University of Colorado Undergraduate Thesis

“Frack Off!”

Strategic Framing in Colorado’s Grassroots Challenge to Oil and Gas

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2016-2017

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Photo on title page: Joseph Melita

Introduction

On October 15th, 2015, thousands marched in Denver against "fracking" – the relatively new technology leading the largest wave of oil and gas extraction ever seen in Colorado. Pouring through the streets of downtown Denver, these activists demanded to have their voices heard in a state that had, in the view of many, unfairly accommodated oil and gas interests at the cost of the average citizen. With makeshift signs as well as bonafide banners, activists representing a diverse and abundant group of organizations presented their messages to the world: "100% Renewable Energy" and "Save the Oil in the Soil"; "Stand Up to Big Oil;" and predominantly, "Ban Fracking." Two months later, activists gathered again in Denver for a demonstration outside of the Colorado Supreme Court during a case concerning fracking. Here, messages like "Protect Our Constitutional Right to Ban Fracking," "Protect Our Land," and "Protect Our Families From Fracking" were abound. With characteristic wit, protesters in both cases made ample use of the slang term "Frack" with slogans like "Frack Off," and "Don't Frack With Our Air." In these demonstrations and many others, protesters young and old voiced a plethora of concerns about fracking, including its perceived impacts on the environment, citizens' health and safety, property rights, and the health of Colorado's democracy, along with outright condemnations of the oil and gas industry.

With so many different concerns about fracking abounding in Colorado, I ask: why is the single-issue of fracking interpreted and framed by organizations in so many different ways? Are some interpretations more prevalent than others? Furthermore, what does this mean for a social movement that has had few statewide successes? Although the social movement literature has established that social movement organizations frame messages based on target constituencies (Benford and Snow 1986; White 1999), the role of political and geographic factors in issue framing and goal formation has not explicitly been examined. In addressing these overlooked

components in the literature, I argue that the variation in local political geography — such as party affiliation and the actual impact of an issue — is responsible for this variation in issue framing and, separately, organizational goals. Most importantly, I will show how incongruent issue framing and goals explains in part why this social movement has suffered from insufficient cooperation and recent movement failures.

In the process, I will test a central assumption of framing theorists: that political geography plays a major role in the process of organizational issue framing and goal formation. Given that social movements are founded upon coalition-building (Klandermans 1992; Jenkins 1983), this examination of political geographic factors on framing and goal formation is central to understanding the challenges faced by social movement organizations working together to mobilize a diverse constituency.

Organization in response to oil and gas development, popularly referred to as the anti-fracking and citizens movements, has pushed oil and gas to the forefront of Colorado politics in the last five years and is likely responsible for Merriam-Webster's designation of "fracking" as a legitimate word in 2014 (Kroepsch, Rempel and Limerick 2014). However, oil and gas development has affected communities in very different ways across Colorado; the boom has left many counties virtually untouched while rocking others, and in some areas, such as the San Juan Basin in Southwestern Colorado, oil and gas development is simply nothing new. Often called the "purple state," Colorado is also politically diverse and divided: located on the Front Range, the cities of Denver, Boulder and Fort Collins are known as liberal hubs and leaders in the national environmental movements; but on the Eastern Plains and Western Slope of the Rocky Mountains, agriculture, tourism, ranching and political conservatism are the norm.

The anti-fracking movement and citizen, grassroots-led organization in response to oil

and gas development is, on the other hand, relatively new as a statewide phenomenon. Especially in the last five years, opposition to fracking has been intense in many Front Range communities, despite the fact that fracking has largely taken place elsewhere, in counties outside of the Front Range: in neighboring Weld County, an agricultural hub, and on the Western Slope in the counties of Mesa, Garfield and La Plata. Therefore, oil and gas extraction has had varying impacts on communities all over this purple state – in areas rural and urban, majority Democratic and Republican, rich and poor – while local citizens have organized in response, usually on a county-wide level. It is precisely this diversity of constituencies and organizations, which often tailor different strategies and goals, that poses challenges for statewide coalition-building

When the oil and gas boom threatened to expand into urban areas on the Front Range like Boulder, Longmont, Broomfield, Fort Collins and Lafayette, fracking became a top issue for both national environmental organizations and concerned citizens, who have electrified the conversation about oil and gas with the country's first bans on fracking and other hard-fought political campaigns. With the profits of an industry as powerful as oil and gas potentially at stake, and a state government that is viewed in some circles as a puppet, grassroots organization has come under staunch opposition. Millions have been spent by oil and gas companies in this political battlefield to undermine activists' frames, and the anti-fracking movement is currently experiencing a reorganization period after suffering a series of setbacks (Reuters). In other words, this is a fierce political battlefield with tremendous consequences that is certainly worthy of inquiry of serious study. My choice to examine strategic framing and goal formation processes in particular comes out of the recognition that oil and gas companies have much more power and resources to disseminate their issue frames: that oil and gas development is both vital to the state's economic well-being and is harmless to Coloradans and the environment. On the other

hand, the mostly grassroots anti-fracking movement cannot devote millions of dollars to its public campaigns, which makes strategic framing choices crucial for political successes.

Thus, through an examination of organizations' strategic decision-making, I offer an explanation for recent setbacks in the anti-fracking movement. Although this is the first scholarly treatment of this movement in Colorado, my interest in energy politics began several years ago. As I became more and more acquainted with the actors in this political drama and witnessed several major setbacks for the anti-fracking movement, I wanted to answer three questions: How do organizations frame the issue of fracking? Next, why do groups in this movement choose to present fracking the way that they do? And finally, what does this mean for the strength of the movement as a whole, when organizations representing diverse constituencies attempt to build a comprehensive issue campaign? In this thesis, I answer these questions and show that, when organization takes place locally, such as on the county level, issue frames and goals develop specifically based upon their perceived efficacy with a targeted population. This process then presents challenges when locally-based organizations attempt to build a comprehensive, statewide political campaign in a state that is both politically diverse and unequally affected by oil and gas development. In the Discussion, I also explore the limitations to these findings that arise from the methodology, as well as other explanations for the lack of cooperation in this social movement.

In this study I gained insight into the strategies of the anti-fracking movement through interviews with 19 leaders — founders, co-founders, directors, board members — of relevant organizations across the state, from the Front Range to the Western Slope. These activists, who spoke with me on a condition of anonymity, represent a diversity of organizations who are devoted to either a fracking ban and/or strong regulations or more moderate oil and gas

regulations. I spoke with leaders with the intention of gaining insight into the strategic decision making processes of their organizations, which only leaders could likely provide. All but two of the groups represented in this study, the Sierra Club and 350.org's Colorado branch, are grassroots.

Table 1: Sampled Organizations

Organization	Grassroots?	Sampled Leaders
Our Longmont	Yes	2
Weld Air and Water	Yes	2
Western Colorado Congress	Yes	1
Our Broomfield	Yes	2
Oil and Gas Accountability Project	Yes	2
Co. Community Rights Network	Yes	2
Frack Free Colorado	Yes	1
350.org Colorado	No	3
Sierra Club	No	2
San Juan Citizens Alliance	Yes	1
Grand Valley Citizens Alliance	Yes	1

These movement leaders were asked about how they frame the issue of fracking, why they do so; what their organization's goals are with regard to oil and gas development, and why; and their perception of cooperation with other groups that are challenging oil and gas development. Interviews also dove into the dynamics of this social movement, organizers'

personal views of oil and gas development, the political situation in Colorado, and energy policy. In addition to the qualitative data collected with these interviews, I examined the role of two quantitative variables, political affiliation and the level of oil and gas production in a county, and showed their role in strategic decision-making processes of these groups and their implications for the social movement.

This thesis begins with Chapter One, in which I show what hydraulic fracturing is, its role in Colorado's historic oil and gas boom, and overviews the health and environmental risks of oil and gas development. The property rights dynamics are also briefly explored before an examination of the political landscape and a history of the organization in response to oil and gas. Next, Chapter Two surveys the relevant social movement literature, shows how this study departs from existing conclusions, and presents the framing strategies of the sampled organizations. Chapter Three then presents the methodology and a description of analytical units. In Chapter Four I present and discuss the findings of the thesis, and in Chapter Five I examine the implications of the study for further research, the anti-fracking movement and other social movements.

Chapter One

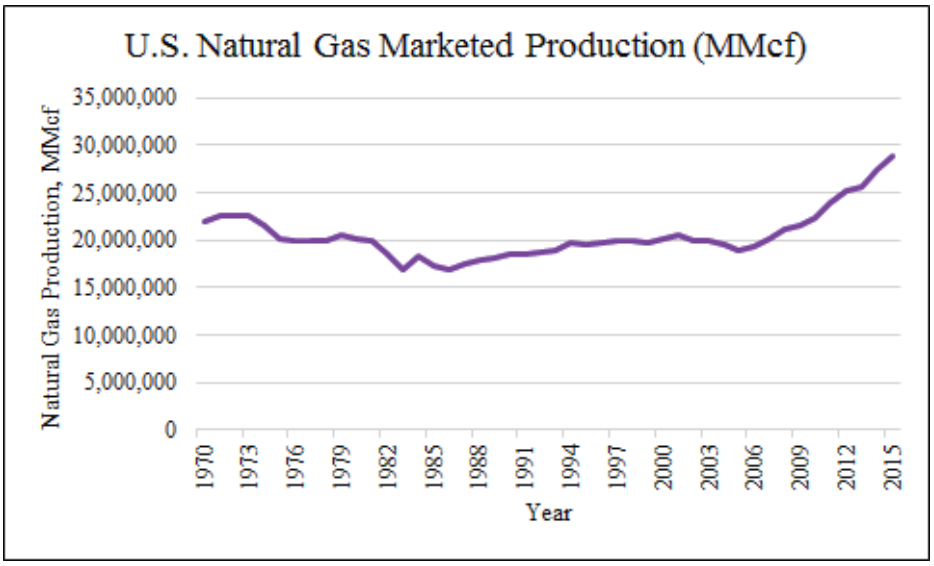
The advent of unconventional oil and gas development

This thesis is concerned with fracking and the responding social movement organization. First and foremost, what is fracking? Although anti-fracking activists have organized in the last five years in an attempt to stop the oil and gas boom, fracking itself is nothing new. Rather, it is the combination of fracking with other technological innovations that has fueled the recent and dramatic uptake in fossil fuel production. Short for "hydraulic fracturing," fracking is the process of using pressure to crack submerged geological formations, such as shale or coal beds, in order to access oil and gas reserves. This pressure, built by the powerful injection of water, sand, and a cocktail of industrial chemicals, "frees" oil and gas from sealed formations and allows for extraction at ground level (Ehrenburg 2012). Since oil and gas do not move freely in these formations, penetration via fracking is necessary for extraction and eventual use in homes, cars, buildings and industry.

