# Please in My Backyard: Quiet Mobilization in Support of Fracking in an Appalachian Community[1]

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Environmental justice and social movements scholarship demonstrates how not-in-my-backyard activism by more privileged communities leaves the disadvantaged with "locally unwanted land uses." Yet it overlooks instances of local support for risky industries. Our ethnographic case shows how a rural, white, mixed-income Pennsylvania community adopted a please-in-my-backyard stance toward shale gas extraction (fracking). Residents invited development on their land and supported it through *quiet mobilization*. While landowners prioritized benefits over risks, economics cannot fully explain their enthusiasm. Consistent with public opinion research, partisan identities and community obligations undergirded industry support even when personal benefits were limited. Devotion to self-reliance and property rights led residents to defend landowners' freedom to lease their land. Cynicism toward government precluded endorsing environmental regulation, and the perception of antifracking activists as "liberal" outsiders linked support for fracking with community solidarity. This case illustrates why communities may champion risky industries and complicates theories of nonmobilization.

Tom and Mary Crawley were not able to drink the water from their tap ever since an energy company drilled a natural gas well up the hill from their

[1] We thank Gianpaolo Baiocchi, Fedor Dokshin, Mitchell Duneier, Jon Gordon, John H. Mollenkopf, Iddo Tavory, and audiences at the Ethnography Workshop at NYU, the


0002-9602/2018/12402-0005$10.00

house, outside the rural hamlet of Hughesville, Pennsylvania, about three years prior. The spigot hissed, and the water fizzed like soda—telltale signs of methane gas. The state's Department of Environmental Protection (DEP) determined that the cause of methane migration into the Crawleys' water well—and four of their neighbors' water wells—was natural gas drilling; it subsequently cited the nearby gas well for faulty cement casing. Despite the DEP's conclusion, the energy company continued to deny responsibility and ceased providing the Crawleys with complimentary bottled water. As someone who worked long hours for modest wages, Tom feared that he neither had the time nor the resources to take on the company. He also felt abandoned by elected officials. In the meantime, the Crawleys were relying on bottled water at their own expense, they worried that their home—their only asset—was worthless, and they expressed an overwhelming sense of powerlessness.

Environmental justice (EJ) researchers (e.g., Bullard 1990; Čapek 1993) emphasize that economically and politically marginalized groups—for example, the poor, minorities, and immigrants—disproportionately bear the brunt of environmental hazards from controversial land uses like fracking.[2] Communities with greater economic and social capital, it is argued, are better able to mobilize against threatening efforts to site "locally unwanted land uses" (LULUs) nearby. An emerging literature suggests that "environmental injustice occurs" through fracking in so-called rustbelt areas like rural Pennsylvania—notwithstanding residents' relatively privileged status as white property owners (Harris 1993)—because gas wells (and their associated environmental and health risks) are concentrated in poorer rural census tracts (Ogneva-Himmelberger and Huang 2015, p. 165) and because landowners are excluded from meaningful participation (Malin and DeMaster 2016; see also Willow et al. 2014; Eaton and Kinchy 2016). Gullion (2015) portrays shale gas communities in Texas as impotent victims consigned to live in "environmental sacrifice zones."

Urban Inequalities Workshop at Boston University, and the Center for Public Leadership at the Harvard Kennedy School for their helpful suggestions and criticisms on previous iterations of this paper. We are most indebted to the landowners in Lycoming County, Pennsylvania, who have allowed us to share their stories. Direct correspondence to Colin Jerolmack, 295 Lafayette Street, Fourth Floor, New York University, New York, New York 10012. E-mail: Jerolmack@nyu.edu

[2] Some industry proponents object to the word "fracking" altogether, while others use it to refer only to the specific process of injecting water, sand, and chemicals into a drilled well (Shepstone 2014). We use the term as it was routinely used in everyday conversation, which also resonates with popular discourse: to refer to the entire industrial process of preparing a well pad, drilling and cementing a natural gas well, fracking, and removing the flowback and produced water (wastewater).



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It would seem that the Crawleys and their neighbors are at high propensity for mobilization (McAdam and Boudet 2012) against shale gas extraction in their backyard (see Dokshin 2016), given their intersubjective awareness of an objective hazard, collective sense of injustice at the hands of the energy firm that tainted their water, and shared frustration with local public officials' apparent lack of political will. But the Crawleys and their neighbors insisted that, despite what happened to them, they were not against fracking. They rejected offers of assistance from a local advocacy organization, and they refused to conclude from their experience that greater regulatory oversight of the gas industry is needed.

Moreover, while working-class residents like the Crawleys may be "stuck" with the unwanted consequences of fracking, this potentially risky industrial process was not imposed upon them involuntarily by elite outsiders (cf. Brehm and Pellow 2013). Tom and his neighbors *invited* energy companies to lease their property—a prerequisite for gas drilling in most cases[3]—and collectively bargained with several companies before signing over their mineral rights. In fact, the majority of working- and middle-class residents that this study followed over five years of fieldwork in northern Pennsylvania said they welcomed the industry; many rallied their neighbors and local politicians in support of shale gas extraction. Even after a state supreme court ruling created a more favorable opportunity structure for resisting fracking by allowing towns to use zoning to restrict the industry, most residents showed no interest in doing so.

Because EJ and social movements scholars typically examine how not-in-my-backyard (NIMBY) activism and socioeconomic vulnerability structure the siting of industrial projects, we know very little about the conditions under which local residents instead enact please-in-my-backyard (PIMBY) stances toward contentious land uses (Smith and Marquez 2000; Dokshin 2016; but see Hochschild 2016). This lack of sociological attention is all the more surprising given that much research on environmental attitudes indicates that (1) proximity to risky energy projects like fracking, nuclear power, and pipelines rarely produces a NIMBY effect and may even *increase* support for them (e.g., Gravelle and Lachapelle 2015; Boudet et al. 2017); and (2) self-identified conservatives consistently endorse proposed risky land uses. We leverage this literature—which is primarily quantitative and rooted in political science—and our ethnographic research to explain what predominant sociological theories of environmental siting and mobilization cannot

[3] There are instances in which landowners have no say in whether to allow drilling because someone else retains the mineral rights ("split estate"); the first author did not encounter any such cases in the course of his fieldwork.



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adequately account for: why people like the Crawleys endorse, not merely tolerate, ostensible LULUs—even after they cause major problems. Our qualitative case study thus affords a unique opportunity to amend and reconstruct theory (see Burawoy 2009; Tavory and Timmermans 2014)—in this instance, EJ and social movement mobilization theories—so that it can better account for nonoppositional political responses to contentious land uses. We also contribute more broadly to environmental politics literatures by conceptualizing community PIMBY-ism as an overlooked form of mobilization.

Following an overview of relevant theories and our research setting and method, we turn to the observational and interview data gathered as part of a larger study of a rural community living in the midst of the natural gas boom. We first demonstrate that many residents actively pursued efforts to bring fracking into their "backyard," prioritizing the monetary benefits over the known risks. Our subsequent data section shows that residents' political ideology dovetailed with their economic rationale and cemented enthusiasm for fracking. Locals routinely situated their profracking sentiments in relation to their partisan identities (i.e., libertarian or conservative), defending landowners' freedom to lease and profit from their mineral rights and viewing government efforts to regulate fracking as a threat to personal sovereignty. Complementing the ethos of individualism, residents also explained their support for fracking in light of their relations with—and obligations to—their neighbors. Most believed that the community as a whole benefited from fracking, even if they personally did not, and they perceived antifracking activists to be liberal urban outsiders. Thus, to continue to stand with fracking was a way of showing solidarity with the community and its ostensibly rural way of life.

These findings indicate that whether particular environmentally risky land uses are seen as unwanted is a contingent social process. A certain land use may be a LULU to one community and an amenity to another. We use many rural residents' rejection of fracking as a LULU to argue in the paper's last section that the community's response to shale gas is best conceptualized as a form of *quiet mobilization* in support of this industry rather than as nonmobilization or quiescence (Gaventa 1980). We argue that the academic bias toward studying contentious political resistance (e.g., rallies or sit-ins) has created a blind spot, whereby conventional forms of collective engagement in civil society such as participating in town hall meetings or organizing interest groups are not considered to be mobilization—even if they have political ends. One effect is that scholars overlook instances of activism that may typify small-town and conservative rural communities, where civility and neighborliness are prized. Last, we suggest that the continual expression of support for gas drilling by some of the biggest "losers" of the "fracking lottery" reveals the limits of purely economistic accounts of PIMBY-ism.

## CONTENTIOUS LAND USES, PIMBY POLITICS, AND QUIET MOBILIZATION

Because of the pioneering research by Robert Bullard (1990) and his intellectual heirs (e.g., Pellow 2002), it is well known that poor and minority communities face a disproportionate number of hazardous waste facilities and other LULUs and must endure higher rates of environment-induced illnesses than their wealthier and whiter counterparts. For EJ scholars, the presence of environmentally risky industry in a community is typically read as evidence of structural violence (Nixon 2011)—for example, elite NIMBY-ism indirectly pushed LULUs into more vulnerable communities (Bullard 1990, p. 4; Pellow 2002, p. 30) with little "negotiation or consultation" with impacted residents (Cole and Foster 2000, p. 14; see also Shrader-Frechette 2005, p. 17; Park and Pellow 2011, pp. 4–5; but see Krakoff 2002, pp. 168–75; Pellow 2002, p. 89–99).

A small but growing number of scholars argue that fracking follows a similar trajectory, notwithstanding the fact that many siting decisions require individual consent and that those impacted are predominantly white landowners. Ogneva-Himmelberger and Huang (2015) note that gas wells in Pennsylvania are concentrated in poorer rural census tracts. Others argue that landowners are excluded from "meaningful participation" (Malin and DeMaster 2016; see also Willow et al. 2014; Eaton and Kinchy 2016) or have their "cultures and livelihoods" taken away from them (White 2013). Gullion's (2015, p. 127) ethnography of a Texas suburb suggests that even white, upper-middle-class communities that "possess social capital" can experience "structural violence" as a result of shale gas extraction because they are relatively powerless to prevent the oil and gas industry from endangering their health.

Explanations of why it is that so many communities that bear the negative impacts of LULUs fail to mobilize typically conclude that residents are too politically disorganized or economically marginalized (e.g., Bullard 1990; cf. McAdam 1982), are unsure about the facts or who is to blame because of elites' "labor of confusion" (Auyero and Swistun 2009), or have become quiescent after adopting the ideological justifications imposed upon them by more powerful actors and institutions (e.g., Gaventa 1980; Malin 2014). For instance, Eaton and Kinchy (2016, p. 22) argue that "nonmobilized" shale gas communities are not necessarily "sites of consent." The authors explain the "lack of collective mobilization" against fracking among northeastern Pennsylvania landowners as resulting in part from their sense of "powerlessness" due to the region's "paucity of organizational capacity and political opportunities" (Eaton and Kinchy 2016, p. 22).

In short, the existing EJ and social movements literature leads us to expect NIMBY-ism when a community faces the prospect of a risky land



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use. If there is no oppositional collective action, its absence is the dependent variable in need of explanation. However, a related body of (mostly) political science research on environmental attitudes should make us question this presumption. As Bishop (2014, p. 2) notes, "Scholars have found inconsistent evidence that local environmental conditions affect environmental opinion." Smith (2002, p. 159), for instance, finds "very little support for the claim that proximity matters with respect to people's opinions on either offshore oil development or nuclear power" in California. Similarly, several scholars have found that exposure to pollution risk and ecological disruption in Pennsylvania is not linked to greater opposition to natural gas wells (Boudet et al. 2016; Evensen and Stedman 2016; Alcorn, Rupp, and Graham 2017) or wind farms (Jacquet 2012; Wolsink [2007] and Jobert, Laborgne, and Mimler [2007] find the same in Europe). One study indicates that this pattern may hold in the face of real—rather than just potential—harm: Bishop (2014) shows that the Deepwater Horizon oil spill had no effect on impacted residents' opinions on oil drilling. Some studies even point to signs of an "inverse NIMBY dynamic": Gravelle and Lachapelle (2015, p. 101) reveal that the closer one lives to the proposed route of the contentious Keystone XL pipeline, the more likely one is to support it. And Boudet et al. (2017, p. 1) illustrate that proximity to new shale gas development is associated with more support for fracking in a nationally representative survey (see also Clarke et al. 2016). Smith (2002) finds the same for those living near nuclear facilities.

