedly be used to supply fracking operations near his “luxury property” noting in the legal documentation that, “Furthermore, upon information and belief, BWSC will sell water to oil and gas explorers for fracing shell formations leading to traffic with heavy trucks on FM 407, creating a noise nuisance and traffic hazards” (p. 17).⁶ It is “in place” where people bring action to words that is

⁶ No. 2012. 30982.211. Armeý et al. vs. Bartonville Water Supply Corporation et al.Plaintiffs’ Second Amended Petition. <http://online.wsj.com/public/resources/documents/water20140220.pdf> (last visited April 28, 2014).

not strictly at what might be considered a policy professional or corporate scale, but where advocacy is concretized in everyday life. It is also additionally here, “in place,” where fracking-related corporations such as Halliburton, Schlumberger, Baker Hughes, and Frac Tech are alternatively also realized as embodied, human, personified beings doing the work of fracking as local police protect and enforce the implementation and progress of their work.

Industry (and state) efforts to revert to a technocratic framing of the issue, setting it as a specific policy problem and, hence, only requiring if anything a policy solution, deny the political character of various interpretations and needs (Fraser 1989).

Yet, such prognostic framing seems to be less resonant for communities than in the past (such as with climate change issues or even environmental justice ones). Where states or local governments have responded, the response was that of a (temporary) ban or a moratorium on fracking (i.e. countrywide bans in France and Bulgaria, and many local bans in the US, Spain, ...). Still, regulatory prognostic framing manifested concretely in the form of proposed legislation that sets standards for where, how or under which circumstances fracking may be utilised and conversely when it may not, is still not part of the policy agenda. “Sustainable fracking” policies are not currently evident in the prognostic frames of policymakers. On the contrary, governments seem to prefer to exempt fracking (e.g., US) and leave the doors open.

The fashioning of specific policy responses is yet another discursive/framing operation, and as such a power mechanism, in which frames used or constructed in policymaking can have both positive and negative impacts in terms of power relations (Foucault 1970). This once again reminds us that discourse/framing, through its association to the production of truths, can have

significant material and immaterial impacts.

Inasmuch as global or even national debates about fracking are dominated by, or perhaps kept at the level of, narrowly defined environmental (ecological) questions such as the impacts of fracking on “Nature”; local struggles often defy the very society-nature dichotomy on which these debates rest and point to multiple issues that transcend this dichotomy (Di Chiro, 1998). They oppose the “science-politics short-circuiting” (Swyngedouw, 2010: 220) which structures most of today’s environmental debates (climate change being the prime example) and instead put forward a different set of knowledges and cultural meanings, contesting top-down managerial decision-making processes and engaging in a proper political struggle in which they not only oppose fracking but demand to be heard as ‘equal citizens in functioning democracies’.

In that sense, local anti-fracking struggles also emerge as cultural distribution conflicts that raise the question: “whose norms and meaning-making practices define the terms and values that regulate social life concerning economy, ecology, personhood, body, knowledge, property, and so forth[?]” (Escobar, 2008: 13). This is why in the beginning of this chapter we challenge the characterization of the anti-fracking movement as a mainstream environmental movement. For as our analysis has shown, in contrast to other mainstream environmental movements, the anti-fracking movement counters the isolation of nature as separate from society and culture and its corresponding delimitations of the problems. As the anti-fracking movement implicitly notes, fracking is not strictly an environmental problem, or a problem of our surroundings. It is rather both “cause and effect” and symptomatic in terms of our relationships to each other and with(in) nature.

Local anti-fracking initiatives are ‘place-based struggles’ inasmuch as they appear as defenses of place – understood as a particular relation between local people and communities and their physical environments. Environmental, as well as socio-cultural and economic changes unfold through these multiple and complex relations as processes that cannot easily (or without consequences) be reduced and reified as thing-like object-causes or singular socio-chemical components the likes of CO₂. As Escobar noted “economic crises are ecological crises are cultural crises...[and]... it is important not to separate these three domains but to let them interpenetrate each other” (2008: 14). This means that fracking technologies do not only threaten environments at the ecological level, but also at the cultural level through the “subalternization or even elimination of local grammars and knowledge of the environment” (ibid., p. 9).

In other words, fracking technologies are never implemented in ways that they co-exist with places where they are employed and without any consequences and implications to those places, but they are rather entirely transformative of places: ecologically, as well as culturally, economically and throughout these – politically. This is a point that is indeed increasingly recognized and articulated within many local anti-fracking protests, and increasingly being reflected in global anti-fracking platforms and networks.

The unitary frames, as often presented in official political debates, industry responses and even mainstream media texts, sharply contrast with the dynamic reality of multiple (anti)fracking frames at both local and global levels. It thus seems of crucial importance for the study of the anti-fracking movement(s) and the state and industry responses to the movement(s), to further capture the diversity of (anti)fracking frames. In doing so, we will be better able to

recognize the role that such diversity plays in either distortions or, more importantly, successes in the anti-fracking struggle.

Conclusion

The anti-fracking movement, in both its local and global articulations, reveals what other global movements of our time have told us loud and clear, democracy is in crisis and a prominent symptom of this crisis is the ever widening gap in social equality. This chapter engages a way of understanding social movements that sheds light on their democratizing potential to articulate alternative imaginaries, to engage in a power struggle where power is manifested, namely through discourse, and to draw attention to the everyday world of people who do not see themselves as separate from nature or that nature is all about the market, despite the dominant discourse that attempts to make it so.

The chapter thus engages the anti-fracking discourse through an overview of some of the framing generated from the many local voices and the global virtual forums for social solidarity and exchange. Across the framing of the movement, we identify and reflect on some core themes: 1) what constitutes knowledge; 2) communities struggling in and across places; and 3) the explicit and powerful articulation of a resonant, alternative political and economic imaginary based on democracy and social equality.

In conclusion, one global movement and many local voices reveal various frames of fracking including: a continuation of fossil-fuel-dependence, a technology that destroys local

environments by polluting water, soil and air, a new materialization of global capitalism's unsustainability, an issue of state corruption and governments functioning not on the basis of popular but elitist/private representation, an issue of social, economic and environmental equity. However, the movement's capacity to resist efforts to narrow or structure the discourse on fracking to technical or strictly environmental terms, let alone what might be considered scientific conclusions, is critical to its democratic and political potential in general.

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