Oil and gas companies have historically focused on the extraction of fossil fuels from relatively easy formations like sandstone or limestone, which oil and gas can flow in and out of. This type of extraction is known today as "conventional" oil and gas development (Kroepsch, Rempel and Limerick 2014). Hydraulic fracturing has been used in this type of extraction since the 1940s (Physicians for Social Responsibility 2016). However, it was the innovation of horizontal drilling and its combination with hydraulic fracturing that has propelled the recent oil and gas boom. In the late 1980s, industry researchers found that drilling sideways into shale formations was much more successful in cracking sealed geological formations and allowing gas in particular to bubble in centralized areas. Since shale formations can be hundreds of miles long but only hundreds of *feet* wide, drilling horizontally allows for much more access to "locked in"

oil and gas reserves than conventional top-down drilling (Ehrenburg 2012). Furthermore, horizontal drilling allows for increased extraction from a single well: instead of boring multiple or even dozens of individual wells for vertical drilling, a single horizontal drill can allow access to reserves up to two miles away from the wellhead. This also means that wells exhausted by vertical drilling can be repurposed by horizontal drills and given a much longer lifespan.

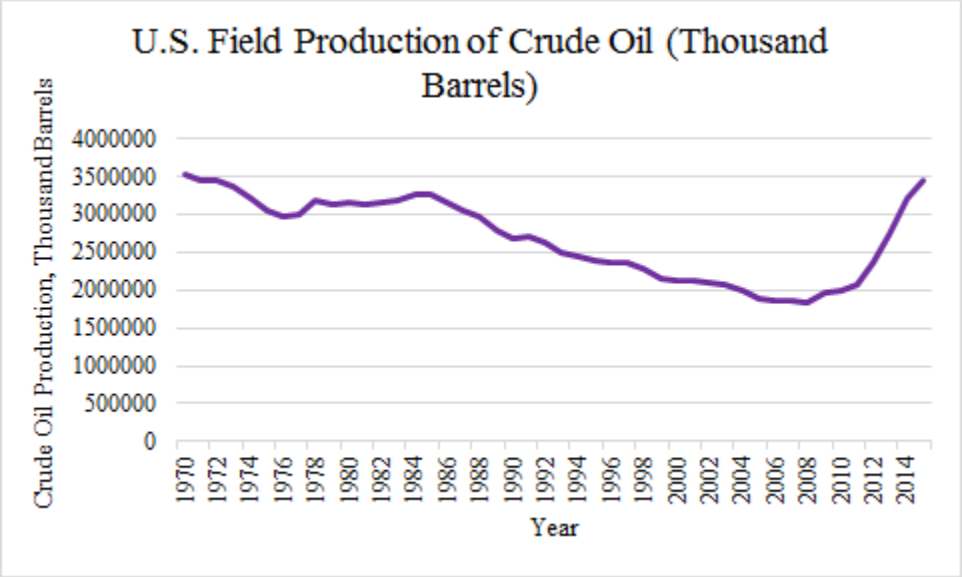
The use of the term "fracking" was coined by activists in response to unconventional oil and gas extraction, which revived production after decades of stagnation and decline in the 1990s (Kroepsch, Rempel and Limerick 2014; Physicians for Social Responsibility). As the graph below shows, gas production declined steadily from 1970 until the mid-1980s. Industry then rose consistently through the early 2000s before production boomed from 2004 to 2015 (EIA "Natural Gas"). This boom rendered the US virtually independent in its consumption of gas, which is 50-60% cleaner than coal or oil combustion. American imports of gas halved between 2001 and 2016, while exports increased tenfold in the same period and domestic consumption increased by almost one-third. Meanwhile coal consumption declined from over 1 million short tons per year to only 43,000 in April 2016.



Unconventional extraction also revived declining oil production: as the second graph

shows, the boom brought crude oil out of a decades-long decline in the late 2000s. Between 2008 and 2015, production almost doubled (EIA "Petroleum and Other Liquids").

However, the fracking boom also brought oil and gas operations in proximity with more U.S. residents: 15 million currently live within one mile of a fracking well drilled since 2000, and the drinking water of 8.6 million people is sourced from within a mile to a fracking operation (Physicians for Social Responsibility 2016).



This national boom was driven by extraction in the states of Texas, Pennsylvania, Oklahoma, Louisiana, Wyoming, and Colorado. In the last state, home to 11 of the largest 100 gas fields in the U.S., production of natural gas skyrocketed from about 230 million thousand cubic feet (MMcf) in 2001 to 1.6 *trillion* MMcf in 2015 (EIA "Colorado: Energy Profile"). In the same years, crude oil production increased ten-fold. Here, production varied widely across counties, leaving many virtually untouched while visibly altering the landscape of others. Dramatic booms revived traditional oil and gas extraction zones, such as Colorado's San Juan Basin, while rapidly entering a handful of untouched counties on both sides of the Rocky Mountains. In rural Garfield County, for example, gas production increased five-fold from 2001 to 2015; and in La Plata County, which includes the city of Durango, gas production doubled.

However, it was Weld County, a largely rural and agricultural community, in which the most startling expansion of oil production took place. From 2001 to 2015, wells in this county spiked from 3,000 to over 30,000, and an increase from under 10 million barrels per year to over 60 million in the same years (COGCC). The rapid industrialization of predominantly rural Garfield, La Plata, and Weld counties generated both support and backlash from affected communities and a wave of grassroots political organization that focused on strong regulation of industry. Citizens from Front Range cities and suburbs also organized themselves, but in order to protect against the intrusion of fracking into their communities through moratoria and fracking bans.

As I will show, organization in Garfield, Mesa and La Plata counties, all in western Colorado, occurred relatively early in contrast to the Front Range. This first wave of organization established a largely grassroots, "citizen"-oriented advocacy for oil and gas regulations such as setbacks from residences and business and protection of ecologically sensitive areas. By the early 2010s, the presence or potential of oil and gas development in urban areas like Fort Collins, Boulder, and the northern Denver suburbs spurred a robust "anti-fracking" movement dedicated to local control of oil and gas development for the purposes of moratoria or bans. Before an examination of the political landscape and the stakeholders of fracking, it is necessary to overview activists' concerns about oil and gas development, which from the bases of organizational issue frames.

Risks to air and water associated with fracking

What concerns activists about unconventional oil and gas development? The recent boom in scholarly research has highlighted some of the risks that unconventional development poses

for human and environmental health, bolstering the claims of activists. According to the *Compendium of Scientific, Medical and Media Findings Demonstrating the Risks and Harms of Fracking (Unconventional Oil and Gas Extraction)* (hereafter referred to as the Compendium) published in 2016 by Physicians for Social Responsibility and Concerned Health Professionals of New York, more than 80 percent of the existing empirical research in this area was contributed since 2013 (4). This means that the impacts of fracking in particular on humans and the environment have only recently become seriously studied in response to the widespread use of horizontal drilling. Most importantly, this sudden availability of empirical evidence has partially released concerned citizens from over fifteen years of reliance on anecdotal evidence and a stream of counter-arguments from proponents, who often cited this lack of research in dismissing the concerns of citizens. However, it must be stressed that much is still unknown in this area of study; in drawing from this source I aim not to legitimize the concerns of social movement organizations but to contextualize opponents' concerns about fracking's effect on air and water quality in particular and its impacts on human populations.

Given the essential quality of water for human beings and the environment in general, it is appropriate to begin with an examination of how fracking employs water and may impact water sources. Fracking uses approximately 3 to 5 million gallons on average in the typical operation and is mixed with sand to "prop" up fractures after they have been created (Kroepsch, Rempel and Limerick). About two percent of this fracking fluid, depending on the specific extraction site, is composed of dozens of industrial chemicals that perform specific functions such as helping the creation of fissures in shale (FracFocus). As the gas or oil rises into a fracked well, much of the fracking fluid can come back up to the surface level after mixing with subterranean "formation water" — a mix of chemicals along with carcinogenic hydrocarbons and

radioactive materials including mercury and arsenic (Compendium 13; Ehrenberg 2012). Of the 750 chemicals that can be present in the process of fracking, dozens are hazardous chemicals controlled under the Clean Air and Safe Drinking Water Acts. Many are also known carcinogens, such as benzene and naphthalene (Ehrenburg 2012). This "flowback" fluid is then typically stored, in many instances in open pits or tanks, or flushed back into the earth into "injection" wells. However, storage is not without its risks: according to the EPA, contamination of drinking water occurs less from hydraulic fracturing itself than from spills of fracking fluid and fracking wastewater, discharge of fracking waste into rivers and streams, and underground migration of fracking chemicals, including gas, into drinking water wells" (12-13; EPA 2016). Furthermore, because of the challenges in mapping underground fractures, oil and gas companies cannot completely control how shale is fissured and where "frack fluid" migrates, which may pose risks to groundwater reserves.

Air pollution is also a major concern for many opponents of fracking. After hydrocarbons, natural gases and heavy metals are extracted to the surface well, their storage has contributed to increasing greenhouse gas emissions. Methane, known as natural gas, has high enough heat-trapping properties to warm Earth's atmosphere at 86 times the rate of carbon dioxide over a twenty-year time period. According to the Compendium, methane leakages from oil and gas storage infrastructure may be responsible for a 30 percent increase in US methane emissions from 2002 to 2014 (5). One study even found that fugitive methane emissions alone will render the US unable to commit to the 2015 Paris agreement target of a 26-28% decrease in greenhouse gas emissions by 2025 (Greenblatt and Wei 2016). These concerns are integral to the issue framing of environmentalists, many of whom argue for the complete cessation of oil and gas extraction, whether conventional or unconventional, or relatively strict limitations.

Air quality pollution is well-documented in one area proximate to fracking operations: Colorado's Front Range. In this area, 17 percent of produced ozone can be traced to nearby oil and gas operations. As the Compendium notes, Colorado as a whole has exceeded federal ozone regulations for the last decade (13). According to research led by Detlev Helmig at the University of Colorado at Boulder, emissions of ethane, a greenhouse gas, increased by about 400,000 tons annually from 2009 to 2014, primarily due to North American oil and gas activity (Helming and Scott 2016). Along with high levels of the carcinogen benzene, the highest emissions were found to be centralized over Northeastern Colorado, where Weld County is located, according to another University of Colorado study (Hueber and Helming 2014). Colorado researchers also linked low exposure levels of benzene, toluene, ethylbenzene, and xylene — four common chemicals used in fracking — to reduced sperm count, fetal abnormalities, cardiovascular disease, and asthma (Bolden et al. 2015).