The upshot is that a sizable body of environmental survey research reveals evidence of favorable sentiments about what might otherwise be defined as LULUs by analytic fiat. But, as Dokshin (2016, p. 942) notes, this phenomenon has received little attention from EJ and movements scholars, most of whom focus on case studies of resistance against—or acquiescence in the face of—so-called LULUs.[4] In turn, Alcorn et al. (2017, p. 29) suggest that political research documenting support for risky energy projects like fracking in residents' backyards would benefit from "case studies constrained to particular towns . . . that qualitatively take into account [community] perspectives." Such research, which to date is scant (see the brief accounts of Pellow [2002, pp. 89–99] and Krakoff [2002, pp. 168–75]), would help contextualize survey findings by showing how residents construct al-

[4] Although a few EJ scholars do account for voluntary accommodation of risky industries, they usually imply that the communities in question have no alternative but to oblige a LULU because they are "left with the choice of dirty industry or no industry at all" (Bullard 1990, p. 22; see also Cole and Foster 2000, p. 61; Pellow 2002, p. 166). Malin and DeMaster (2016) apply this argument to fracking in Pennsylvania: although some of the working-poor farmers they interviewed called gas leases a godsend, the authors conclude that leasing is a "devil's bargain" because farmers are forced into a dependent relationship with a volatile industry.

ternative narratives about LULUs and by revealing how and when pro-development sentiments translate into action. Our article takes up this task.

In our view, a central but often underappreciated process evident in many instances of local support for risky industry is what we call the *quiet mobilization* of community members. Unlike well-known manifestations of contentious political repertoires through protest tactics like demonstrations, rallies, sit-ins, and civil disobedience (Clemens 1993; Tilly 1995; Walker, Martin, and McCarthy 2008), forms of quiet mobilization—either for or against new economic, political, or cultural practices—include everyday conversations with neighbors, the formation of interest groups, local civic meetings, discussions at churches, and other conventional forms of engagement in civil society. Quiet mobilization often reinforces sentiments of community and belonging and involves exchanges that are about political topics but that nonetheless emerge in nonpolitical spaces where participants tend to approach partisan issues with caution (Eliasoph 1998). Quiet mobilization is typically not covert (cf. Morrill, Zald, and Rao 2003), although it seems to require mutual trust. It squares well with the shift toward "blended social action" that mixes civic and political engagement (Sampson et al. 2005), but it differs from forms of "everyday resistance" (e.g., Scott 1985; Eaton and Kinchy 2016) in that quiet mobilization need not involve a sense of oppositional consciousness, let alone a sentiment of cognitive liberation (McAdam 1982). Quiet mobilization overlaps with the notion of "infrapolitics" (Scott 1990) in highlighting "acts, gestures, and thoughts that are not quite political enough to be perceived as such" and that do "not respond to the criteria for widely recognized forms of political action" (Marche 2012, p. 3). Yet it diverges from that concept's premise that such practices are confined to subaltern populations that deploy them because they are fearful of state repression and are "deprived of access to legitimate channels of expression" (Marche 2012, p. 4). Instead, we argue that quiet mobilization may be deployed because it can achieve desired goals without violating community norms. Some scholars imply that what we call quiet mobilization is a particularly appealing avenue of collective action in rural, white, conservative communities, where civic association is valorized (Wuthnow 2013) and overt forms of activism (e.g., protesting) may be viewed as "something that only liberals and/or Democrats do" (Gullion 2015, p. 110). As we illustrate in more detail below, such boundary work is often a central aspect of how quiet mobilization is made manifest.

This issue has bearing on how we understand mobilization more broadly. A long-standing critique of social movements scholarship is that much of it samples on the dependent variable by searching for cases of successful or noteworthy collective action while ignoring the vast body of abortive mobilizations and, perhaps most consequentially, cases in which potential grievances did not materialize into any resistance at all (e.g., Olzak 1989; Oliver, Cadena-Roa, and Strawn 2003; Martin, McCarthy, and McPhail 2009). Of



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course, a key issue is knowing where to look. Without the outward manifestation of resistance, it is incumbent upon the analyst to define the places and times where one expects grievances to be experienced in the first place. But this can introduce bias if analytic categories are grounded in scholars' own normative concepts of injustice (see, e.g., Ogneva-Himmelberger and Huang [2015], who presume that the presence of gas wells in proximity to poor people is an injustice even though residents may view the situation favorably).

McAdam and Boudet (2012) offer one solution to this problem by analyzing the siting process for contentious energy projects—primarily liquefied natural gas facilities—in 20 randomly selected communities. Their findings lend credence to the critique that movement scholars exaggerate the frequency and impact of collective opposition by selecting on the dependent variable, and they challenge EJ presumptions about community responses to risky land uses. Their sample contained little organized opposition to contentious energy projects, and only one sustained social movement (in Ventura County and Malibu, California). McAdam and Boudet note that when opposition did manifest, it often came from "outsider" activists, not community members; more numerous were expressions of support for ostensible LULUs, including instances where poorer and minority communities actively sought new energy projects "to spur local economic development" (p. 89). For example, locals in Louisiana described the oil and gas industry "as part of the 'culture'. . . along with hunting," pointed to the thousands of jobs provided by existing petrochemical plants, and attended public meetings regarding the siting and approval process for a new liquefied natural gas terminal by the hundreds to voice their support (p. 86; see also Gramling and Freudenberg 1996). While McAdam and Boudet use these findings to highlight that nonmobilization against LULUs is the modal community response, we interpret their research as also finding evidence of collective action in support of LULUs.

Scholars who study how communities mobilize around contentious land uses have often shown—consistent with Kahneman and Tversky's (1979) prospect theory—that threats of potential losses are often the most significant forces in generating activism (Benford, Moore, and Williams 1993; Walsh, Warland, and Smith 1993; Futrell 2003). What these perspectives overlook, however, is the extent to which issue entrepreneurship is taking place that frames some new potentially risky land uses as economic opportunities. While EJ and social movement scholars typically interpret the absence of local opposition to risky land uses as a failure to mobilize (Auyero and Swistun 2009) or quiescence (Gaventa 1980; Malin 2014), local manifestations of what we consider PIMBY-ism suggest that at least some of these cases are better understood as instances of grassroots community support for, and "quiet" social mobilization on behalf of, contentious industries.

In our view, two distinct biases in contentious politics and EJ research explain the relative failure of scholars to account for PIMBY politics: (1) the focus on how organized actors resist existing institutional arrangements and powerful interest groups can lead scholars to remain blind to, or discount, instances in which communities endorse issues championed by elites (but see Walker 2009, 2014; Martin 2013); (2) the emphasis on more easily observed "outsider" strategies such as rallies, boycotts, and civil disobedience glosses quiet politics that are more private and involve conventional forms of social engagement such as political conversations with neighbors, friends, and family, as well as through citizen lobbying and participation in public hearings and meetings. It is a crucial oversight of the literature to ignore these phenomena, and to gloss them as instances of nonmobilization may be a fundamental misreading.

It seems reasonable that the predominant factor that might explain local PIMBY responses to risky land uses is economic gain in the form of jobs, direct compensation, tax revenues, or increased local business. Indeed, in explaining the seemingly unusual case of a poor black community in Chicago that was "vigorously courting" a trash incinerator, Pellow (2002, p. 97) shows that residents prioritized the jobs it promised to deliver, rejected the insinuation of "environmental racism," and implied that the NIMBY-ism of outsiders was an attempt to keep them impoverished. Similarly, regarding fracking, Dokshin (2016, p. 922) finds that communities in New York State lying above favorable (i.e., lucrative) areas of the shale were far less likely to seek a ban on shale gas drilling than communities on the periphery of regions targeted for fracking. However, decades of research suggest that apparent self-interest is a surprisingly poor predictor of one's policy preferences (Sears and Funk 1990; Bishop 2014). Moreover, while instrumental motives may help explain why communities would *tolerate* ostensible LULUs (i.e., as a "necessary evil"), they cannot fully account for why communities would *embrace* them. Yet this apparent puzzle resolves itself if we stop presuming what must be demonstrated—that a particular land use is in fact perceived as risky and/or unwanted by the community in question.

Sociologists have long understood that "if men define situations as real, they are real in their consequences" (Thomas and Thomas 1928), and social psychologists show that the connection between people's perception of risk and analysts' evaluations is often tenuous (Slovic 1987). This implies that no land use is inherently a LULU, even if it is objectively risky; it becomes unwanted, or not, through in situ interactions. As Auyero and Swistun (2009) demonstrate, understanding local negotiations over the meaning of contentious land uses is crucial for explaining community mobilization for or against them. The upshot is that social analysts gain greater leverage on explaining both PIMBY and NIMBY mobilization (and nonmobilization) when they focus on how interpretations of industrial projects are socially constructed



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in particular contexts. However, the "site fights" (Aldrich 2008) and EJ literatures typically classify LULUs based on the analyst's own risk assessments rather than residents' subjective perceptions. This leaves scholarly observers unable to satisfactorily explain why some communities mobilize in favor of the same land uses that other communities protest.

There is reason to believe that support for industrial projects may involve more than instrumental rationality. In examining two instances in which American Indian tribes approved an ostensible LULU (a landfill and a hog farm), Krakoff (2002, pp. 168–75) shows that many residents valorized their decision as an exercise in tribal sovereignty; the more that white outsiders lobbied against the projects, the more the tribes united behind them in the name of self-determination. Regarding fracking, Dokshin (2016, p. 942) shows that "partisanship was an essential lens that colored residents' perceptions" of the industry across New York State and "contributed to local land use decisions." Specifically, he finds that, as fracking became politicized in national debates, more majority-Democratic towns sought to ban it.

If "political identities or ideological commitments" can provide a "basis for opposition" (Dokshin 2016, p. 924; see also Dokshin and Buday 2018) to industrial land uses like fracking, they could also, as Krakoff (2002) insinuates, serve as a basis for support. The aforementioned survey literature on environmental attitudes lends support to this idea. Republicans and self-identified conservatives consistently report supporting risky forms of energy production like nuclear power and oil drilling, regardless of proximity (Smith 2002; Gravelle and Lachapelle 2015; Clarke et al. 2016). Similarly, those who would be classified by Douglas and Wildavsky's (1982) influential cultural theory of risk as "individualists" (who overwhelmingly self-identify as conservatives) tend to support disruptive energy projects (e.g., offshore oil drilling, pipelines) and accept risk in the name of free enterprise, while "egalitarians" (who overwhelmingly self-identify as liberals) tend to favor environmental regulations in the name of the public good (Michaud et al. 2008; Boudet et al. 2013; Gravelle and Lachapelle 2015). This partisan sorting echoes the pattern for climate change, in which identifying as conservative is the most significant predictor of the likelihood to deny that human activity is warming the planet (McCright and Dunlap 2011).[5]

Although Hochschild (2016) does not situate her study of a conservative rural town in Louisiana within the literature on environmental siting or en-

[5] Gravelle and Lachapelle (2015) find that partisanship interacts with proximity in shaping views toward the controversial Keystone XL pipeline: the expected partisan divide only begins to emerge when respondents are more than 158 kilometers away from the proposed route; closer to the pipeline, liberals join conservatives in supporting it. Clarke et al. (2016) observe a similar phenomenon regarding fracking, and Dokshin and Buday (2018) show that Democratic partisans *not* living atop shale drove antifracking activism in Illinois.

vironmental attitudes, her qualitative case study offers a rare look at how partisan and place-based identities facilitate collective efforts to support risky energy uses. Many of her interview subjects identified as Tea Party members who had a "visceral hate" for the government (p. 151) and expressed faith in the private sector. Even after their backyards were poisoned by local petrochemical companies that were able to flout the state's lax regulatory apparatus, many residents "renounced the desire to remediate" the damage "because that would call for more dreaded government" (p. 177). Echoing Cramer's (2016) "politics of resentment" thesis, Hochschild implies that locals' support of industry was shaped by "cultural values" and emotional "feeling rules" that unfolded from their conservative political identities (p. 15), which bred a distrust of politicians and of any policies that appeared to threaten personal sovereignty. Similarly, Gullion (2015, p. 115) mentions that her suburban Texas subjects' reluctance to mobilize against fracking was in part based on their perception that being an environmentalist was incompatible with their conservative, progrowth beliefs. And Eaton and Kinchy (2016, p. 27) hint that the value placed on individualism in rural Pennsylvania jibed with residents' support for private land leasing.