It is crucial to note here that the authors of the *Compendium* view policies such as mandatory setbacks of oil and operations from residences, businesses, public spaces or ecologically sensitive areas as inadequate measures to protect people and the environment from fracking in particular. Indeed, mandatory setbacks of drilling sites from homes and businesses are viewed by the authors as the result of political compromises and not peer-reviewed science, who conclude that there is "no evidence that fracking can be practiced in a manner that does not threaten human health" (6). Instead, the authors recommend moratoria on fracking until more research is available. Writing on the environmental threat, Hueber and Helming note that even if regulation mandates decreases in the emissions of individual wells, the proliferation of oil and gas extraction as a whole will still result in rising emissions on a local, national or global level. These conclusions — that anything short of temporary or permanent fracking bans will fail to

protect people or the environment —are central to the strategy of many Front Range activists.

Unconventional oil and gas extraction and property rights

Many activists also bring attention to the dynamics of land ownership in the unconventional oil and gas boom. Horizontal drilling, which can subterraneously extend more than two miles from the wellhead, has added a new chapter to Colorado's history of extractive industry and land rights. According to Lance Astrella, an attorney who represents landowners, horizontal drilling impacts more property owners than conventional vertical drilling (Jaffe 2011). These property owners can then be forced into negotiations based on Colorado state law, which has preemption powers over county or municipal law, and deal with issues of mineral rights ownership, surface rights use and property owner compensation (Kroepsch, Rempel and Limerick 2014).

In Colorado, many landowners do not own mineral rights under their properties, resulting in a "split estate" between the landowner and the federal government, which leases mineral rights to oil and gas operators. Typically, a landowner who does not own the subsurface mineral rights can still negotiate a "surface agreement" with the interested operator in order to establish rates of compensation and surface use terms. Less frequent is the practice of forced pooling, in which a landowner and/or mineral rights owner who has not or will not sign a land lease is forcibly included in the operator's extraction plan (Jaffe 2011). Another issue of concern to landowners is property devaluation due to drilling or other oil and gas infrastructure on the premises, or even proximity to a noisy and brightly-lit site. These concerns are central to what I call the Property Rights frame. As will be shown, organizers in politically "red" counties with moderate or high levels of oil and/or gas production emphasized these transgressions of property

rights. However, in areas with high levels of fracking, organizers were simultaneously constrained by a population receiving royalty checks from oil and gas companies. This resulted in specific issue framing and relatively moderate goals because, as one prominent organizer in a high-fracking/red area noted, "You can't be totally anti-industry here."

The politics of fracking in Colorado

In this section I provide a history of the social movement response to unconventional oil and gas development, beginning with the formation of grassroots groups on the Western Slope. As has been shown, unconventional oil and gas extraction such as fracking has been entrenched in Colorado since the 1990s, primarily in the western counties of Garfield, Mesa and La Plata. Even though Colorado's oil and gas boom began in the early 2000s, however, opposition did not become significant on the Front Range until the 2010s. Since then, citizens across the state have organized for a variety of reasons: environmental protection; the establishment of setbacks between extraction sites and private or public spaces; to temporarily or permanently ban fracking in particular; and to promote citizens' voices. As much of the social movement literature suggests, organizations do not operate in vacuums; rather, groups can be constrained or compelled by actors such as the state (Jenkins and Perrow 1997; Goldstone 1980; Gamson 1975), political elites (Jenkins and Perrow 1977; McCarthy and Zald 1977), personal networking (Melucci 1995), ideology (Offe 1985) and framing strategies (Snow and Benford 1986). I take cues from these authors in addressing how various actors in the state all influence each other

The initial wave of citizen activism on the Western Slope led to the establishment of local "citizens groups" that generally emphasized, first and foremost, citizen health and safety, as well as property rights. In this first category are four organizations sampled in this study, shown in

Table 2 on the follow page.

Table 2: Sampled Grassroots Groups on the W. Slope
San Juan Citizens Alliance
Grand Valley Citizens Alliance
Western Colorado Congress
Oil and Gas Accountability Project

Across the Rockies on the Front Range, grassroots organization responding to oil and gas operations did not become significant until the 2010s. These groups were established in a broad wave of mobilization in the northern Denver suburbs, Boulder county, the Fort Collins metro area and Weld County. Excluding the last, groups from this area generally advocate for a temporary or permanent ban on fracking. One of the earliest populations to do was the city of Longmont in Boulder County, where grassroots activists mobilized the local population in a bid to ban oil and gas development from the city limits. Although fracking did not occur on a large scale here — there were only 16 plugged and abandoned wells and three dry but drilled wells within the city limits — Longmont's proximity to neighboring Weld Co. and the prospects of drilling under the city's Union Reservoir mobilized citizens, who formed Our Health, Our City, Our Longmont in 2011. In November 2012, Our Longmont succeeded in banning fracking and

wastewater disposal within city limits through Amendment 300, making it the first city in the US to do so. Longmont's success set a precedent in the cities of Boulder, Fort Collins, Lafayette and Broomfield, which all banned fracking in November 2013 for a five-year period in initiatives driven by citizens' groups including, but certainly not limited to, Our Broomfield, organizers of Frack Free Colorado and the Colorado Community Rights Network.

Table 3 shows sampled groups this second category — grassroots organizations of the Front Range.

Table 3: Sampled Grassroots Groups of the Front Range
Our Longmont
Our Broomfield
Colorado Community Rights Network
Frack Free Colorado
Weld Air and Water

For grassroots groups on both sides of the Rocky Mountains, resources and support were also provided by professional environmental organizations including the Sierra Club and 350 Colorado. Although these groups do work specifically on mobilizing support from non-activist citizens, they are not strictly grassroots, as each is a hierarchical, nationally funded network. Although both groups have a network across the state, both have statewide or regional offices in the Denver area. Organizers sampled from these groups were located in either Denver or Boulder counties.

Table 4: Sampled Non-Grassroots Environmental Organizations
Sierra Club
350.org, Colorado branch

In 2014, many grassroots groups from the Front Range and these two environmental organizations formed Coloradans Against Fracking (CAF), a statewide coalition of over 40 nonprofit groups, dedicated to "fighting for a ban on fracking" (CAF Website). Steering committee members include Frack Free Colorado, Our Longmont, 350 Colorado, and Boulder County Citizens for Community Rights (a local branch of the Colorado Community Rights Network). The Sierra Club is a general member, but not a member of the steering committee. However, of 36 coalition members (not including multiple chapters of the same organization), only 6 groups are represented from outside of the Front Range, and none of these are steering committee members. This relative power disparity between the Front Range and Western Slope groups is important to the following analysis of how political geography shapes organizational issue framing and goals, and many why organizers across the state cite a lack of coordination among allied groups.

The social movement literature has long shown that coordination in a multi-organizational field is crucial for goal achievement (Jenkins and Perrow 1977; Jenkins 1983; McCarthy and Zald 2001). Furthermore, when challenging an industry as powerful as oil and gas, a unified movement is vital to political successes. Organizers sampled in this study were acutely aware of the power of the oil and gas industry, which is represented in trade groups like the Colorado Oil and Gas Association (COGA). Board members include representatives from

Anadarko Petroleum and Noble Energy, the two largest oil and gas companies in the state, as well as British Petroleum and ConocoPhillips. In a response to the sudden wave of anti-fracking organization on the Front Range, COGA and other industry groups have poured millions into PR campaigns in order to challenge the social movement organizations' issue frames. Perhaps more importantly COGA has dedicated itself to legally challenging local fracking regulations, moratoria or bans in courts.

COGA and other industry outreach groups like Colorado Concern and Coloradans for Responsible Energy Development (CRED) have systematically presented fracking operations as necessary to the economic well-being of the state, while downplaying the risks to public health and the environment. On its website, COGA describes in its "Objectives" how important it is for the industry to "maintain a unified industry that speaks with one voice, while promoting and embodying positive industry core values" (2016). Accordingly, the industry groups have generally remained committed to their issue framing, although individual companies have occasionally deviated from this narrative. In a typical statement called "Recent Studies Show Fracking is Safe," a spokesperson for CRED writes that "As Coloradans, we should be proud of the role our oil and natural gas industry plays in creating jobs, supporting economic growth, and advancing America's long-term energy independence – all while protecting our environment and wilderness" (2016). Vital to this issue frame is a 2014 study from the University of Colorado Leeds School of Business, which estimated the economic benefits of oil and gas at $31 billion (Wobbekind and Lewandowski 2014).

The year 2014 began a period of statewide debate about fracking, driven by the arguments of the Front Range anti-fracking organizations and a counter-campaign funded heavily by the oil and gas industry. This thesis is primarily concerned with this period, in which

CAF failed both in 2014 and 2016 to successfully place two initiatives on the statewide ballot in each year. In 2014, CAF promoted two initiatives framed by oil and gas companies as anti-industry: Initiative 88, which would have required a 2,000 ft. setback between oil and gas operations and houses, and Initiative 89, which called for an environmental bill of rights. The Colorado Community Rights Network also failed to place a local control initiative on the ballot, which would have delegated, among other things, oil and gas policy to county and municipal governments. The first two initiatives, financed by Colorado's 2nd District Rep. Jared Polis, were heavily fought by the industry, which countered with two ballot initiatives that would have denied revenue from oil and gas to localities that ban fracking and required a fiscal note for ballot initiatives. According to the *Denver Post*, over $10 million were, spent in the campaigns, largely by industry groups, and up to $20 million could have been spent had Polis and Governor John Hickenlooper not struck a deal to get all these initiatives off the November ballot (2014).

May 2016 saw a major setback for Front Range activists, when the Supreme Court of Colorado overturned all existing fracking bans and moratoria in a ruling on a four-year, COGA-driven lawsuit against the city governments of Longmont and Fort Collins. Soon after, another two ballot initiatives sponsored by the citizen group Coloradans Against Fracking failed to acquire the necessary signatures for placement on the ballot: Amendment 75, which would have amended the state constitution to allow for local oil and gas regulations or bans that would otherwise be preempted by state law, and Amendment 78, another attempt to require setbacks from operations and buildings of any kind, this time of no less than 2,500 ft. According to an analysis from CU Boulder Leeds School of Business, Amendment 78 would have effectively limited oil and gas operations to less than 10% of the state (2016). During this time the Colorado Community Rights Network, a Front Range grassroots group focused on local control of issues

such as fracking, rent controls and industrial agriculture, also ran a failed local rights initiative known as Amendment 40.

Against these initiatives, the industry raised and spent millions of dollars in an "education" campaign based on their economic necessity frame: one industry group, Protect Colorado, received $13 million and an additional $11 million for spending if the initiatives were placed on the ballot, mostly from Anadarko and Noble Energy (2016; Reuters 2016). Conversely, Yes for Health and Safety Over Fracking, the primary sponsor of Amendment 75, was reported to have received about $50,000. Even without the relative disparity of funding, it was imperative for the social movement coalition to take a unified approach in framing the issue of fracking (Jenkins 1983; McCallion & Maines 1999, Crowley 2008). Resource mobilization, therefore, should not be ignored in the following examination of issue framing. This is discussed at length in Chapter 5.

Thus, this social movement is composed of a variety of grassroots groups from all over the state and the assistance of national environmental groups like the Sierra Club and 350.org. These groups have fought hard to keep oil and gas development out of the Front Range through moratoria and bans, which have been declared unconstitutional by Colorado's Supreme Court. In western Colorado and Weld County, groups have worked to move drilling sites out of residential and environmentally sensitive areas, institute air quality regulations and assist property owners in leasing agreements with oil and gas operators. Front Range groups also led unsuccessful ballot initiative campaigns in 2014 and again in 2016. Operators, set aside at least $13 million in order to combat this organization through PR campaigns and counter-ballot initiatives. The state, acting as an intermediary, has instituted dozens of oil and gas regulations and heard disputes through the Governor's Oil and Gas Task Force but has generally opposed the anti-fracking

stance of many Front Range groups, as shown in the Hickenlooper-Polis compromise. These dynamics contextualize the strategic decision-making, particularly message and goal formation, of organizations challenging the industry and the state on this issue.

Chapter Two

Literature review

What does the existing scholarly literature tell us about the strategic decision-making processes of social movement organizations and their effects on the greater social movement? While there is a great deal of scholarly work on the subject of social movement organization, I limit the following literature review to works that are theoretically and/or methodologically relevant to this study. This review will focus on framing theory —the study of how social movement organizations portray or "frame" an issue — and its implications for organizational coalition-building, goals, strategy and tactics. In the process, I will show how conclusions from this school of thought is relevant to this study, where the literature fails to adequately explain social movement organization, and how this study departs from existing research.

Framing Theory

Framing theorists have for decades studied how social movement organizations craft political messages. As Benford and Snow (2000), two formative authors in this school of thought, note, this process of framing is essentially "meaning work," wherein a political organization attempts to strategically portray an issue in a way to make it resonate with a targeted constituency, which can then be mobilized and brought into the social movement. In a seminal analysis (1986), the authors showed how psychological motivations played an important role in mobilizing new activists in social movements, concluding that four types of framing processes facilitated this strategic process. The first is frame bridging, in which an organization attempts to link itself with a latent constituency with similar grievances that could be tapped for participation. This could mean, as the authors note, bridging between two social movement

organizations with different portrayals of an issue for the sake of providing resources and organization itself to potential participants.

The second process is frame amplification, whereby a social movement organization attempts to connect an issue with individual's existing values and beliefs, which may not be apparent to the individual without the organizations' framing. Here, an organization accentuates widely-held beliefs and values in communications with the public. Third is frame extension, where an organization broadens its issue frame to encompass issues that are of concern to potential movement participants. Whereas amplification means resonating a message with an individual's existing values or beliefs, this process seeks to include interests or points of view that are "incidental to its primary objectives but of considerable salience to potential adherents." In the words of scholar Aaronette White, frame extension is used to "expand outside of their primary interests of potential recruits as a strategy for increasing support" (1999: pp. 84). Lastly, the fourth process is frame transformation, in which traditional values, beliefs and/or points of view are redefined so as to avoid pushing an agenda that is antithetical to conventional lifestyles.

Therefore, as White (1999) notes, the establishment of a *perspective* through the framing process then dictates proper courses of organizational strategy or tactics. For example, in her account of Black feminist advocacy during the Mike Tyson rape scandal, the organizers' view of rape scandals as historically detrimental to Black men prescribed a course of action during the ensuing media frenzy. Tactically, the organizers' emphasis on female leadership led to a first phase of unilateral advocacy before a second phase of alliance-building with Black male allied groups. In Colorado, I hypothesize, organizations responding to oil and gas extraction also based issue tactics and goals out of issue frames.

Important to this study is Klandermans (1992), who was the first to show how multiple

social movement organizations in the political environment influence each other's issue framing. Developing a multi-organizational model of social movements, Klandermans argues that groups are both enabled and constrained by others in the political environment: in the first case, groups pursue the establishment of alliance linkages, which allow for the broadening of that group's goals in conjunction with those of allies. In the second case, however, antagonism between organizations can hinder a movement's goals and drain an organization's resources and political capital. Babb (1996) also focused on frame extension in a study of the US labor movement from 1866 to 1886, concluding that "frame extension by constituents can lead to instability in the movement because such a frame may be unpalatable to a movement leader." Therefore, he writes, organizers can have official frames and unofficial ones, where one view of an issue may hold more sway with constituents but another may be more important to movement leaders.

Also important to this paper is McCallion & Maines' (1999) study of how the liturgical movement in the Catholic Church was characterized by incongruent issue frames that in turn reduced mobilization. The authors conclude that frame extension activities resulted in factionalization within the Church on the basis of ideological domain; that is, that the sudden interest of one group in an issue that had historically been the focus of another group led to a "turf war" and arguments about purity in the movement.

In a case study related to this thesis of organization in response to oil and gas development in Colorado, Williams et al. (2015) explore latent assumptions of the public in the United Kingdom in response to the issue of fracking through focus group research and a brief examination of institutional rhetoric. While this analysis ignores how social movement organizations play a role in framing the issue and influencing public opinion, the focus group methodology to gained insight into latent public fears, three of which were predominant across

all demographic groups: affordability of energy, an industry motivated by greed and profit with short-term goals and little concern for the public or the environment, and a lack of good governance to address problems with energy and climate change. Indeed, as I will show, these perceptions are held widely by citizen activists and professional activists in Colorado.

Therefore, although framing theorists have examined the employment of strategic issue framing; how framing shapes organizational goals and tactics; and the constraints and benefits of a multi-organizational field, the literature has not explicitly addressed the role of political geography in issue framing. Furthermore, the scholarship has ignored the implications of a diverse political geography for comprehensive movement building, in which allied organizations attempt to mobilize many diverse constituencies for a common political purpose.

The literature and methodology

This study uses interviews with leaders — that is, committee members, founders or -cofounders — of numerous organizations challenging oil and gas development in Colorado. While many framing studies have focused on organizational or news media, such as newspaper articles, pamphlets, press releases, and speeches to examine issue frames, this study brings a fresh approach in adopting the technique used primarily in studies of collective identity (Plows 2000; Melucci 1995; Buechler 1993; Crowley 2008). Additionally, Williams et al. (2015) relied upon interviews in their study of how citizens in the UK viewed the issue of fracking in focus groups.

Just as these researchers interviewed to study collective identity, I used the method of interviewing in order to most accurately define how organizational leaders see the issue of fracking, how their organizations have framed the issue, and why they have done so.

Additionally, interviewing allows for leaders to discuss their perceptions of how successful their framing of the issue has been, along with the perceived success and efficacy of alternative frames used by other organizations. For this purpose it is necessary that organizational leaders are sampled, for, as Babb (1996) suggests, it is primarily leadership in hierarchical social movement organizations who undertake the development of framing strategies based on the perceived needs of a targeted population. These interview subjects, whether paid professionals or volunteers, have an intricate understanding of their SMO and greater movement that likely only they can offer. Thus, with this method, all of these areas and more can be examined. I define a social movement organization as a group seeking to remedy a perceived injustice through education, advocacy and possibly institutional political goals.

Organizational Issue Frames

In the social organization response to oil and gas development, how do organizations frame the issue of fracking? Interviews revealed that four major issue frames were used with varying frequency in this social movement. Most organizers reported that they emphasized two of these four primary issue frames.

A: **Health and Safety** of the public. This frame emphasizes the impact of oil and gas extraction specifically on people's health and safety, often framed in terms of neighborhoods or individual families.

B: **Environmental/Environmental Justice**: This frame links fracking with climate change and/or ecological destruction such as air and water quality. Some organizations also framed environmental degradation as an injustice that affects communities in specific ways.

C: **Democratic/Local Control:** This frame presents fracking as an issue of local control,

often among other issues. Challenging the power of corporations and the state were essential for the Democratic frame, whereas the Local Control frame saw governance on the local level as more efficacious in general.

D: **Property Rights:** This frame presented fracking as a threat to stable property values and property rights.

At face value, these concerns are certainly not synonymous. That being said, why do organizers choose to publicly emphasize the concerns that they do? And are varying issue frames a source of conflict in this social movement? Before showing why organizers chose the frames and goals that they did and their implications, I detail in the next chapter exactly how the study was conducted.

Chapter 3

Methods

Over a period of three months, I conducted interviews with leaders of organizations seeking to implement stricter regulations or ban fracking on a local, state or national level. A number of subjects can also be described as leaders despite having no formal title in an organization, as can be the case in grassroots organizing. These interviews have focused on how organizational leaders themselves see the issue of fracking, as well as how and why their group has framed oil and gas development. Leaders were also asked to gauge the level of cooperation in the statewide push for stronger regulations or a ban on fracking. Below are the full list of questions:

1. Briefly tell me about the history of your anti-fracking activism.
2. How do you see the issue of fracking? Is it a health and safety risk, an environmental threat, an issue of local rights or something else? Or a combination of these?
3. How does your organization typically present the issue to the public? Did you emphasize one concern in particular?
4. What is your goal? Has that changed?
5. How successful do you think your group has been? What about on the state level?
6. Do you feel that your framing of the issue has come into conflict with that of other groups who may view the issue differently? (If organizers were unclear what “framing” meant, I defined it for them.)
7. Do you think that there was adequate cooperation in the anti-fracking movement?
8. In your opinion, what will the future of the movement look like?

In Table 5 I show the organizations sampled from in this study, as well as the number of subjects interviewed from each organization.