Below, we draw on data from an ongoing community study to explain how impacted locals interpreted and responded to fracking, one of today's most contentious land uses (Vasi et al. 2015). By showing how siting decisions regarding an ostensible LULU resulted not from NIMBY-ism but rather from proindustry mobilization, we amend and advance environmental inequality and social movements theory. By illustrating how working- and middle-class residents used partisan identities and communal obligations to reject the notion that fracking was an unwanted land use, our case study contextualizes and extends environmental opinion research.[6]

## PENNSYLVANIA, THE GAS BOOM, AND THE FRACKING CONTROVERSY

At a time when President Trump is eager to enact a domestic energy agenda that prioritizes economic growth over reducing carbon emissions, and with concerns about national security prompting calls for the United States to wean itself off foreign oil, experts say there is enough natural gas under American soil to supply U.S. energy needs for decades while lowering energy costs and creating tens of thousands of jobs (Gold 2014). Moreover, some frame shale gas extraction as environmentally friendly since gas burns

[6] Our findings also resonate with Cramer's (2016) observation that rural residents in Wisconsin feared that their interests would be overpowered by the dominant "urban" establishment. Our observations and interviews reveal resentment toward antifracking activists grounded in the belief that "fractivists" were urban interlopers who did not understand or respect rural values.



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"cleaner" than oil or coal (Gold 2014). It has long been known that vast reserves of natural gas (and oil) are trapped inside layers of shale a mile or more underground; while companies began injecting pressurized water and sand into vertically drilled wells in the 1950s, "hydraulic fracturing" remained too inefficient until it was combined with horizontal drilling in the last decade in Texas. The new capacity to drill laterals a mile or more in length along the shale layer finally made fracking commercially viable. This new method of extracting oil and gas from so-called unconventional shale formations also greatly increased the amount of water, chemicals, and sand required: conventional wells use thousands of gallons of frac fluid, whereas unconventional wells use millions of gallons (Wilber 2012).

In 2008, a geologist published a famous report that called the Marcellus shale formation, which extends over 100,000 square miles from the southern tier of upstate New York to the bottom of West Virginia, "a bona fide super giant gas field" (Governor's Marcellus Shale Advisory Commission 2011). Given that Pennsylvania commands the largest share of the Marcellus's estimated 300–500 trillion cubic feet of natural gas and that there is now a ban on fracking in neighboring New York, and given its proximity to East Coast energy markets, the state is at the center of the gas boom. Over 10,000 unconventional wells have been drilled there since 2004, and over 18,000 have been permitted (Marcellusgas.org). Data from the U.S. Energy Information Administration (2015) show that the Marcellus shale "play" (industry parlance for a large shale mineral deposit) has become, by far, the most productive play in the United States since late 2012. Further, its growth rate is the steepest of all U.S. shale plays, a staggering 13-fold increase since January 2007.

To access the gas, energy firms lease the mineral rights from landowners, sometimes for thousands of dollars per acre, who are also entitled to royalties if gas is extracted from beneath their property. In this way, fracking is more dependent on individual-level approval (Jacquet 2015) and potentially offers more direct financial incentives than many other risky land uses (e.g., a landfill or coal mining). The Commonwealth of Pennsylvania had itself received $413 million as of 2014 for leasing hundreds of thousands of acres of state forests (Department of Conservation and Natural Resources [DCNR] 2014), in addition to millions of dollars in "impact fees" collected from energy companies and distributed directly to impacted municipalities since 2012 (resulting from Act 13, which is discussed below). While fracking has brought economic benefits, it imposes an industrial infrastructure onto rural areas. "All phases of hydrocarbon gas production involve complex mixtures of chemical[s]," many with "significant toxicity" (Bamberger and Oswald 2012, p. 52), and drilling rigs, well pads, and compressor stations (which serve as nodes for area wells that pressurize the gas) commonly sit adjacent to residences, schools, churches, baseball fields, and other communal gathering spots.

In Pennsylvania in particular, laws and regulations surrounding fracking have been subject to considerable contestation. Pennsylvania, as a "home rule" state, has historically granted a notable amount of lawmaking authority to its municipalities. However, in February 2012, the state passed Act 13, which was widely seen as restricting the structure of opportunity to contest fracking by preempting municipalities' sovereignty to enact local zoning ordinances to restrict drilling. The passage of the act drew lawsuits from seven of the state's municipalities almost immediately, as well as others filed by environmental groups. In December 2013, the state supreme court (in *Robinson v. Commonwealth*) struck down the zoning restrictions, arguing that they violated the Environmental Rights Amendment of the Pennsylvania Constitution.[7] Act 13 and these rulings have bearing on the present study in that the law was in full effect during the time that the first author lived in Williamsport in 2013. Yet it is important to recognize both that (1) passing local zoning ordinances is not the only viable means of challenging or restricting fracking and (2) the first author also repeatedly observed fracking politics in this community *after* the supreme court decision in 2013. He did not observe marked differences in community practices and discourses, despite the changed opportunity structure.

There is considerable uncertainty about, and controversy surrounding, the safety of fracking (Ladd 2014). Ever since the scathing documentary *Gasland* (2010) memorably featured images of flaming tap water, debates have raged about the extent to which shale gas extraction may cause methane or hazardous chemicals used in the fracking process to migrate into drinking wells (Howarth, Ingraffea, and Engelder 2011; Osburn et al. 2011; Vasi et al. 2015). While the industry maintains that there are no confirmed cases of groundwater contamination related to fracking, there are hundreds of instances in which the Pennsylvania DEP concluded that the presence of methane in a drinking well was the result of nearby gas drilling (Peltier 2016). Several studies link shale gas extraction to low birth weight (Hill 2014), respiratory ailments, skin rashes and headaches (Steinzor, Subra, and Sumi 2012), and livestock deaths (Bamberger and Oswald 2012); critics point out that no peer-reviewed cohort or case-control study has established a causal link between fracking and disease (but see Hill 2014). For politicians inclined to support fracking like Pennsylvania's ousted Republican governor Tom Corbett (2011–15), the lack of "incontrovertible evidence of direct links between gas facilities and specific health impacts amounts to proof that no harm exists"

[7] The state supreme court sent other parts of the law back to the lower Commonwealth Court of Pennsylvania. In turn, portions of the law (regarding disclosure of fracking chemicals and medical doctors' intermediary role in judging health risks, as well as eminent domain and hazard notification rules) were eventually appealed back up to the supreme court again in 2016. The state supreme court struck down these provisions in its 2016 ruling.



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(Steinzor et al. 2012, p. 37). Conversely, New York's governor Andrew Cuomo, a Democrat, justified a statewide ban on fracking (implemented in 2014) by saying that more environmental and health impact studies are needed to prove it is safe. Given that the frenetic pace and scale of the expansion of fracking constitutes an "energy revolution" that is transforming geopolitics and the world economy (Gold 2014), and given the rapid rise of a vocal, national antifracking movement that even industry insiders admit has often steered the public conversation (Willis 2015), fracking is one of today's most consequential and controversial land uses.

## SETTING AND METHOD

Once the "lumber capital of the world," Williamsport's contemporary claim to fame is the Little League World Series. Yet this halcyon image belies the everyday problems of a rustbelt city with outsize rates of heroin use and violent crime (Beauge 2014) that has seen its population decline by over one-third in the past half century.

The gas boom, which began in earnest here in 2009, appeared to ameliorate some of the region's economic woes (Maroney 2011). Although Williamsport is a small city (population 29,197), it is the largest urban area in north central Pennsylvania. Its size, infrastructure, and strategic location (bisected by major highways and proximate to the East Coast) have made Williamsport the regional economic and administrative hub of fracking. The city's small downtown added new hotels and restaurants to cater to an influx of itinerant gas workers; its office buildings and nearby industrial parks enticed oil and gas companies like Anadarko and Halliburton; the local vocational college has provided gas-related job training to thousands; and the gas companies have met many of their servicing needs through subcontracting with myriad local businesses. In the year before this study began, Lycoming County (which surrounds the city) had the most new unconventional gas wells drilled (208) of any Pennsylvania county (marcellusgas.org). At the time, local politicians credited fracking for making greater Williamsport the seventh fastest growing metropolitan statistical area in the United States in 2011 and claimed that it created hundreds if not thousands of well-paying local jobs (Murphy 2011). Yet the city's median household income of $33,147 in 2012 was still 37% below the statewide median, and its poverty rate was twice as high as the state average.[8]

Lycoming County is significantly whiter and less poor than Williamsport (93% vs. 81% white; 14% vs. 27% poverty rate). The area surrounding the city is very rural, dominated by small family farms and hamlets nestled

[8] Moreover, although Pennsylvania's gas boom peaked between 2011 and 2012, its unemployment rate did not decrease in that time and mirrored the national average of 7.8% (the unemployment rate fell in 43 states in that time; Bureau of Labor Statistics 2016).

among densely forested state parks and the Appalachian foothills, and very conservative (all of its state representatives are Republican; Trump carried 72% of the county vote in the 2016 presidential election). Almost all of Lycoming County's 950 or so unconventional gas wells drilled to date (and the almost 1,500 permits issued) are located in the countryside (marcellusgas.org). It is rural landowners who largely determine when and how drilling proceeds in the area by agreeing to lease their land (or not) to gas companies. Williamsport, the county seat, provides the infrastructure and labor force.

Many of the long-term rural residents appeared to hold deep moral commitments to both individualism and communalism (see also Erikson 1976, p. 86): on the one hand, government distrust was rampant, people often said they just wanted to be "left alone" and subscribed to the principle of "live and let live," and individual sovereignty and private property rights were routinely perceived as God-given; on the other hand, many residents anchored their lives in the church and other voluntary associations and believed in sacrificing for the good of their neighbors. As we describe below, it appears that residents' countervailing allegiances to individual freedom and the community played a role in how they constructed the meaning of fracking.

The data for this article are drawn from observations of, and interviews with, over 100 residents of Lycoming County carried out between 2013 and 2018. The most intensive period of data collection occurred between January and September of 2013, during which time the first author rented an apartment and lived full time in Williamsport. After first interviewing city officials (e.g., the mayor, city council members), the first author relied on these connections to access supervisors of outlying townships, business owners, vocational instructors, and DCNR foresters who manage fracking on state land.[9] The first author also attended dozens of township and city council meetings around the county where fracking was discussed and permits for gas wells and compressor stations were approved, went to industry trade shows and occasional (small) protest events, observed classes and open houses at two local colleges offering vocational training for energy jobs, and volunteered in Tiadaghton state forest (painting gates), which hosted dozens of gas wells.

To meet rural landowners, the focus of this article, the first author frequented general stores, butcher shops, and cafes and attended church in two boroughs on opposite sides of Lycoming County as well as in a hamlet in the middle of the county. In such sparsely settled locales, "third places" (Oldenburg 1999) like Cohicks Trading Post in Salladasburg (population 260) are crucial communal hubs that attract everyone from state troopers

[9] All of the ethnographic observations and interviews associated with this study were performed by Jerolmack. Nonetheless, in referring to Jerolmack's field research in this article, we occasionally use "we" for ease of reading.