Table 5: Organizations Sampled

Organization	Number of leaders participated
Our Longmont	3
Sierra Club	2
Weld Air and Water	2
Western Colorado Congress	1
Frack Free Colorado	1
Oil and Gas Accountability Project	2
Our Broomfield	2
Colorado Community Rights Network	2
350 Colorado	3
San Juan Citizens Alliance	1
Grand Valley Citizens Alliance	1

Why are these organizations sampled? First and foremost, because they are all relevant actors in this multi-organizational field. Methodologically, I began interviewing with organizers featured in five newspapers, *The Denver Post, Boulder Weekly, Greeley Tribune, Longmont Times-Call* and *High Country News.* These newspapers have extensively covered oil and gas

development and the reacting organization in their counties. Additionally, the *Denver Post, Boulder Weekly* and *High Country News* have offered excellent coverage in oil and gas development across the state of Colorado. I argue that an organization is active and relevant if represented in local and/or statewide media outlets. Organizations also came to my attention through word-of-mouth and referrals from an adviser on this project and sampled or, in a few cases, even un-sampled activists.

However, there are several relevant organizations that are absent from this study. These include the national environmental group Food and Water Watch as well as grassroots groups like Protect Our Loveland and What the Frack?! Arapahoe. As I will show, there is significant political tension and a significant level of distrust in this multi-organizational field and some organizers were concerned with how the information yielded here could be used. Therefore, without the condition of anonymity, I speculate that the sample size of this study would have been heavily reduced. Although this skepticism can definitively explain the absence of a couple individuals, it is unclear if other organizers could not participate in the study for other reasons, such as a lack of time or the lack of compensation offered. This methodological challenge is examined deeper in the discussion following the results section.

Given that there are other relevant organizations absent from this analysis, are there any statewide trends in grassroots organization to oil and gas development? Do citizens organize in response to oil and gas development already happening in their counties, or is the threat of development enough to spur resistance (as in the Front Range communities who instituted fracking moratoria or bans)? And how complete is the sample size of this study? To answer this question I randomly sampled 7 counties not represented in this study, in addition to the 7 represented counties. There are 64 counties in Colorado. This is shown in page 1 of the

Appendix. Organization occurred across levels of oil/gas development and county political affiliations. Given that only two counties saw significant organization, this random sample suggests that this study's sample constitutes a reasonable representation of the multi-organizational field.

Interviews served as data collection for the dependent variables examined here, and provided qualitative evidence for the independent variables.

Independent variables	Dependent Variables
IV_1: level of oil and/or gas production in county	DV_1: Primary issue frame of SMO
IV_2: county party affiliation	DV_2: measure of movement cohesion

Measurement of Variables: Independent

In this analysis, I measure IV_1 and IV_2 on the county level. This is because, as has been noted, organization on this issue has occurred primarily on the county level. Why is this the case? I argue, because county oil and gas rules have been the *primary* focus of local organizers. Therefore, organizers have targeted residents of their own counties as their primary constituents. However, there are two exceptions to this unit of analysis. The first is Our Longmont, which organized, as the title suggests, primarily within the city of Longmont in Boulder County in order to enact a city-wide fracking ban in 2012. This separate organization is significant and deliberate, based on the political geography of Longmont in relation to the rest of Boulder County. Whereas Boulder County as a whole is politically very blue, with over 69% of the vote for Obama in 2012, Longmont is significantly less blue, with about $1/3^{rd}$ of its electoral precincts "purple" ("2012 Presidential Results by Precinct") in comparison to zero purple precincts in the

city of Boulder, which voted overwhelmingly for Obama.

Secondly, leaders from the groups 350.org, Sierra Club and Colorado Community Rights Network were based in both Denver (both a city and a county) and Boulder County, two areas that voted overwhelmingly for Obama. For this reason, these groups are categorized as responding to "Low/Medium" oil and gas development, as Denver County had low levels of both oil and gas development and Boulder County had medium levels of both oil and gas extraction. For 350.org and the Sierra Club, two national conservation networks, *state* leaders (such as regional/executive directors or state board members) were asked about framing strategies in their base counties of Boulder or Denver. Issue framing was generally consistent in these counties. Again, even though these three organizations span counties, the fact that leadership is centralized in the cities of Boulder and Denver is not accidental; both are liberal hubs that are widely considered to be progressive "leaders" of environmentalism.

IV_1 (level of oil and gas development in local area) is measured as the quartile – low, medium or high – of oil and/or gas production between 2012-2014. This is an appropriate measurement for three reasons. First, given that wells can be used for extraction repeatedly through horizontal drilling, the number of wells alone are an inadequate measurement. Instead, measurement through total oil and gas production is used here. Secondly, measuring production in the years 2012-2014 is appropriate because both oil and gas production peaked in this period (USEIA), and Coloradans Against Fracking (CAF) was established in 2014. Finally, production is measured by county because, as has been shown, social movement organization took place primarily on a county level. Measurements of oil and gas production are in thousand cubic feet (Mcf) for natural gas and 42-gallon barrels for oil. Data is from the Colorado Oil and Gas Conservation Commission (COGCC). I categorize production along the 2014 quartiles for oil

and gas production in all counties in Colorado. The lowest quartile is "Low;" the medium quartile is "Medium;" and the highest quartile is "High." These are shown on pages 1 and 2 of the Appendix in Tables 2 and 3.

IV_2 (political party affiliation) is used here to indicate political party affiliation by county. This follows the suggestion of Campbell et al. (1960), who first showed that, although party identification cannot completely account for political identity, the former is a central component of the latter. Party identification will be measured through county-by-county 2012 Presidential Election results. This election occurred when much of the Front Range organization against fracking began, and voter turnout was over 70% - well above the national average of approximately 58% (Colorado Sec. of State; Bialik 2016). Counties with over 55% of the vote for Obama or Romney are called "Blue" or "Red," respectively, while counties with less than 55% of the vote for either Obama or Romney are called "Purple." Table 4 in the Appendix shows the political affiliation of each organization's county.

Measurement of Variables: Dependent

DV_1 (Primary Issue Frame of SMO) was collected through interview data, which shows that SMOs used *at least* one of four dominant issue frames in appealing to the public:

A: **Health and Safety**

B: **Environmental/Environmental Justice**

C: **Democratic/Local Control**

D: **Property Rights**

In Table 6, the primary issue frames of each organization is defined as the average of individuals' stated primary frames. In almost all cases leaders from the same group reported the

same issue frames.

Table 6: Organizations' Primary Issue Frames

Organization	Grassroots?	Primary Issue Frames
Our Longmont	Y	Health and Safety
Weld Air and Water	Y	Health, Safety and Property
Western Colorado Congress	Y	Health, Safety and Property
Our Broomfield	Y	Health, Safety and Property
Oil and Gas Accountability Project	Y	Health, Safety and Property
Co. Community Rights Network	Y	Democratic/Local Control
Frack Free Colorado	Y	Health and Safety
350 Colorado	N	Environmental Justice
Sierra Club	N	Environmental Justice
San Juan Citizens Alliance	Y	Environment, Health and Safety
Grand Valley Citizens Alliance	Y	Health, Safety and Property

DV_2 (measure of cohesion in the movement) was also gathered from interviews primarily through the question, "Do you think that there was adequate cooperation in the anti-fracking

movement?”

Chapter 4

Results

With so many interpretations of fracking abound, how do organizations choose to portray fracking? Is this process related to goal formation? In this chapter I answer these questions and present the results of the study while providing context into the nature of the qualitative data. Table 7 shows the values of independent and dependent variables for the base county of the organization.

Table 7: Results

Org	Issue Frame	Gas Prod.	Oil Prod.	2012 Vote
OL	Health and Safety	Medium	Medium	Blue
WAW	Health, Safety and Property	High	High	Red
WCC	Health, Safety and Property	High	High	Purple
GVCA	Health, Safety and Property	Medium	Medium	Red
SJCA	Environment, Health and Safety	High	Low	Purple
EW	Health, Safety and Property	High	Low	Purple
OB	Health, Safety and Property	Medium	Medium	Purple
FFC	Health and Safety	Low	Low	Blue
Colo	Environmental Justice	Low/Med	Low/Med	Blue

SC	Environmental Justice/Health and Safety	Low/Med	Low/Med	Blue
CCRN	Democratic	Low/Med	Low/Med	Blue

Health/Safety and Property Framing

Of 11 organizations sampled, 5 emphasized the Health and Safety and Property Rights frames, while 4 other groups emphasized Health and Safety either alone or in tandem with another frame. Thus, the Health and Safety and Property Rights frames are dominant in this analysis. Table 6 (above) show that this frame was employed across counties with high, medium and low levels of both oil and gas production. The Health, Safety and Property frames dominate the results, not because of overrepresentation in the sample, but because organizers strategically prioritized these frames based upon their local geographies. Compared with the Environmental and Democratic frames, Health/Safety and Property were overwhelmingly seen as "safe" and relatively apolitical issue frames: while the first two frames were perceived as polarizing, the second two were seen as common sense arguments that appealed to a segment of the public commonly referred to as "Not-In-My-Backyarders" – people who were generally not interested in fighting climate change, government overreach or corporatism and simply wanted fracking out of their backyards of neighborhoods. Furthermore, as Table 8 shows on the following page, these frames were used in areas with high or medium oil and/or gas extraction.

Table 8 Extraction Levels and Issue Frames

Org	Issue Frame	Gas Prod.	Oil Prod.
OL	**Health and Safety**	**Medium**	**Medium**
WAW	**Health, Safety** and Property	**High**	**High**
WCC	**Health, Safety** and Property	**High**	**High**
GVCA	**Health, Safety** and Property	**Medium**	**Medium**
SJCA	Environment, **Health and Safety**	High	Low
EW	**Health, Safety** and Property	**High**	**Low**
OB	**Health, Safety** and Property	**Medium**	**Medium**
FFC	**Health and Safety**	**Medium**	**Medium**
Colo	Environmental Justice	Low/Med	Low/Med
SC	Environmental Justice/Health and Safety	Low/Med	Low/Med
CCRN	Democratic	Low/Med	Low/Med

In the words of a Front Range organizer, "public health is probably the strongest argument. I think most people simply want to protect their health." Another organizer, concerned about conservative backlash to "anti-industry" messages, said that she "stressed health and having a beautiful place to live that should stay beautiful" because "that was a message that went across party lines." Furthermore, a Western Slope organizer felt compelled to emphasize health and safety simply because of the actual dangers posed to citizens: "We definitely emphasize health and safety," she said. "Some of our members have actually died from strange diseases or cancers that, statistically, they should never have had." These organizers felt comfortable in the

strength and efficacy of this issue frame, as summarized by one: "One of the saddest things about this issue is that people don't wake up until [oil and gas development] hits them — when it's in their backyard, school, their kid gets sick. And their willingness to share that is the biggest PR thing we can use, because it's *people, people*."

Additionally, the Property Rights frame was seen as relatively safe and apolitical, making a strong companion for the Health and Safety frame. However, the Property Rights was overwhelmingly employed with the expressed goal of appealing to conservative constituents in the politically "purple" counties of Broomfield, La Plata and Garfield (with Obama vote in the low 50%) and the "red" counties of Weld and Mesa. This is because framing the issue to Republicans was generally seen as more challenging. "They bought the oil and gas commercials hook, line and sinker," said one organizer. "I mean, if you were a moderate or a republican, it was over." In response, organizers in these "purple" or "red" localities relied upon the Property Rights frame. "For a lot of people in my neighborhood, which has a lot of Republicans also, it became a property rights issue. So that became one of our arguments," said a grassroots organizer in a "purple" Front Range city. "We see the threat of fracking as a threat to our estates," said an organizer from Weld County. There is substantial agreement across the Rockies about this framing technique, summarized best by an organizer in Broomfield County.

Health and safety was first and foremost.

> But we were in a conservative district, relative to a district like Boulder. In Boulder if you want influence you go the environmental route… [our area] has a different demographic, and we knew that because we were part of that. I'm an independent, I'm not a Dem, I'm not a Green. So some of the things we may have put more emphasis on was property values….

Using the Property frame, he says, "We were able to permeate the conservative base." Table 9 shows the relationship between political party affiliation and issue frames.

Table 9: Property Rights Frames in Purple/Red Counties

Organization	Issue Frame (s)	Party Affiliation
Our Longmont	Health and Safety	Blue
Weld Air and Water	Health, Safety and **Property**	**Red**
Western Colorado Congress	Health, Safety and **Property**	**Purple**
Grand Valley Citizens Alliance	Health, Safety and **Property**	**Red**
San Juan Citizens Alliance	Environment, Health and Safety	**Purple**
Earthworks	Health, Safety and **Property**	**Purple**
Our Broomfield	Health, Safety and **Property**	**Purple**
Frack Free Colorado	Health and Safety	Blue
350 Colorado	Environmental Justice	Blue
Sierra Club	Environmental Justice/Health and Safety	Blue
Colorado Community Rights Network	Democratic	Blue

Emphasizing Property Rights also makes sense in areas where oil and gas production was significantly present on private land by 2014. This can in part explain by property rights were not emphasized by any groups based out of Denver County, which had low levels of both oil and gas production. Therefore, the Health/Safety and Property issue frames were employed primarily in red and purple counties with high and moderate levels of extractive industry.

Framing for Democracy

Even though the five groups above emphasized the Health/Safety and Property frames, the framing priorities of these groups do not explain the role of framing in the entire organizational field. As Babb (1996) has shown, organizations can have both "official" and "unofficial" issue frames due to the preferences of leaders. Many participants in this study personally viewed oil and gas extraction as an affront to local rights and democracy, but only one group prioritized that frame: the Colorado Community Rights Network. This group is particularly radical in its view of fracking as one single branch of excessive corporate political influence, along with issues like rent control, logging, dark money in elections and industrialized agriculture. As one CCRN leader stated, "the problem is not fracking. The problem is the system." According to another: "My experience is that other groups viewed fracking primarily as an environmental issue and not as a democracy issue. They might have seen it as a democracy issue, but [they] don't want to poke at that." Based in Denver and Boulder counties, the only two counties sampled to vote overwhelmingly for Obama in 2012, CCRN is allied with some Front Range groups.

Framing for the Environment

Babb's observation applies best to the relatively scarce use of the Environmental frame. In this case study, no leaders were sampled who did not *personally* link oil and gas extraction to climate change or other environmental concerns. If this is the case, why did so few groups emphasize environmentalism? To answer this question I will show the relationship between issue frames and the partisan stances and level of extractive industry. Table 9 shows the relationship

between issue frames and Obama support. Although there is little correlation between Health and Safety/Property and issue frames, Table 10 does suggest a relationship between "blue" counties and the Environmental issue frame.

Table 10: Environmental Frames in Blue Counties

Organization	Issue Frame	Party Affiliation
Our Longmont	Health and Safety	Blue
Weld Air and Water	Health, Safety and Property	Red
Western Colorado Congress	Health, Safety and Property	Purple
Grand Valley Citizens Alliance	Health, Safety and Property	Red
San Juan Citizens Alliance	**Environment, Health and Safety**	Purple
Earthworks	Health, Safety and Property	Purple
Our Broomfield	Health, Safety and Property	Purple
Frack Free Colorado	Health and Safety	Blue
350 Colorado	**Environmental Justice**	**Blue**
Sierra Club	**Environmental Justice/Health and Safety**	**Blue**
Colorado Community Rights Network	Democratic	Blue

Two out of three groups that prioritized the Environmental Justice/Environment issue frames were located in a blue county, while the other was located in a purple county. Groups

here saw oil and gas extraction as *primarily* an environmental problem: One organizer, speaking with me on an unseasonably warm winter day, talked about the role of oil and gas in climate change and the organizational perspective:

> We have to stop burning fossil fuels. The Earth cannot absorb the CO2. We are warming up, I think everyone feels it. If we want a future for guys like you, and maybe your children and grandchildren, they have to stop burning fossil fuels. There is no doubt about it. ... So yes, we're all about climate.

A leader of the San Juan Citizens Alliance, when asked which issue frames he prioritized, said that, although "all four [frames] resonate. … What we have been prioritizing are air quality impacts, climate change, public health and safety and operation costs." However, these environmental groups also felt compelled to bring a human element into their issue framing. For the Sierra Club and 350 Colorado, this meant emphasizing how environmental degradation impacts humans in general, as well as the disproportionate effects of oil and gas development on low-income residents: "We framed it as protecting the environment and environmental justice. So our framing is on air pollution, water pollution and how those affect our communities," said a Sierra Club leader. Another leader of this national conservation group stated that

> The Sierra Club works on pretty much any conservation issue you can think of. ...In terms of fracking in particular, there are a number of reasons that we are opposed to it. First and foremost is that it is a contributing factor to climate change. But beyond climate it has impacts on water including drinking water, air impacts, noise impacts, and a lot of fracking occurs in lower-income communities — they tend to be fracked — so it has environmental justice impacts. We look at [fracking] holistically."

However, this organizer also felt that health and safety framing was important to garnering public support for this issue, saying that this issue frame "resonates." A leader of 350.org's

Colorado branch also saw the Environmental Justice frame as a way to encompass many of the private concerns they held about oil and gas development: “I think for all of the reasons [environmental, health and safety, property rights and local control concerns] it is a huge environmental justice issue, with so many of the wells being placed where people don’t have the monetary or legal or time wherewithal to fight it.” “It’s really about justice,” said another 350 leader.

Environmental Justice/Environmental frames were emphasized in Boulder and Denver Counties, areas with respectively medium and low levels of oil and gas extraction, as well as La Plata County, an area with high gas extraction. Given that there is a significant partisan break between perceptions of climate change (Funk and Kennedy), it is logical to presume that organizers in predominately Republican counties would choose to emphasize issue frames other than environmentalism or climate change. When asked about his environmental framing, the organizer from the San Juan Citizens Alliance stated that “There are enough people in Durango [the largest city in La Plata County] that are like the Boulder/Denver type, and you can get away with [advocating for the environment].”

However, personal concerns with environmental impacts of oil and gas development were universal. Interestingly, *every single* leader from the other 7 organizations believed that, although climate change is concerning, emphasizing environmentalism would be relatively ineffective in mobilizing their county constituency. For example, one organizer sees oil and gas development “as an environmental issue as being a subset of the democratic concerns;” another organizer who emphasized the “corporate takeover of democracy,” argued that “there’s nothing wrong with [the environmental frame] — it is an environmental issue — but the cause of that, of how we all got [this problem of fracking], is another story.” A red county organizer characterized

this frame as "low hanging fruit" and that, in order to be effective, his organization had to "get past the environmental view." Perhaps the clearest examples of this argument came from this organizer in Longmont: "We minimized our worries about the environment because there is a very strong conservative element in [our area], and somehow environmentalists have been cast as ineffective, unrealistic tree-huggers. But that was a marketing strategy. That doesn't mean we weren't interested …." A Weld County activist agreed, discussing bittersweet victories of getting individual pads away from "densely-populated," "working-class" zones and areas with "lots of students:"

> Surface activity gets moved to better locations sometimes, but there is still...it is problematic. ...It's there, and it's still painful. And given what I know about global warming, and in my heart knowing that Bill McKibben [co-founder of 350.org] is probably right about this, it pains me. [We] have kept a pretty low profile in terms of bringing up global warming, because we knew it wouldn't play well here. ...I often wonder if that was the right tactic. But truthfully, that is a huge, huge part of this. I think people in the FR range communities that have already been believers in global warming who are much more attuned to that issue. There's a lot of folks here …who are deniers — they just don't believe in it or [don't] want to believe.

Therefore, the Environmental frame was a divisive issue between organizers. Of the twenty organizers sampled, ten also felt that emphasizing environmental concerns would lead to a guilt-by-association with what they perceived as "environmental" groups. Of those ten, half were concerned with being perceived as too radical and were all based in purple or red counties. One organizer working in a predominantly Republican county, when asked why this was, emphasized the argument of the Front Range activist above that "we must try to be smart in how we present the issue, but it still hasn't prevented us from being labeled as crazy liberal environmentalist treehuggers." Organizers sharing this sentiment commonly used the words

"radical," "Leftist," "ineffective," "Greens" and "Fractivists" in describing "environmental groups", though most would not say what specific groups they referred to. However, no groups on the Western Slope were described with any of this language, and activists on both sides of the Rockies used the terms "Front Range" or "Denver/Boulder" in defining what they were opposed to.

The other five organizers who said their group distanced themselves from "environmentalists" were concerned specifically with corporatism in a primarily grassroots multi-organizational field. This contingent was based entirely in Denver and Boulder counties, two counties that voted overwhelmingly for Obama. As has been shown, only two organizations sampled in this study were nationally-funded organizations: the Sierra Club and 350.org's Colorado branch. In a political environment filled with skepticism of big businesses, the Sierra Club directly received criticism from 25% of the total sample pool and one-third of grassroots leadership. This group was known in this contingent as "Big Greens," a derogatory term intended to highlight their perceived accommodationist and friendly stance toward industry and corporations in general. Subjects who employed the "Big Greens" language were all based on the Front Range and generally viewed the Sierra Club and some other national conservationist groups as too powerful in general but not strong enough against the oil and gas industry. "It is sad, because [some groups] have control and get to make all the decisions, but I hope that is changing," said one Front Range organizer. "Notoriously, there is one environmental group that appears to be in bed with oil and gas, and they are making decisions that we see as very destructive." Another, who took a hard line against the "Big Greens," said that "environmental groups are mostly focused on regulation, through working through the established system and hoping to improve the conditions under which they get poisoned. But the poisoning won't

usually stop."