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to retirees, gas workers, teachers, and farmers. The first author came to know 26 landowners who leased to gas companies, walking their properties with them, watching as drilling and fracking activities commenced in their backyards, and following them to everything from meetings with industry representatives to neighborhood cookouts and Little League games. In the process, he talked to them at length about their decision to lease, perceptions of risk and reward, and attachment to their property. While these landowners skewed toward working class (over half did not attend any college and held occupations such as farmer, custodian, machine operator, bartender, and truck driver), there was considerable socioeconomic variation (including three college professors, a radio announcer, and a nurse); all were white. The first author also followed two landowners who refused to lease and eight of their friends living in greater Williamsport (where drilling was not happening)—all were members of the Responsible Drilling Alliance (RDA), which describes itself as an education and advocacy coalition aimed at raising community awareness about fracking risks.

Given the volume of news stories about fracking and about Williamsport as a "boom town" (e.g., Kirkland 2010; Maroney 2011), few people seemed put off by the presence of an ethnographer. Although some expressed suspicions that the first author was a "liberal" biased against fracking since he was a professor coming from New York City, it is plausible that other characteristics of his biography—in particular, that he is white and was born and raised in Pennsylvania—helped facilitate rapport. The first author found the small-town character of the region to be more a help than a hindrance for recruitment, for he often found that social networks were so dense that a single informant could introduce him to a broad network. All interviews and public events, and many encounters, were audio recorded. In settings where audio recording was not feasible, contemporaneous notes were taken. Finally, all of the participants elected to use their real names; the place names described herein are also real. Identifying people and places facilitates sociological comparison and revisits (Jerolmack and Murphy 2017) and is not inconsistent with human subjects research as governed by institutional review boards.[10] The people identified herein said they valued seeing their name rather than a pseudonym in print; they have also agreed to be part

[10] Identification of research subjects and places is not, in itself, a violation of IRB standards for social science research. Although the NYU IRB exempted the first author's study from oversight, he did consult with the board in developing a protocol for obtaining consent to use real names. After this article was accepted for publication, the *AJS* editors raised additional privacy concerns about reporting the study participants' income and disclosing the identities of the people we call Bob and Susy (who dropped out of contact after moving to Texas). We maintain that using the couple's real name and reporting exact dollar amounts is in accordance with our subjects' wishes and expectations. We have nonetheless given the aforementioned couple pseudonyms (as discussed below) and refrained from reporting precise income figures in response to the editors' concerns.

of an ongoing photodocumentary project. In this instance, anonymity seems both impractical and disrespectful of our participants' autonomy. There is one exception: the real names of the couple whom we call Bob and Susy are not disclosed. Although they initially gave the first author permission to reveal their identities, he was not able to verify whether they were still comfortable with having their names printed after this article was written up.[11]

## INVITING RISK

In stark opposition to the typical EJ and movement narratives about ostensible LULUs, most Lycoming County residents supported an environmentally risky land use and invited it into their community, prioritizing the opportunities—especially economic incentives—over the risks. Indeed, almost every lessor the first author encountered was eager to recount a story about a friend, relative, or neighbor who leased their land and struck it rich—at least by local standards. And most believed that fracking had boosted the economy and provided needed jobs.

While tales of "shaleionaires" were usually apocryphal, residents owning dozens or hundreds of acres commonly reaped significant sums of money from leasing payments, monthly royalties for gas extracted from under their land, and bonuses for hosting gas-related facilities such as well pads and pipelines. George Hagemeyer, a retired custodian, is one such person. A lifelong bachelor, George has lived on his 77-acre property outside the hamlet of Trout Run his whole life. Though George never knew his father, who died when he was six months old, he said it "means the world" to him to care for his "daddy's land" and claimed, "If I ever had to leave this property, I'd suck on a gun barrel."

When the first author met George, the Anadarko Petroleum Corporation was in the midst of drilling six gas wells on several acres of land it had cleared in a field about 350 yards behind his house. Despite the caravan of big rigs inching down George's gravel driveway, the large earthmovers tearing up his meticulously mowed lawn, and the din of drilling equipment, he expressed enthusiasm for fracking. On one occasion he remarked, "I just think it's neat. They oughtta make me a spokesperson for Anadarko 'cause I'm just so darned thrilled with what they're doing." George had heard about problems with fracking in Dimock, a town to the north made infamous by the images of flaming faucets featured in the provocative 2010 documentary *Gasland*. But, as a self-described contrarian, he was skeptical:

[11] One of the ways that the first author attempted to verify details of his subjects' accounts, such as the amount of the bonus they received, was by asking them to provide him with documentation. He made clear to them that the information they provided would be public and that it was important that it be as accurate as possible.



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"All the crap you hear on TV of this is bad, this is gonna happen, they're doing this, they're doing that . . . I just don't go for it." George continually expressed fascination with the drilling and fracking operations, bantered with the workers, and even shrugged off the occasional wafting of what were potentially toxic volatile organic compounds from the well pad into his home as the cost of doing business, noting that the problem was easily solved by jamming rags into his windowsill.

It was apparent that George drew a modest income from his pension: duct tape crisscrossed his linoleum kitchen floor, and a tarp was hastily draped over the leaking roof of a ramshackle trailer parked in his front yard that he used as a shed. However, because of fracking, things were looking up. In addition to a small leasing bonus, George also received a bonus in the high five figures for allowing a six-inch-diameter pipeline to be buried along the perimeter of his field. While George had set aside some of this money as a college fund for his niece's daughter, he proudly showed off the new Ford SUV and treadmill that he purchased with the remainder. Once the six gas wells in his backyard were hooked up to the pipeline the following year (2014), George began receiving monthly royalty checks for the gas extracted from under his land. The first payment was enough to purchase a zero-degree radius mower, hire a contractor to renovate his kitchen and bathroom, and rent a stretched limousine to take him and a friend to New York City (about 400 miles round trip) to deliver a guest lecture at NYU.

Few lessors that the first author observed and interviewed made as much money as George, and most were well aware of the low likelihood of becoming a shaleionaire. But all reaped some financial rewards. Accidents of geography effectively created a lottery system where many landowners reaped modest gains and some benefited substantially from leasing. We call this a lottery because many of the factors that determined the biggest economic "winners" were not known a priori and were beyond the control of landowners, such as the thickness and depth of the shale layer underneath their properties and the productivity of the wells (the greater the production, the greater the royalties). Companies typically placed gas wells, pipelines, and other infrastructure on only a fraction of the acreage that they leased, which resulted in some landowners receiving just the one-time lease payment while their neighbors reaped much more through royalties, pipeline right-of-ways, and so on. The fracking lottery is also rather random from a sociological perspective in that one's socioeconomic status had little bearing on his or her chances of coming out a winner.[12] In fact, some of the

[12] While it is plausible that wealthier and more educated residents were advantaged in negotiating lease and royalty payments, the biggest predictor of whether or not one hired a lawyer was not socioeconomic status but the size of one's property (small landowners surmised that lawyers' fees would eat up most of their leasing bonus).

biggest winners were "land-poor" farmers and commoners like George whose inherited properties were millstones before fracking.

The range of harm to residents' property and quality of life was also wide and relatively random. In fact, some of the biggest losers in the fracking lottery happened to be small landowners whose properties did not even house gas-related infrastructure. For example, the couple whose large property actually hosted the gas well that contaminated the Crawleys' and their neighbors' water well reported no problems with their own drinking water.

As Tom and Mary Crawley sat in Adirondack chairs in the front yard of their modest 8.69-acre "homestead," the empty nesters—who grew up next door to each other and live in the valley farmed by their ancestors—described their predicament and provided corroborating official documentation.[13] Before drilling on the nearby gas well (about 2,100 feet away) commenced, the Crawleys invested $350 in a certified, independent lab test that measured the concentration of methane in their well water—it was 4.45 milligrams per liter in July of 2010, which, Tom rightly noted, "is quite acceptable under EPA and DEP standards." A year later, after their neighbor's gas well had been drilled, the water from their faucet "was just like a cup of skim milk" because of methane. The DEP cited the energy company for "failure to report defective, insufficient, or improperly cemented casing" of the nearby well and found that the concentration of methane in the Crawley's water had spiked to 72 mg/L—over 10 times the DEP's safe standard. The company denied responsibility, but as part of its "good neighbor policy" it installed a 10-foot-tall pipe over the Crawley's water well to vent the gas, placed "explosive gas detectors" in their house, and commenced delivery of bottled water. Upon concluding its own investigation into the incident the following year, the company mailed the Crawleys a 1.5-inch thick final report and informed them that it was terminating delivery of bottled water since its analysis determined "that methane levels and composition . . . were present in the area before [we] began our gas well development activity."

In the two years that had elapsed since the Crawleys stopped drinking their water, the DEP had done nothing to hold the gas company accountable. Although the Crawleys were contemplating filing a lawsuit with their four neighbors who also experienced methane migration into their drinking water, Tom wondered aloud how "an average Joe like me" could possibly prevail against "a corporation with hundreds of millions of dollars and all of their lawyers." "We have our life's money invested in this property," he lamented. "We're stuck."

[13] The first author has verified the information for all cases described herein by independently obtaining DEP inspection reports and copying lab tests, legal memos, and related documents. At the Crawleys' request, we do not name the company that contaminated their water (even though, as Tom conceded, a simple Internet search would reveal its identity).

Although few leaseholders in this study experienced negative impacts from drilling as severe as the Crawleys, our ethnographic data show that when damage was done to residents' water or property, gas companies for the most part denied responsibility and were loath to pay damages. This situation hints at the existence of a financial and power asymmetry tilted in favor of gas companies that can produce what Malin and DeMaster (2016) call "procedural inequalities" for lessors. Nonetheless, lessors acknowledged that they willingly played a leading role in exposing themselves to environmental risk in exchange for a chance to participate in the fracking lottery. Gas companies needed more than token "buy-in" from residents and politicians: they needed people to agree in writing to host gas infrastructure on their properties. Not only did we find that landowners routinely sought agreements to host such facilities and negotiated the terms of their leases (see also Jacquet 2015), they also commonly expressed support for shale gas extraction in public and private—even after problems arose or the prospect of getting rich dissipated.

Tom and Mary Crawley, for instance, said that they welcomed the industry "from the beginning," having seen how a lease was the difference between their neighbors keeping their family farm or having to sell it. Upon the arrival of gas companies in the area in 2007, the Crawleys said they met with their neighbors and decided to "stick together" as they actively pursued a gas lease. They attended information sessions with gas companies, researched leases, consulted lawyers, and talked to people who had already leased. In the end, they devised a strategy that significantly amplified their negotiating power, joining a self-organized "landowner coalition" (Jacquet and Stedman 2011) committed to collectively seeking and bargaining with gas firms as a class (about 4,000 acres). The landowners met several times and decided to accept one company's offer of $450 an acre. In what Tom described as a "wild scene," the 200 or so landowners and their relatives descended on the local fire hall en masse to meet with company representatives. But the group's spokesperson fielded a phone call in the middle of all the commotion from a rival gas company, and a raucous bidding war ensued. By the end of the two-hour meeting, the landowners left with a deal for $800 per acre for a five-year lease.

Despite what had happened to them, the Crawleys refused to "say anything bad about the industry" to the media or in public meetings, even after the DEP leveled a record $8.9 million fine against the gas company for failing to stop gas leakage from the faulty well and the company continued to insist that its gas well did not cause the methane spike in the Crawleys' water (Hopey 2015). "I'm not against it," Tom reiterated. "It's just, we had a problem. Things happen, accidents happen . . . [but] for most people it turns out fine." His only desire, he said, was that the gas company "make things right," not that gas drilling cease.