Thus, 25% of interviewees distanced themselves from "environmental" groups for fear of being seen as too radical, while another 25% did so because they believed the "Big Greens" were not radical enough. In the following section I argue that organizational goals were central to these perceptions and examine the role of political geography and issue framing in goal formation.

Political Geography, Framing and Goal Development

I have shown how, in this sample, political geography played a central role in strategic frame formulation. But what does this mean for the social movement of which these organizations are all a part? In the following section I will show how this process can also pose an explanation for strategic goal formulation – that is, why political organizations choose a particular goal. In this case, groups have either devoted their energies to regulation of oil and gas industry or a *de facto*/*de jure* ban on fracking. As has been noted, there are hundreds of oil and gas regulations in the state of Colorado, covering many parts of the extraction and production process. These include, for example, regulations of how much methane can be emitted from a drilling site; required "drilling" plans that overview the geological and environmental impacts; and property owners' protections such as a requirement that a notice be sent to all building units within an industrial "Buffer Zone" (COGCC).

In the second category of goals is either a *de jure* ban such as Longmont's Amendment 300 in 2012, or a *de facto* ban on fracking through strong regulation or local control. What I argue is the best example of a *de facto* ban is the 2,500 ft. mandatory setback proposed in 2014 as Initiative 88 and 2016 as Amendment 78, which would have prevented all drilling in over 90% of the state (CU Leeds 2014) . I classify organizations as seeking a "ban" if they have

achieved a *de jure* ban in their county or are a steering committee member of Coloradans Against Fracking, which describes itself as "a coalition of groups across Colorado fighting for a ban on fracking" (CAF Website). Steering committee members of Coloradans Against Fracking include Our Longmont, the Boulder branch of the Colorado Community Rights Network, and Frack Free Colorado. As I will show, a number of organizations are technically rank-and-file members of CAF but do not strictly limit themselves to the pursuit of a *de facto* or *de jure* ban. Goals are added into the table of results below:

Table 11: Frames, Goals and Political Geography

Org	Issue Frame	Gas Prod.	Oil Prod.	Goal	Obama V.
OL	Health and Safety	Medium	Medium	Ban	Blue
WAW	Health, Safety and Property	High	High	Regulation	Red
WCC	Health, Safety and Property	High	High	Regulation	Purple
GVCA	Health, Safety and Property	Medium	Medium	Regulation	Red
SJCA	Environment, Health and Safety	High	Low	Regulation	Purple
EW	Health, Safety and Property	High	Low	Regulation	Purple
OB	Health, Safety and Property	Medium	Medium	Ban	Purple
FFC	Health and Safety	Medium	Medium	Ban	Blue
Colo	Environmental Justice	Low/Med	Low/Med	Ban	Blue
SC	Environmental Justice/Health and Safety	Low/Med	Low/Med	Regulate or Ban	Blue
CCRN	Democratic	Low/Med	Low/Med	Ban	Blue

A number of trends are clear here. Perhaps most apparent is that zero groups from the Western

Slope advocated for a ban on oil and gas development, which all had high or medium levels of development and are politically purple or red. Conversely, the "Ban" groups are all located on the Front Range, none have high levels of oil or gas development in their counties, and none are politically red. There is also a rift along framing strategies: none of the organizations that emphasized Property Rights called for a ban, while two out of three groups that emphasized the Environmental/Environmental Justice frame do. That the Sierra Club is not limited to the pursuit of a ban is significant and can explain in part why there is some distrust of this group. In red or purple counties with high levels of oil or gas extraction, organizers were adamant in taking a moderate stance due to the fact that industry was already entrenched and relatively popular in their counties. An organizer from the Western Slope describes her strategy below:

> Once industry is in people's backyards…and it is hurting your political system and hurting your neighbors and they are turning against you – and it isn't hypothetical anymore, you are … dealing with the impact *right now*. So yes, maybe people will be for a ban sometime in the future. But people are being impacted right now and that has to be dealt with.

Below, another organizer from the Western Slope argues that:

> We know oil and gas development will continue, and it will be beyond my lifetime that we can rely on solar energy. The oil and gas industry has a long history and is entrenched not only in the US but also in the whole world, so it's gonna be a hell of a long time before they go away. … I want a solar panel on my house too, but the reality is that I have to deal with the guy who wants to put a [drilling] pad next to my home. So we just want a seat at the table.

Another organizer from the West agrees: "If you don't show up at the table, the only people there are [already] at the table. What kind of regulations do you think you'll get then?"

The regulatory approach was scorned by many, particularly in Boulder, Denver and Broomfield Counties. This sentiment is summed up best in quotes like these: "Regulation is

bullshit. It is nibbling along the edges of the problem"; "We would all prefer a ban"; and "Their [pro-regulation groups'] position is to be friends with the enemies, to have a place at the bargaining table. They're all buddies. … You're not gonna change their position on fracking by being friends with them. You have to strike fear into their hearts."

Conversely, many organizers admonished the Front Range "fracktivists" for taking a position that was both too radical and ignorant of the issue statewide. "There's the citizens and then there's the fracktivists," said one Westerner. "I am sorry that there isn't a word to describe our groups. Because we don't believe in the 'scorched earth' policy [of zero compromise]." A Front Ranger who didn't necessarily advocate for either a ban or regulation described the frustration:

> Unless you are for an outright ban, they don't view your organization as wanting to restrict or ban fracking. I think that has caused problems for…groups who understand that, to get things done, compromise is necessary. So I do think it is fair to say that, at times, there has been conflict between the 'ban-it-fracktivists' and the larger conservation and environmental movement.

A Westerner also linked framing strategies to the "fracktivist" policy of zero compromise:

> It's a position that I can appreciate. They are saying, 'We have to stop development because we have to save the planet and save the climate. I appreciate that. But when this becomes a bitter fight between pro-regulation organizations like mine and anti-frackers, the oil and gas companies win, development continues apace, and nothing gets done. The oil and gas companies are having a hysterical laughing party…while this bizarre debate continues.

What are the implications of these perceptions for the perceived strength of the social movement? When asked, "Do you think that there was adequate cooperation in the movement?", 11 organizational leaders said no, 6 said yes and 2 could or would not say. For individuals who believed that there was inadequate cooperation, goals were the defining cleavage. "There is a lot

of infighting amongst the anti-fracking contingent this past year, and that is tough to see. … There is some sort of McCarthyism, in my opinion, from groups judging people on how pure [other groups] were and how much [they] compromise," argued an organizer from Weld County. "Oh yes...there are powerful differences," agreed another from the Front Range. "[The movement] is fractured. … If we could be sure that there is enough interest among Colorado voters that a moratorium or ban is a good thing, I think that all the groups would come together." Another Front Ranger saw room for improvement in working with other groups:

> No. I think we're not adequately cooperating. I think that we're getting better, and there's a lot more work that needs to be done. I would like to see an understanding that our movement is an ecosystem, and that everyone has a part to play, and that some of those parts can be more radical, and some can be less radical. Not to put down people that have a different perspective, but we need to work together to achieve a similar goal."

A Front Ranger from an environmental group also noted the difficulty of working with the radical, anti-fracking contingent, saying "There is inadequate cooperation, and I believe there is a lack of leadership on the issue. There are also people on the far-Left, who sometimes speak the loudest, have made it very difficult to make any progress on halting fracking here." A Westerner went further to distance herself from many other groups, arguing that

> The majority of people who are concerned about fracking, they have done such a disservice to minimize the impacts of oil and gas development in general. ...I don't consider myself part of the anti-fracking movement. … I have never considered myself anti-oil and gas… I want the best regulations that our communities deserve.

Amendments 75 and 78 were at the heart of this cleavage. When asked about why her organization didn't assist the campaign, another Westerner replied that "We supported the measures with our hearts, but couldn't sign on publically. [The 2500 ft. setback] was just too

much, and we would have lost credibility. The fractivists thought we were selling out. But we need to take baby steps on this to get public support." A Westerner agreed, saying that "I think the past two ballot initiatives are a very good example of how our people felt about it and who people on the Front Range felt about it." A Front Ranger believed that his organization's resources were rejected by some groups: "You have very passionate people who spearheaded the efforts who did not want to coordinate or collaborate with existing organizations, volunteers or professional staff. By and large, they did not want to coordinate with existing organizations. There were strictly territorial and not good partners." Another believed that the Amendments were inadequate: "If [75 and 78] passed at the state level, they would have not protected us. The oil and gas companies would have filed a federal lawsuit."

However, the six organizers who felt there there was adequate cooperation between groups felt so strongly. When asked if there was enough cooperation, these organizers responded with these statements:

"Absolutely!"

"I don't think there was anything urban vs. rural. We had people in the mountains, in Greeley, in Ft. Collins, Battlement Mesa, all over the state. I don't think there was any big fight among the activists that has to do with that."

"We don't lump all the Big Greens in the same group, because some of them have accepted funds from oil and gas. But never have we been dominated by them, they are very conscious of our leadership."

"Here... we feel that we need all the friends we can get, and we aren't as hard on being purist."

Of the two organizers that felt they could not say whether there was adequate

cooperation, both were aware of "infighting" or "differences" between some groups. However, neither could say definitively whether cleavages were significant on a statewide level and only spoke from his/her own experiences. Below, one of these organizers talks about her strategy of broad acceptance, which she learned from an older mentor:

> [He] would work with anybody who was willing to do something about [fracking]; he wasn't particular about whether you wanted a moratorium, or whether it was a community rights issue, or if it had to be a ban or nothing. And that is kind of a tactic that I have taken and that works best. ... Whatever their reason, whether they aren't morally opposed to fracking but are there because of the property value, I really don't care why you're here, I'm just glad you're here. And [groups from all the framing categories] helped. ...Even though I know that there was a lot of infighting. .... I didn't care why anybody was helping me, I was just glad that they were.

Conclusion of Results

In this sample of 19 organizers from 11 organizations, political geography — specifically, party affiliation and the level of oil and gas development in their base county — played a defining role in both the framing strategies and goal formation of organizations responding to oil and gas development in Colorado. First, I showed that the Health and Safety frame was dominant across all independent variables due to its perception as a safe and apolitical frame. However, the Property Rights, Environmental Justice and Democracy Frames were found to have been developed deliberately based on county political geography. No correlation was found between issue frames and goals, but organizers often felt that there was a correlation between framing and goals. In particular, organizers from the Western Slope and Weld County, almost all of which emphasized health, safety and property and advocated for regulation, associated "ban it all fracktivists" with environmentalism. Cleavages like this and others resulted

in a majority of respondents who felt that there was not adequate cooperation between organizations in this movement. Other potential explanations for this cleavage are explored in the following section

Chapter Five

Discussion of Results

What are the implications of these findings? What do they tell us about this and other social movements? In this section I apply the findings of this study in three areas: the social movement literature, other social movements and the anti-fracking movement. In doing so I recommend further areas of scholarly study focusing on political geography and strategic decision-making and explore the options of organizers moving forward in their challenge of oil and gas development in Colorado. Next, I discuss a number of limitations to the study and address exactly what the study does and does not address.