The Crawleys' next-door neighbors Bob and Susy (pseudonyms), whose water gurgled with methane and turned brown after the gas company drilled its gas well, expressed a similar sentiment. Their double-wide trailer, where they had lived for over 40 years and raised two children, sat on two and a half acres. Although baseline water tests and the DEP's investigation both imply that the neighboring gas well contaminated their well water, Bob—a retired truck driver—said over coffee in his living room in 2013 that "we don't really feel bad about" gas drilling and that he was impressed with how it had "boosted the economy around here." He complained that "a lot of people around here is blaming the gas companies" for methane in their water wells that is actually naturally occurring. While Bob believed that the gas company had in fact impacted their water, he emphasized, "We never had pure water." He added, "A lot of other people are not having any problems" with fracking. All he asked was that the offending company "take care of us and let us know what's going on with our water." In the fall of 2014, the gas company finally agreed to install a filtration system and pay damages to Bob and Susy, the Crawleys, and their neighbors (in exchange for indemnity). As far as they are all concerned, the matter is now closed.

While the Crawleys and their neighbors joined a large landowners' coalition that actively courted gas companies, other landowners leased on their own after being visited by a "landman," an independent contractor hired by gas companies to go door-to-door. Landmen appeared to be held in low regard by many in the community (see Wilbur 2012; see also Malin and DeMaster 2016), with lessors routinely complaining that landmen pressured them to sign a lease on the spot (lest the offer be rescinded), minimized the disturbances that would result from fracking, and exaggerated the economic benefits.

Yet the lessors in this study all displayed some degree of savvy in negotiating their leases (see also Jacquet 2015). Scott McClain, a retired game warden who owned a five-acre "homestead" on the side of a mountain, recalled that he dismissed the landman's promise that he would be "richer than Jed Clampett" (of the Beverly Hillbillies). But his distrust of the landman did not dampen his sentiment of being "gung ho" about leasing his mineral rights—it simply bolstered his belief that he should "lawyer up" before signing a lease. None of our participants reported signing a lease on the spot, and they all consulted either with neighbors who had already leased or with a lawyer. While the most common lease alteration that landowners obtained was a bigger signing bonus, half of the lessors in our sample left some money on the table in exchange for greater control over drilling and fracking operations on their property, such as a stipulation that the lessor must approve the location of any permanent structure (e.g., a gas well), and even a "nonsurface disturbance" clause (meaning that the lessee can only drill horizontally under the lessor's property, leaving no trace on the surface).



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Lessors' post hoc narratives indicate that some felt less equipped than others to make a fully informed decision (see also Briggle 2015). Yet all but two of the landowners' self-reports portrayed them as eager to sign, and a landman the first author followed constantly fielded phone calls from his clients' friends and relatives who were seeking their own lease. Our study identified only two landowners who refused to lease their land, both of whom were politically liberal and staunch antifracking activists (even a few of their activist peers decided to lease). In light of EJ and movement theory, it is surprising that even some residents who sued gas companies for malfeasance voiced continued support for fracking, and that it was common for middle-class (e.g., college professors) and even wealthier people (e.g., a millionaire)—not just the economically vulnerable—to pursue a LULU in their backyard.

## FRAMING SUPPORT

An economic explanation of local PIMBY-ism would hold that it is a straightforwardly rational strategy aimed at maximizing utility. Relatedly, land leasing can be understood as a collective action problem. Leasing is a private act, so community coordination is difficult and "defectors" cannot be punished. Moreover, the benefits of leasing accrue to the individual, while the costs are distributed across the community (see Hardin 1968). Most residents understood that they would absorb the spillover effects (e.g., light pollution, noise, ecological disruption, and possible water contamination) of their neighbors' decision to lease no matter what. Therefore, acting "selfishly"—leasing—was the optimal individual strategy (see Jerolmack and Berman 2016).

Although our ethnographic research does not contradict this economic account, it indicates that there is more to the story. In a manner similar to Max Weber's observation that the Protestant ethic of asceticism and capitalism's logic of accumulation mutually reinforced each other, our case study indicates that political and social commitments played a complementary role in enabling support for fracking and justifying an individual's perceived right to profit from land leasing. Indeed, locals—including the plain-spoken, flannel-clad Republican state representative Garth Everett—commonly invoked what they called "rural values" to explain their endorsement of fracking and dismiss antifracking activists who sometimes came into town from major cities like Philadelphia and New York to protest (on "rural consciousness," see Cramer [2016]).

Echoing nationalist public discourse about energy independence, George—whose politics hewed to libertarianism—firmly believed he not only had the God-given right to total autonomy over how he used his land but also a duty to realize its productive potential. In his view, exercising this right, and retaining any benefits that accrue, was more than permissible—it was moral,

even patriotic. When asked whether the DEP, municipal authorities, or the community should have a say in his decision to lease his property since fracking impacts the commonwealth, George replied with a decisive "nope." Asked to justify his answer, he curtly added, "It's my land. I'll do as I damn well please." (In turn, George believed it was none of his—or the government's—business what others did with their own property.) He bristled at any form of government intrusion onto his land, pointing to several safety signs that the gas company was required by law to post at the entrance to his driveway as an example of the problem: "I live in the country. I like the freedom. I like the openness. Now I've got all these freaking signs all over the freaking place? The government doesn't care. That ticks me off to no end, because now I have to put up with that for the rest of my life."

The moral elevation of individual sovereignty, private property rights, and self-reliance is often what residents had in mind when they invoked the notion of rural values (see also Cramer 2016). The role of these discourses in enabling and sustaining support for fracking can perhaps be best illustrated by returning to our participants whose water was tainted by gas drilling but who nevertheless insisted that they still supported it. (After all, we would expect rational economic actors to withdraw support if they lost the fracking lottery.) While those exposed to contamination like Bob were angry at gas companies for harming their water supply, they joined other lessors in emphasizing that no one "held a gun to my head" to sign a lease. Their support of freedom of individual choice entailed embracing the role of acting as their own actuary rather than relying on the government or some other expert; they insisted that they knew there were some risks involved and made a personal decision to lease despite those risks.

For example, Susy, who used to work at the nearby Kellogg's factory, acknowledged that they knew beforehand that allowing gas drilling so close to their home entailed risk and that they never stood to get rich since they had so few acres to lease. In rationalizing their decision to lease anyway, she compared fracking to everyday risks that people accept in exchange for convenience: "Everything at one point in time, they put stuff on it like formaldehyde when we were growing up. Stuff was put on the plants and we ate that." She added, "You could get lung cancer and never have smoked a cigarette in your life." Bob, her husband, interjected, "I agree with her. With all the chemicals that we're putting on the crops today . . . you can't tell me they know that's 100 percent safe." Drawing a parallel to fracking, he added, "It doesn't matter where you live, you're gonna have water problems" of some kind.

Now that things had gone wrong, the Crawleys and their neighbors wanted recompense. But they viewed the gas company's apparent negligence as a breach of contract between two private parties to be settled in civil court. Even as they struggled to hold the gas company accountable, they re-

fused to conclude from their experience that greater government oversight of the industry was necessary (cf. Hochschild 2016). It seems that their inclination to distrust government agencies, including the DEP (see Stedman et al. 2012), may have made taking an antifracking position unappealing or untenable because they understood that the implied solution to managing risk—government intervention and increased regulations—was inconsistent with their belief in self-determination. Indeed, the Crawleys and their neighbors were adamant that it was not their place to say or do anything that might compromise their neighbors' land sovereignty. They summarized their self-identified conservative philosophy as "live and let live," a phrase that almost every resident interviewed invoked at one time or another to describe their worldview.

George's souring relationship with the gas company that drilled on his property further highlights how the value he placed on sovereignty shaped his view of fracking. Not long after George began receiving massive royalty checks, he reported that he now wished he had not leased. His property had suffered no environmental calamities. His regret was the net effect of dozens of ostensibly minor indignities—a guard temporarily blocking his driveway to facilitate the removal of heavy equipment, a security camera installed by the gas company without his knowledge to monitor the well pad in his backyard, the nonchalant manner in which truck drivers drove on his grass—that sapped George's enthusiasm for the industry. "What would my daddy say if he saw the way they used this land?" The essence of George's lament was that he had come to feel like a tenant on his own property. While the value he placed on land sovereignty helped justify his decision to lease his property, it was the feeling of having now lost that sovereignty that led him to reject fracking—even as it made him a shaleionaire.

Complementing their appeals to individualism, residents also explained their support for fracking in light of their relations with—and obligations to—the community. It was widely known that most residents supported fracking and most people believed that the community as a whole benefited from the industry (e.g., more private wealth from lease bonuses and royalties, more jobs, new businesses, increased tax revenue), even if they personally did not (Bishop [2014] notes a similar reaction in impacted towns after the Deepwater Horizon oil spill). It was also widely believed that antifracking activists (fractivists) were predominantly "urban liberals" who, as the state representative Garth Everett remarked, "have no clue about rural values" (Dokshin and Buday [2018] empirically demonstrate that, in Illinois, antifracking activists were Democratic partisans who lived outside the targeted development region).

An event that occurred in the early stages of this study's fieldwork illustrates this point. At a town hall meeting in Hughesville hosted by Garth Everett, Tom Crawley vented about his water problem in front of the packed

fire hall audience (about 75 people). "I've got a contaminated well as a result of [gas drilling]," he shouted from the back. "I'm frustrated because I've called your office and . . . you never got back to us." His neighbor Jim Finkler added, "Every time I draw water out of my faucet it looks like it came out of a soda bottle." The attendees politely gave Tom and his neighbors space to detail their grievances against the gas company that impacted their water, and the state representative remained gracious even as Tom and his neighbors accused Everett of abandoning them. However, the tenor of the room quickly shifted when two antifracking activists tried to use the opportunity to level a broader critique against the gas industry. Wendy Lee, a philosophy professor at Bloomsburg University and a self-proclaimed agitator and member of Shale Justice, followed Bob's complaints about the DEP's inaction by interjecting that both the agency's director and his boss—the governor—opposed the kinds of regulations needed to protect the public from an inherently toxic industry. She had already made an impassioned plea a few minutes earlier for the state to stop allowing drilling on protected forests and game lands, which drew groans and murmurs, and this time Everett's patience ran out. He sternly told her she spoke out of turn, and when she replied that Bob had as well, he told her that she was not "part of the community" (she lived an hour away) and was thus "only here as a guest." Everett asked her if she wanted to stay or leave, which prompted a woman in the audience to ask aloud, "What *are* they doing here? I wish he *would* throw them out." Many in the audience nodded their approval when Everett threatened expulsion if they continued to "try people's patience." Right after this heated exchange, attendees introduced mundane questions about government workers' pensions, roads, and Obamacare. Tom Crawley and his neighbors looked disgusted and dropped the issue. In this way, attendees ratified Everett's efforts to disregard the fractivists as community outsiders.

Events like this stuck with residents. Eight months later, Tom and Mary Crawley cited it—along with a "frack tour" in which celebrity New York fractivists Yoko Ono, Sean Lennon, and Susan Sarandon protested at alleged contaminated gas wells in the area—as the main reason why they were not willing to "raise a stink" about their situation to the media or environmental groups. In particular, they were concerned that "environmentalists" from "outside the community" who heard about the case would demonize their "nice old neighbor" whose property hosted the gas well, or otherwise disrupt the community. "Oh gosh," Mary worried, "no picket lines." Tom added, "We're afraid everybody will blame them. It's not their fault. I don't want people camping out on their property." Despite their difficulties navigating the byzantine bureaucracy of the DEP and finding a competent lawyer they could afford, the Crawleys and their neighbors repeatedly rebuffed a local advocacy organization's offer of pro bono legal advice on the grounds that they did not want to be associated with antifracking elements. "We're

not against gas drilling," Tom reiterated. "A lot of people have profited from it," he added, concluding that it benefits the community. "These people [environmentalists] have no interest in this area other than creating a stink." Even a small advocacy group composed of local residents, the RDA, was dismissed as an outsider organization because almost all of its dozen or so active members were educated, politically liberal professionals who lived in the city of Williamsport, and half of them were "rusticators" who had moved from a bigger city (e.g., Pittsburgh) to be close to the country. And even Scott McClain, who would seem to be their natural ally given that he and his wife tried to block gas trucks from driving up their driveway after their property was damaged, dismissed the RDA as a "bunch of wackos" and poked fun at its "hippy" president, who ran a health food store in town.

Because many residents believed that their neighbors supported, and benefited from, fracking and that the few vocal opponents were liberal interlopers from the city more interested in community disruption than dialogue, supporting fracking was viewed as a way of showing solidarity with the community against outsiders. Conversely, perhaps being opposed to fracking would have felt like being opposed to one's community, and their commitment to their neighbors made that position almost unimaginable. Some might argue that part of the impulse to remain supportive of fracking even after one has lost the fracking lottery may be a manifestation of "motivated reasoning"—that is, people do not want to think that they made the wrong decision and seek to reduce cognitive dissonance by maintaining their original beliefs (Kunda 1990). Whether or not sustained support for fracking is bolstered by motivated reasoning does not impact the thrust of our argument: both before and after leasing, many residents appealed to rural values to explain their PIMBY-ism; their personal and public commitment to these values jibed with support for fracking and clashed with fractivism. Even the two observed instances in which contaminated families turned against fracking lend some additional support to our interpretation. In both cases, the families had migrated from more urban locations and appeared less embedded in—and committed to—the community; they also expressed what would classically be considered more liberal political views. So, even though they initially tolerated fracking, moving to oppose it after having their water contaminated by gas drilling did not present gross inconsistencies between their new beliefs and actions and their prior normative commitments.

## LOCALLY UNWANTED LAND USE?

While it is possible that many privately held antifracking attitudes that they never voiced or acted upon in situ, our study only uncovered a dozen or so county residents—almost all of whom were members of RDA (and half of

whom were transplants to the region)—who identified themselves as categorically opposed to fracking. Indeed, a cofounder of RDA did not dispute a critic's assessment that its message of "protecting communities and special places" from the "ravages" of fracking seldom resonated at public meetings and coffee klatches.

This was evident at the two dozen public conditional use hearings observed across the county where permits for gas wells and compressor stations were discussed and voted on by township supervisors (every gas well, compressor station, and water withdrawal site must be vetted at a public hearing). One night in the Fairfield Township building, the company Inflection Energy made its case to the supervisors and about 30 citizens for approval to drill several gas wells on a leased property. After every attendee who wished to speak was sworn in, Inflection's lawyer asked the company's chief engineer a series of generic questions about the details of the permit request and what the community could expect as far as traffic, noise, light, and the steps the company would take to protect water wells. As the engineer discussed the water impoundment pond, a supervisor smirked, "How many tractor trailers to fill the pond?" When the engineer responded, "about 1,500," the audience groaned and two of the supervisors grimaced. For the next two hours, almost every question centered on traffic concerns. One man whose house was right next to the proposed gas wells complained about how loud the trucks' engine breaks (a.k.a. jake brakes) would be. While the meeting ended with the supervisors saying they needed more time to make a decision, the permit was quickly approved at the next supervisors' meeting after Inflection's engineer promised to restrict truck drivers' use of jake brakes and said that the company had performed its own traffic study and concluded that the big rigs could navigate a nearby S-turn safely.

What is significant about the Fairfield Township hearing, along with every other permit hearing observed, is what was *not* a part of the discourse about fracking. Even though fracking was new to Fairfield Township, no one questioned the practice as a whole, and no sustained discussion followed about environmental or health risks. At some township meetings, permits were approved in minutes with little discussion, with topics such as budgeting for a new salt truck generating more debate.

While there is evidence that fracking is a polarizing issue for some communities (Willow et al. 2014), we found few situations in Lycoming County where residents explicitly framed fracking in partisan terms—aside from the occasional small protest (i.e., fewer than 20 people) or public hearings on drilling in a beloved state forest (see also Ladd 2014).[14] To be sure, as

[14] Although journalists often highlight instances of communities divided over fracking (e.g., Wilber 2012), surveys reveal a pattern that marks these cases as outliers: opposition to fracking emanates from urban and coastal areas; those living over productive shale regions tend to support it (Dokshin 2016; Dokshin and Buday 2018).



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an issue that most residents agreed hit "close to home," fracking routinely penetrated—if not dominated—everyday conversations. Yet in light of national debates over how to balance the ostensible trade-offs between the environmental costs and economic benefits of fracking (Wilber 2012), and given evidence suggesting growing public concern over its safety (Hill 2014), it stands out that fracking was rarely defined as undesirable in everyday conversation. At the popular general store Cohicks Trading Post in Salladasburg, locals often remarked on the latest natural gas activity in ways akin to how they talked about the changing of the seasons or sightings of animals (after the holidays had passed, one man at the counter remarked, "Even on Christmas day in this weather they [Halliburton] were fracking"). If an evaluation of the industry was made, it was usually positive. The family who owned Cohicks claimed that it would have gone under if not for the business brought in by gas workers, others talked about how they or their neighbors could make long-needed home improvements thanks to lease bonuses and royalties, and some hunters even celebrated the clearance of forest tracts for well pads and pipelines because they created more "edge habitat" that attract deer. When people complained about fracking, it was usually—as in the public meetings—laments about truck traffic.

In summary, despite analysts' characterization of fracking as polarizing and risky (McGraw 2011; Ladd 2014; Willow et al. 2014; Malin and DeMaster 2016), residents shied away from describing it as a LULU. The way that locals commonly reacted to the first author when he joined them at the butcher shop or the general store further supports our conclusion: when the first author revealed that he was a professor from New York City, residents (half) joked that he was there to stir up trouble and that he would conclude, no matter what, that fracking is terrible and destroying the environment. In framing him this way, residents revealed (1) their awareness that fracking is seen by others as a LULU and (2) that they did not view leasing land for drilling as a "devil's bargain" (Malin and DeMaster 2016) because the taken-for-granted local assumption was that fracking was an uncontentious, even desirable, land use.

## DISCUSSION AND CONCLUSION

It is hardly the case that power and information asymmetries were absent, and there is evidence that companies exploited their privileged position. They or their representatives (e.g., landmen) routinely minimized the disruption that fracking entails—most notoriously, presentations and brochures commonly depicted an Arcadian meadow dotted by almost indistinguishable gas well caps, with the implication being that one's property would be similarly "reclaimed" after drilling and fracking operations concluded. Left unsaid was that gas wells may be productive for decades, and that in the

meantime a sizable industrial footprint would remain. Relatedly, some lessors seemed surprised that their five-year lease would be extended in perpetuity if any drilling commenced before its expiration, and many were chagrined to learn the amount of sovereignty over their property that they ceded to gas companies (see Malin and DeMaster 2016). For instance, George Hagemeyer (who hired a lawyer to review his lease) was shocked to find that the gas company was entitled to use the well pad in his backyard as a parking lot and have him arrested for trespassing if he stepped on it. George was also angered over inexplicable deductions from his royalty checks by Chesapeake Energy for postproduction costs (this practice provoked a state-led investigation, new legislation to protect lessors, and a class action lawsuit alleging that Chesapeake fraudulently claimed $5 billion in deductions; McAuley 2014).

The environmental inequality framework is a powerful lens for illuminating the structural dimensions that create and reinforce these observed landowner–gas company "procedural inequities" (Malin and DeMaster 2016). Put simply, the power asymmetries that we describe largely result from—and can be predicted by—actors' relative positions in the economic, social, and political order. However, the fact that landowners—both those of higher and lower socioeconomic status—voluntarily sought an environmentally risky land use poses a problem for accepted EJ and movement theories. This literature expects them to either engage in NIMBY-ism because of their relatively privileged position as white property owners embedded in efficacious communities (e.g., Bullard 1990) or to acquiesce because of their relatively marginalized position vis-à-vis the oil and gas industry and the political elites who support it or because leasing is one of the few opportunities for economic mobility available (e.g., Gullion 2015).

Perhaps most counterintuitive, given the contentious national debate over fracking (see Gold 2014) and the ban on fracking in neighboring New York, most landowners and residents in this study did not view their decision to lease as a necessary evil (Malin and DeMaster 2016) and avoided framing fracking as an unwanted land use. Our observations resonate with Jacquet's (2015, p. 238) survey results showing that Pennsylvania landowners who have natural gas leases or "gas development" on their property are more likely to express positive attitudes about fracking (see also Stedman et al. 2012). They also complement Dokshin's (2016) and Vasi et al.'s (2015) discovery that proximity to gas wells decreased the likelihood of political mobilization against fracking. Taken together, all of these data points indicate that many people in Pennsylvania (and elsewhere; Vasi et al. 2015) who have the most personal experience with fracking—and who stand to be harmed the most—contest its categorization as a LULU.

While EJ and movement scholars presume that fracking and other potentially risky land uses are objectively LULUs (Malin 2014; Ogneva-



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Himmelberger and Huang 2015), no land use is inherently "unwanted"—it becomes constructed as one, or not, through in situ interaction. When analysts impose their definition of a land use onto their case study, they threaten to distort our understanding of locals' response to risky land uses—that is, reading nonmobilization as proof of quiescence rather than possibly indicating grassroots support.

In looking at instances like our case where residents accommodate a risky land use, EJ and movement scholars typically ask why the community fails to mobilize against industry (cf. Auyero and Swistun 2009) and how industry maintains residents' quiescence (Gaventa 1980). Regarding fracking, Malin (2014) implies that Pennsylvania landowners who leased their properties had so deeply internalized neoliberal ideologies that they were unable to recognize that fracking was antithetical to their "real" class interests; she reads their accommodation of drilling as being "paid to put up and shut up," even though many of her interviewees celebrated fracking (Malin and DeMaster 2016, p. 288). However, if we begin our analysis by taking residents' meanings seriously, we come to a new understanding. Many of our participants avoided framing fracking as a LULU and resisted activists' and the media's attempts to categorize it as such. While residents routinely complained about traffic and other disturbances, many minimized them as inconveniences worth the rewards and opportunities afforded by fracking. Although it is true that there were few openings in the political opportunity structure for successfully resisting fracking during the first author's residency in town, as mentioned earlier, a state supreme court ruling in December 2013 that gave municipalities more power to control fracking through zoning ordinances did not result in a notable uptick in complaints or activism against the industry in Lycoming County.[15]

In line with environmental opinion research, our predominantly conservative participants felt that supporting fracking was not only economically rational but also consistent with their complementary partisan identities—especially their libertarian emphasis on personal sovereignty, even regarding land use decisions that may have planetary consequences. Interestingly, the principle of self-determination was also cited by poor black supporters of an incinerator in Chicago (Pellow 2002, pp. 89–99) and tribal supporters of a landfill and a hog farm on two different Indian reservations (Krakoff 2002). Our other significant finding is that community commitments were also key (cf. Bishop 2014). By observing community members over time and across everyday situations, our ethnographic case study is uniquely positioned to show how these definitions of the situation translated into real-world be-

[15] There are a few rural towns in Pennsylvania that are trying to restrict or ban fracking at the local level (see, e.g., Nobel 2017); they are relative outliers, but their existence demonstrates that resistance is not impossible or unthinkable in the state's current opportunity structure.

haviors (Jerolmack and Khan 2014): residents who espoused conservative ideologies and rural values publicly voiced support for the industry, actively worked to find ways to bring fracking into their backyards, and ignored or even repelled opponents of fracking who turned up at permit hearings and general stores. In a number of towns right across the New York border, like-minded residents have called the state's ban on fracking an injustice and threatened to try to secede to Pennsylvania (Mathias 2015).

Our main contribution to environmental politics theories is to posit that such local manifestations of PIMBY-ism are better understood as a form of quiet mobilization in support of a contentious industry rather than as a lack of opposition to it. We have also suggested that quiet mobilization may be the form of collective action that feels most comfortable to rural, predominantly white conservative residents who may view more overt, confrontational modes of engagement as inconsistent with their political and community commitments (see also Gullion 2015). After all, lessors abhorred the adversarial strategies of fractivists and opined that this form of mobilization bore the hallmarks of urban, coastal outsiders who did not share their rural values.

We use the term "quiet mobilization" to illuminate how, despite the fact that most residents observed did not engage in typical outsider strategies such as protests or rallies (almost none were willing to appear at a progas protest of a *Gasland II* screening), they were nonetheless engaged in individual and collective efforts to legitimize and support fracking.[16] Rather than attempting to fly under the radar for fear of repression or because they felt too marginalized to believe they could effect formal policy changes (Scott 1990), residents simply chose more conventional forms of social engagement that they felt jibed with their rural values—for example, joining landowner coalitions with neighbors, friendly debates at the general store, participation in public hearings and town hall meetings, and occasionally haranguing opponents of fracking in public (as a sporting goods cashier did to the RDA president while he purchased a boat permit). We argue that social movement scholars should consider these strategies part of the tool kit of grassroots political engagement and mobilization, expanding beyond ex-

[16] The *Gasland II* protest was organized in part by Energy in Depth (EID), an industry-funded "research, education and public outreach campaign" that is active in Lycoming County (and elsewhere). EID routinely employed "astroturf" strategies (Walker 2014), like the *Gasland* protest and a daylong festival at the Lycoming County Fairgrounds, to highlight "organic" support for gas drilling. Although assessing the impact of the fracking lobby on local opinion is beyond the scope of this article, the first author found few residents who had any connection to, or were even aware of, groups like EID. Gas companies did sometimes garner community goodwill for paving old roads (which they needed to do to enable their truck convoys to use them) and for sponsoring local events and Little League sports teams. It also remains possible that such groups may have had an influence upon policymakers or in other, more indirect, ways.



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isting understandings of repertoires of contention (see Taylor et al. 2009). Moreover, to categorize quiet mobilization as nonmobilization may be—as it is here—a fundamental misreading of the situation, missing entirely the fact that residents are subtly yet collectively acting in support of a risky land use rather than failing to act on a presumed aversion to it. In other words, residents—who, as white landowners, certainly are more privileged than most of the populations usually studied by EJ scholars—exhibited efficacy and mobilized politically, but not in the ways that the movements and EJ literatures prime us to expect (i.e., organized public resistance to industry). This local PIMBY dynamic played a leading role in structuring where and when gas installations were sited (i.e., only once someone leased the land to the gas company could the land be developed). The quiet mobilization we observed complements the idea of "private participation" described by Jacquet (2015, p. 232): while lack of municipal control over fracking may mean "fewer opportunities for traditional modes of participation" in the planning process, Jacquet argues that conventional notions of participation in planning as something that occurs in the public sphere may lead scholars to miss the fact that leasing provides landowners with the opportunity to participate in the process and exert a degree of control over development privately (on their own property).

In at least three key ways, the dynamics of fracking may be distinct compared with risky land uses typically examined by EJ and movement scholars (e.g., nuclear reactors, landfills, chemical factories): fracking seems more dependent on individual-level approval (through leases); it potentially offers more direct financial incentives (e.g., lease bonuses and royalties, above and beyond possible tax relief or increased local business); and the industry is constrained in where it can site facilities based on geology and geography—regardless of who lives there. Despite these differences, emerging scholarship on fracking suggests that it mirrors the classic environmental inequality story (e.g., Malin and DeMaster 2016)—a claim that we contend is problematic. These differences suggest that fracking may present an exaggerated picture of poorer residents' capacity to be involved in environmental decision making around—and likelihood to support—risky land uses. However, there are enough other instances—especially in political science survey research (e.g., Smith 2002; Gravelle and Lachapelle 2015)—of locals from a variety of socioeconomic statuses and racial backgrounds supporting and even advocating for ostensible LULUs to validate our assertion that EJ and movements scholars need to incorporate this reality into their models. McAdam and Boudet (2012, pp. 81–89) found more support for risky land uses than opposition in their sample, and some poorer and minority communities "actively sought" such projects, pointed to the economic difference that existing risky land uses made in their own lives (particularly through jobs), turned up at hearings to voice support for such projects, and even considered them part of local cul-

ture. To what extent this picture is representative of lower socioeconomic status communities facing a prospective risky land use is an empirical question; to date, theoretically derived a priori assumptions have for the most part precluded asking it.

Finally, to suggest that families that became fracking opponents after their water wells were contaminated were somehow less biased in their information processing than the aggrieved who continued to voice support for drilling—an interpretation implied by theories of motivated reasoning (see Kunda 1990)—or that they achieved cognitive liberation would be naive. Constructivist approaches, from ethnomethodology (Garfinkel 1967) and thick description (Geertz 1973) to frame analysis (Goffman 1974) and cognition (DiMaggio 1997), make clear that *all* reasoning and interpretation is filtered through—or biased by—social and cultural schemas. Most of our participants never defined fracking as a LULU in the first place. This shared definition of the situation likely shaped their interpretation of the environmental harms of fracking in ways that cannot be explained away as false consciousness and that did not make mobilization against the industry appear to them to be the logical next step. While we can discern an objectively unequal distribution of costs and benefits derived from fracking among lessors and between lessors and gas companies, our observations of how locals interpreted threats and opportunities lead us to conclude that EJ and movements scholars at times engage in what might be called "motivated theorizing." The evidence we have presented here encourages much greater caution on the part of analysts in defining a particular land use as unwanted in advance and also in presuming that mobilization is the natural response to environmentally risky land uses. A more empirically grounded approach requires observers to take seriously how actors understand their own situation.

## REFERENCES

Alcorn, Jessica, John Rupp, and John D. Graham. 2017. "Attitudes Toward 'Fracking': Perceived and Actual Geographic Proximity." *Review of Policy Research* 34 (4): 504–36.

Aldrich, Daniel P. 2008. *Site Fights*. Ithaca, N.Y.: Cornell University Press.

Auyero, Javier, and Debora Swistun. 2009. *Flammable*. New York: Oxford University Press.

Bamberger, Michelle, and Robert E. Oswald. 2012. "Impacts of Gas Drilling on Human and Animal Health." *New Solutions* 22 (1): 51–77.

Beauge, John. 2014. "'Home of Millionaires' Has New Meaning in Williamsport—Heroin Sales." *Penn Live*. June 14.

Benford, Robert D., Helen A. Moore, and J. Allen Williams. 1993. "In Whose Backyard? Concern about Siting a Nuclear Waste Facility." *Sociological Inquiry* 63 (1): 30–48.

Bishop, Bradford H. 2014. "Focusing Events and Public Opinion: Evidence from the *Deepwater Horizon* Disaster." *Political Behavior* 36 (1): 1–22.

Boudet, Hilary, Dylan Bugden, Chad Zanocco, and Edward Maibach. 2016. "The Effect of Industry Activities on Public Support for 'Fracking.'" *Environmental Politics* 25 (4): 593–612.

Boudet, Hilary, Christopher Clarke, Dylan Bugden, Edward Maibach, Connie Roser-Renouf, and Anthony Leiserowitz. 2013. "'Fracking' Controversy and Communication: Using National Survey Data to Understand Public Perceptions of Hydraulic Fracturing." *Energy Policy* 65:57–67.

Boudet, Hilary, Chad M. Zanocco, Peter D. Howe, and Christopher Clarke. 2017. "Proximity to Development and Public Support for Hydraulic Fracturing." SSRN, October 23. https://ssrn.com/abstract=2893307.

Brehm, Hollie Nyseth, and David Pellow. 2013. "Environmental Inequalities." White paper. *Society Pages*, September 19.

Briggle, Adam. 2015. *A Field Philosopher's Guide to Fracking*. New York: Liveright.

Bullard, Robert D. 1990. *Dumping in Dixie*. Boulder, Colo.: Westview.

Burawoy, Michael. 2009. *The Extended Case Method*. Berkeley: University of California Press.

Bureau of Labor Statistics. 2016. "Unemployment Rate for States." https://www.bls.gov/web/laus/laumstrk.htm. Accessed February 8.

Čapek, Stella. 1993. "The 'Environmental Justice' Frame: A Conceptual Discussion and Application." *Social Problems* 40 (1): 5–24.

Clarke, Christopher E., Dylan Bugden, P. Sol Hart, Richard C. Stedman, Jeffrey B. Jacquet, Darrick T. N. Evensen, and Hilary Boudet. 2016. "How Geographic Distance and Political Ideology Interact to Influence Public Perception of Unconventional Oil/Natural Gas Development." *Energy Policy* 97:301–9.

Clemens, Elisabeth S. 1993. "Organizational Repertoires and Institutional Change: Women's Groups and the Transformation of U.S. Politics, 1890–1920." *American Journal of Sociology* 98:755–98.

Cramer, Katherine J. 2016. *The Politics of Resentment*. Chicago: University of Chicago Press.

Cole, Luke W., and Sheila Foster. 2000. *From the Ground Up*. New York: NYU Press.

DCNR (Department of Conservation and Natural Resources). 2014. "Shale Gas Monitoring Report." http://docs.dcnr.pa.gov/cs/groups/public/documents/document/dcnr_20029179.pdf. Accessed February 8, 2016.

DiMaggio, Paul. 1997. "Culture and Cognition." *Annual Review of Sociology* 23:263–87.

Dokshin, Fedor A. 2016. "Whose Backyard and What's at Issue? Spatial and Ideological Dynamics of Local Opposition to Hydraulic Fracturing in New York, 2010–2013." *American Sociological Review* 81 (5): 921–48.

Dokshin, Fedor, and Amanda Buday. 2018. "Not in Your Backyard! Organizational Structure, Partisanship, and the Mobilization of Nonbeneficiary Constituents against 'Fracking' in Illinois, 2013–2014." *Socius* 4:1–17.

Douglas, Mary, and Aaron Wildavsky. 1982. *Risk and Culture*. Berkeley: University of California Press.

Eaton, Emily, and Abby Kinchy. 2016. "Quiet Voices in the Fracking Debate: Ambivalence, Nonmobilization, and Individual Action in Two Extractive Communities (Saskatchewan and Pennsylvania)." *Energy Research and Social Science* 20:22–30.

Eliasoph, Nina. 1998. *Avoiding Politics*. Cambridge: Cambridge University Press.

Erikson, Kai. 1976. *Everything in Its Path*. New York: Touchstone.

Evensen, Darrick, and Rich Stedman. 2016. "Scale Matters: Variation in Perceptions of Shale Gas Development across National, State, and Local Levels." *Energy Research and Social Science* 20:14–21.

Futrell, Robert. 2003. "Framing Processes, Cognitive Liberation, and NIMBY Protest in the U.S. Chemical-Weapons Disposal Conflict." *Sociological Inquiry* 73 (3): 359–86.

Garfinkel, Harold. 1967. *Studies in Ethnomethodology*. Englewood Cliffs, N.J.: Prentice-Hall.

Gaventa, John. 1980. *Power and Powerlessness*. Champaign: University of Illinois Press.
Geertz, Clifford. 1973. *The Interpretation of Cultures*. New York: Basic Books.
Goffman, Erving. 1974. *Frame Analysis*. Cambridge, Mass.: Harvard University Press.
Gold, Russell. 2014. *The Boom*. New York: Simon & Schuster.
Governor's Marcellus Shale Advisory Commission. 2011. "Report." http://files.dep.state.pa.us/PublicParticipation/MarcellusShaleAdvisoryCommission/MarcellusShaleAdvisoryPortalFiles/MSAC_Final_Report.pdf. Accessed May 10, 2013.
Gramling, Robert, and William R. Freudenberg. 1996. "Crude, Coppertone, and the Coast: Developmental Channelization and the Constraint of Alternative Development Opportunities." *Society and Natural Resources* 9 (5): 483–506.
Gravelle, Timothy B., and Erick Lachapelle. 2015. "Politics, Proximity and the Pipeline: Mapping Public Attitudes toward the Keystone XL." *Energy Policy* 83:99–108.
Gullion, Jessica Smart. 2015. *Fracking the Neighborhood*. Cambridge, Mass.: MIT Press.
Hardin, Garrett. 1968. "The Tragedy of the Commons." *Science* 162 (3859): 1243–48.
Harris, Cheryl I. 1993. "Whiteness as Property." *Harvard Law Review* 106 (8): 1707–91.
Hill, Elaine. 2014. "Three Essays on the Impacts of Unconventional Drilling on Early Life Health." Ph.D. dissertation. Cornell University, Department of Agricultural Economics. https://ecommons.cornell.edu/handle/1813/38804. Accessed February 5, 2016.
Hochschild, Arlie Russell. 2016. *Strangers in Their Own Land*. New York: Free Press.
Hopey, Don. 2015. "DEP Fines Range Resources $8.9 Million for Marcellus Shale Gas Well." *Pittsburgh Post-Gazette*, June 16.
Howarth, Robert W., Anthony Ingraffea, and Terry Engelder. 2011. "Natural Gas: Should Fracking Stop?" *Nature* 477 (7364): 271–75.
Jacquet, Jeffrey. 2012. "Landowner Attitudes toward Natural Gas and Wind Farm Development in Northern Pennsylvania." *Energy Policy* 50:677–88.
———. 2015. "The Rise of 'Private Participation' in the Planning of Energy Projects in the Rural United States." *Society and Natural Resources* 28 (3): 231–45.
Jacquet, Jeffrey, and Richard C. Stedman. 2011. "Natural Gas Landowner Coalitions in New York State: Emerging Benefits of Collective Natural Resource Management." *Journal of Rural Social Sciences* 26 (1): 62–91.
Jerolmack, Colin, and Nina Berman. 2016. "Fracking Communities." *Public Culture* 28 (2): 193–214.
Jerolmack, Colin, and Shamus Khan. 2014. "Talk Is Cheap: Ethnography and the Attitudinal Fallacy." *Sociological Methods and Research* 43 (2): 178–209.
Jerolmack, Colin, and Alexandra K. Murphy. 2017. "The Ethical Dilemmas and Social Scientific Tradeoffs of Masking in Ethnography." *Sociological Methods and Research*. https://doi.org/10.1177/0049124117701483.
Jobert, Arthur, Pia Laborgne, and Solveig Mimler. 2007. "Local Acceptance of Wind Energy: Factors of Success Identified in French and German Case Studies." *Energy Policy* 35 (5): 2751–60.
Kahneman, Daniel, and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision Under Risk." *Econometrica* 47 (2): 263–91.
Kirkland, Joel. 2010. "A Shale Gas Boom Brings Change and Stress to a Quiet Town." *New York Times*, July 7.
Krakoff, Sarah. 2002. "Tribal Sovereignty and Environmental Justice." Pp. 160–83 in *Justice and Natural Resources: Concepts, Strategies, and Applications*, edited by Kathryn M. Mutz, Gary C. Bryner, and Douglas S. Kenney. Washington, D.C.: Island Press.
Kunda, Ziva. 1990. "The Case for Motivated Reasoning." *Psychological Bulletin* 108 (3): 480–98.
Ladd, Anthony E. 2014. "Environmental Disputes and Opportunity—Threat Impacts Surrounding Natural Gas Fracking in Louisiana." *Social Currents* 1 (3): 293–311.

Malin, Stephanie A. 2014. "There's No Real Choice but to Sign: Neoliberalization and Normalization of Hydraulic Fracturing on Pennsylvania Farmland." *Journal of Environmental Studies and Science* 4:17–27.
Malin, Stephanie A., and Kathryn Teigan DeMaster. 2016. "A Devil's Bargain: Rural Environmental Injustices and Hydraulic Fracturing on Pennsylvania's Farms." *Journal of Rural Studies* 47:278–90.
Marche, Guillaume. 2012. "Why Infrapolitics Matters." *Revue Française d'études Américaines* 131 (1): 3–18.
Maroney, Mark. 2011. "Boomtown. Panel: Drilling Transforming Williamsport." *Williamsport Sun-Gazette*, May 20.
Martin, Andrew W., John D. McCarthy, and Clark McPhail. 2009. "Why Targets Matter: Toward a More Inclusive Model of Collective Violence." *American Sociological Review* 74 (5): 821–41.
Martin, Isaac. 2013. *Rich People's Movements*. New York: Oxford University Press.
Mathias, Christopher. 2015. "New York Towns Threaten Secession over Gov. Cuomo's Ban on Fracking." *Huffington Post*, February 15.
McAdam, Doug. 1982. *Political Process and the Development of Black Insurgency, 1930–1970*. Chicago: University of Chicago Press.
McAdam, Doug, and Hilary Boudet. 2012. *Putting Social Movements in Their Place*. Cambridge: Cambridge University Press.
McAuley, Erin. 2014. "Lessors Sue Chesapeake Energy for $5 Billion." *Courthouse News Service*, June 25.
McCright, Aaron M., and Riley E. Dunlap. 2011. "The Politicization of Climate Change and Polarization in the American Public's Views of Global Warming, 2001–2010. *Sociological Quarterly* 52 (2): 155–94.
McGraw, Seamus. 2011. *The End of Country*. New York: Random House.
Michaud, Kristy, Juliet E. Carlisle, and Eric R.A.N Smith. 2008. "Nimbyism vs. Environmentalism in Attitudes toward Energy Development." *Environmental Politics* 17 (1): 20–39.
Morrill, Calvin, Mayer N. Zald, and Hayagreeva Rao. 2003. "Covert Political Conflict in Organizations: Challenges from Below." *Annual Review of Sociology* 29:391–415.
Murphy, Alyssa. 2011. "Williamsport Rated One of the Fastest Growing Cities in the U.S." *Williamsport Sun-Gazette*, September 24.
Nixon, Rob. 2011. *Slow Violence and the Environmentalism of the Poor*. Cambridge, Mass.: Harvard University Press.
Nobel, Justin. 2017. "How a Small Town Is Standing Up to Fracking." *Rolling Stone*, May 22.
Ogneva-Himmelberger, Yelena, and Liyao Huang. 2015. "Spatial Distribution of Unconventional Gas Wells and Human Populations in the Marcellus Shale in the United States: Vulnerability Analysis." *Applied Geography* 60:165–74.
Oldenburg, Ray. 1999. *The Great Good Place*. New York: Da Capo Press.
Oliver, Pamela E., Jorge Cadena-Roa, and Kelley D. Strawn. 2003. "Emerging Trends in the Study of Protest and Social Movements." *Research in Political Sociology* 12 (1): 213–44.
Olzak, Susan. 1989. "Analysis of Events in the Study of Collective Action." *Annual Review of Sociology* 15:119–41.
Osburn, Steven G., Avner Vengosh, Nathaniel Warner, and Robert Jackson. 2011. "Methane Contamination of Drinking Water Accompanying Gas-Well Drilling and Hydraulic Fracturing." *PNAS* 108 (20): 8172–76.
Park, Lisa Sun-Hee, and David Naguib Pellow. 2011. *The Slums of Aspen*. New York: NYU Press.
Pellow, David. 2002. *Garbage Wars*. Cambridge, Mass.: MIT Press.
Peltier, Laurel. 2016. "MD. Take Note: PA Fracking Water Contamination Higher than Reported." *Baltimore Fishbowl*, January 28.

Sampson, Robert J., Doug McAdam, Heather MacIndoe, and Simón Weffer-Elizondo. 2005. "Civil Society Reconsidered: The Durable Nature and Community Structure of Collective Civic Action." *American Journal of Sociology* 111 (3): 673–714.
Scott, James C. 1985. *Weapons of the Weak*. New Haven: Yale University Press.
———. 1990. *Domination and the Arts of Resistance*. New Haven: Yale University Press.
Sears, David O., and Carolyn L. Funk. 1990. "The Limited Effect of Economic Self-Interest on the Political Attitudes of the Mass Public." *Journal of Behavioral Economics* 19 (3): 247–71.
Shepstone, Tom. 2014. "No More Fracking—Is It Time?" *Natural Gas Now*. http://naturalgasnow.org/fracking-time/. Retrieved February 8, 2016.
Shrader-Frechette, Kristin. 2005. *Environmental Justice*. New York: Oxford University Press.
Slovic, Paul 1987. "Perception of Risk." *Science* 236 (4799): 280–85.
Smith, Eric R. A. N. 2002. *Energy, the Environment, and Public Opinion*. New York: Rowman & Littlefield.
Smith, Eric R. A. N., and Marisela Marquez. 2000. "The Other Side of the NIMBY Syndrome." *Society and Natural Resources* 13 (3): 273–80.
Stedman, Richard C., Jeffrey B. Jacquet, Matthew R. Filteau, Fern K. Willits, Kathryn J. Brasier, Diane K. McLaughlin. 2012. "Marcellus Shale Gas Development and New Boomtown Research: Views of New York and Pennsylvania Residents." *Environmental Practice* 14 (4): 382–93.
Steinzor, Nadia, Wilma Subra, and Lisa Sumi. 2012. "Gas Patch Roulette: How Shale Gas Development Risks Public Health in Pennsylvania." *Earthworks*. https://earthworksaction.org/publications/gas_patch_roulette_full_report/. Accessed February 8, 2016.
Tavory, Iddo, and Stefan Timmermans. 2014. *Abductive Analysis*. Chicago: University of Chicago Press.
Taylor, Verta, Katrina Kimport, Nella Van Dyke, and Ellen Ann Andersen. 2009. "Culture and Mobilization: Tactical Repertoires, Same-Sex Weddings, and the Impact on Gay Activism." *American Sociological Review* 74 (6): 865–90.
Thomas, William I., and Dorothy S. Thomas. 1928. *The Child in America*. New York: Knopf.
Tilly, Charles. 1995. *Popular Contention in Great Britain*. Cambridge, Mass.: Harvard University Press.
Vasi, Ion Bogdan, Edward T. Walker, John S. Johnson, and Hui Fen Tan. 2015. "'No Fracking Way!' Documentary Film, Discursive Opportunity, and Local Opposition against Hydraulic Fracturing in the United States, 2010 to 2013." *American Sociological Review* 80 (5): 934–59.
Walker, Edward T. 2009. "Privatizing Participation: Civic Change and the Organizational Dynamics of Grassroots Lobbying Firms." *American Sociological Review* 74 (1): 83–105.
———. 2014. *Grassroots for Hire*. Cambridge: Cambridge University Press.
Walker, Edward T., Andrew W. Martin, and John D. McCarthy. 2008. "Confronting the State, the Corporation, and the Academy: The Influence of Institutional Targets on Social Movement Repertoires." *American Journal of Sociology* 114 (1): 35–76.
Walsh, Edward, Rex Warland, and D. Clayton Smith. 1993. "Backyards, NIMBYs, and Incinerator Sitings: Implications for Social Movement Theory." *Social Problems* 40 (1): 25–38.
White, Rob. 2013. "Resource Extraction Leaves Something Behind: Environmental Justice and Mining." *International Journal for Crime, Justice, and Social Democracy* 2 (1).
Wilber, Tom. 2012. *Under the Surface: Fracking, Fortunes, and the Fate of the Marcellus Shale*. Ithaca, N.Y.: Cornell University Press.
Willis, Jim. 2015. "How the Gasland Lies Were Used to Manipulate Public Opinion." *Natural Gas Now*, September 4.



American Journal of Sociology 2018.124:479-516.

Willow, Anna J., Rebecca Zak, Danielle Vilaplana, and David Sheeley. 2014. "The Contested Landscape of Unconventional Energy Development: A Report from Ohio's Shale Gas Country." *Journal of Environmental Studies and Sciences* 4 (1): 56–64.
Wolsink, Maarten. 2007. "Wind Power Implementation: The Nature of Public Attitudes: Equity and Fairness Instead of 'Backyard Motives.'" *Renewable and Sustainable Energy Reviews* 11 (6): 1188–1207.
Wuthnow, Robert. 2013. *Small-Town America*. Princeton, N.J.: Princeton University Press.