First, what do the findings suggest about the role of political geography in organizational issue framing? As Benford and Snow (1986) have shown, organizers deliberately target a constituency with framing strategies. In politically red and purple counties, organizers typically targeted Republicans, who were generally viewed as challenging to mobilize against oil and gas development. Organizers who felt that they did not have this constraint, such as some working in La Plata, Denver and Boulder counties, publically voiced their private concerns about climate change and the necessity of environmental protections. This framing strategy is, according to White (1999), the establishment of an organizational perspective; that perspective can enable or constrain other organizations in a multi-organizational field (Klandermans 1992) and movement leaders (Babb 1996), leading to the establishment of "official" and "unofficial issue frames."

While the results of this study confirm well-established ideas, these scholars operated on the assumption that organizers cater to political geographic factors. In addition to showing how political geography influences the framing strategies and goals of social movement organizations, this study also broke new ground in showing how groups frame *each other,* and

the implications of that framing (in some cases, negative) for a greater social movement. Thus, the conclusions suggested in this study should inspire new research into these relationships.

First and foremost, the study found a strong relationship, in this case, between political geography and issue frames; and a link between political geography and goal formation. Interestingly, partisan politics found its way into this definitively apolitical issue (oil and gas extraction takes place in both red and blue counties), and organizers attempted to manipulate specific political constituencies – particularly Republicans – with tailored messages. Implicit here is a predominantly Democratic social movement that sought in many cases to "bring in" Republicans, but data on all organizers' party preference(s) was not collected.

These two findings could be applied to a myriad of social movements, especially developments in environmental politics where similar issue framing may be used, including: social organization for coal mining or nuclear policies, which include a coalition of environmentalists, citizens with health and safety concerns, and a possible radical contingent; and the framing strategies of organizations in the rural Northwest seeking to replace dams with other forms of renewable energy. The results also indicate that a diverse political geography presents challenges for organizers seeking to build a comprehensive social movement – a suggestion that can be applied to many instances of statewide organization in a "swing" state. Like this case study, these cases would involve a multi-organizational movement around an issue that can be addressed primarily through state policies. Strictly partisan issues like abortion, transgender rights and gun control could not be explained with these results. Instead, applications to the two examples above, the anti-fracking movement in Ohio, the campaign to legalize medical marijuana last year in Florida, and the secessionist movement in California would benefit the literature. Here, the perspectives, framing strategies and goals of political "radicals"

could be examined in contrast to political "moderates." Do these contingents organize separately in these instances? Do political views and geography, as well as the impact of an issue, influence the formation of these positions? A comparative study between these factors in Colorado's anti-fracking movement and those in Ohio, New York and Pennsylvania, which all have robust movements, would also be insightful and allow for a direct application of these findings to other cases.

In this thesis there is insufficient evidence to support the claim that the issue framing process – the establishment of perspective – also defines organizational goals. In addition to the potential case studies above, asking questions like these could shed light on this relationship: Do environmentalists tend to have a "scorched Earth" policy of zero compromise in campaigns like water rights in California's almond country? Or do Republicans with ardent property rights views and a higher stake in the issue generally take a stronger, "scorched Earth" stance? Insights could seriously benefit the broader environmental movement by questioning the common perception that environmentalists are political radicals.

A strong contribution of this study to the literature is the phenomenon of groups framing each other in a multi-organizational field, in which organizations created shorthand "meanings" for other groups. Although it cannot be argued definitively if cleavages in the movement are the result of differences in organizational issue framing, the framing of other groups clearly influenced alliance building and the health of the larger social movement. This latter process had serious implications for the success of a social movement by dictating who should be worked with and where alliances should not be made: in this case, groups universally made generalizations about "environmentalist" groups and "Big Greens," which were seen respectively as too radical or too moderate; an alliance here would risk being cast as such by a groups' local

constituency and perhaps beyond. On the scale of the entire multi-organizational field, this framing of these groups split the movement to challenge unfettered oil and gas development. This phenomenon could also be explored in the examples above which have seen participation from national environmental groups like the Sierra Club and 350.org, such as the anti-fracking movements in Ohio and Pennsylvania.

Implications for the social movement

This is the first academic treatment of the "anti-fracking" movement in Colorado. In order to move beyond merely treating this fascinating political phenomenon as a case study, I ask: what are the implications of these findings for the success of this social movement? Given that Colorado has seen strong organization in response to oil and gas production, this question could impact the natural gas boom in one of the US's top producing states. This study shows that, first and foremost, differences in framing and goals arise from the political realities in an organization's county, which vary substantially across the state. In this sense, these differences arise from the "natural" process of issue framing. This does not mean that the social movement is "doomed;" rather, I present two possible courses of action for this social movement.

Colorado is unlikely to become politically homogenous in the near future. Thus, these locally-based grassroots organizations (and perhaps the Sierra Club and 350 Colorado) could recognize the political realities across the state. This would mean casting aside political "purism" and scorched Earth policies in favor of a more comprehensive view of oil and gas development that accounts for areas in which extractive industry is not only entrenched but also enjoying significant public support. In other words, Front Range groups advocating for a statewide ban, local control (Amendment 75) or the 2500 ft. setback (Amendment 78) would benefit from

listening to organizers in areas with a significant Republican population and/or high levels of oil and gas development. Compromise between these groups, which together represent the politically diverse state of Colorado, could create policy proposals that more Coloradans could support – even voters who are currently unaffected by oil and gas extraction, but may be in the future.

On the other hand, organizers in red or purple counties with high and/or medium levels of oil and gas development could publically voice stronger concerns about oil and gas development while still focusing on the Health and Safety frame. This would be aided by the recent wave of research on "fracking," which suggests that health and safety risks to residents are greater than previously known. The inevitability of mistakes in oil and gas production and transportation, such as major leaks or spills, would also allow for organizers to "double down" on these concerns. Most importantly, the continual spread of oil and gas extraction into new areas is seen by most organizers sampled here as a catalyst for opposition, though my results suggest that increased development actually leads to more moderate goal formation. Environmental degradation resulting from climate change or irresponsible oil and gas development may also allow for organizers to begin voicing these private concerns in campaigning for a stronger stance.

Regardless of how the social movement mends its fractured condition, I argue that three political and economic realities will facilitate this process. First, the passage of Amendment 71, in November 2016, now requires that citizen-proposed constitutional amendments be signed by at least two percent of the population in each state senate district in Colorado, of which there are 35. This is a major challenge for this grassroots-dominated field, which has primarily sought institutional change through the ballot initiative process. Secondly, the Colorado Supreme

Court's overturn of the Longmont, Fort Collins, Broomfield and Boulder bans and moratoria means that oil and gas development will likely spread into these areas, garnering strong reactions from the public on the Front Range, while industry will continue to expand into other areas of Colorado and affect certain areas more significantly. The results of this study suggest that an increase of oil and gas extraction in a county correlates with moderate policy proposals; if this is indeed the case, the Front Range may become more politically moderate on this issue. Lastly, the results do show a correlation between the Environment/Environmental Rights frame, which was employed in Denver and the city of Boulder, and the "ban" or "strong regulation" stances. This could mean that, as climate change worsens, the Front Range communities will continue to take a stronger stance than the rest of the state.

Fortunately, organizers on the Front Range are attempting to establish stronger ties across the state through groups like the League of Oil and Gas Impacted Coloradans, or LOGIC, whose mission is to "unite Coloradans living near current and proposed oil and gas operations and other concerned citizens to pass new energy development policies that prioritize public health and safety and environmental protection." LOGIC's Board of Directors include a number of participants in this study and represent Denver, Weld, Garfield, Boulder and Delta counties. According to this mission statement, the group will lead with health and safety and environmental concerns and affirms that it is not strictly anti-fracking. "Our view is sometimes that's appropriate and sometimes it's not, and it shouldn't be done on the backs of these homeowners," LOGIC Executive Director Sarah Loflin told the *Colorado Independent.* "We think it's a valid concern to say that soccer moms and a high volume of fracking trucks and school busses don't necessarily mix. We think those neighbors should be heard" (Hutchins 2016). Indeed, the emphasis on "soccer moms" and "neighborhoods" signifies a more moderate

rhetorical approach and an appeal to the average Coloradan, especially in contrast to the language of "Coloradans Against Fracking." I argue that this strategic approach, which takes the "middle of the road" in terms of both issue frames and goals, is more likely to resonate with Coloradans across the state and increase the likelihood of a successful ballot initiative, though this approach runs the risk of alienating groups with stronger issue frames and/or goals.

Other explanations: resource mobilization and collective identity

Are there other potential explanations for the cleavages in this social movement? Outside of framing theory, resource mobilization theorists have for decades argued that alliance-building in social movements is based upon the sharing of resources – funding, personnel, communications techniques like television, canvassing or direct action campaigns, and office spaces (Jenkins 1983). Obviously, adequate resources are required for sharing between organizations, which suggests that underfunded groups will be less successful in building alliances. In this study, several participants argued that insufficient or unethical spending on the part of some of the organizations sampled here were to blame for the insufficient cooperation: One organizer from the Front Range discussed the impact of another allied group pushing their own ballot initiative in 2016: "Unfortunately, although their intentions are great, there has been some siphoning off [from the ballot initiatives]. A lot of volunteers starting working with [them.] So there weren't as many people working on [Amendments] 75 and 78 as we should have had." When asked if framing was responsible for the cleavages in the movement, another Front Ranger replied that "I think what really gets in the way is the money aspect: that some of these Big Green groups are working with the Democratic funding, and the Democratic party in Colorado is corrupt with oil and gas money in Colorado. So people distrust them because they are close to oil

and gas money." One leader of a national environmental organization, replying to this sentiment, argued that "They overestimate how much money the national conservation groups actually have," suggesting that even the national groups sampled in this study believe that they are underfunded. Therefore, resource mobilization should be accounted for in this primarily grassroots movement.

Another significant aspect of any social movement is personal relationships between activists. Collective identity theorists are concerned with these personal relationships and how they affect organization: do organizations share a common identity? Is that formed in opposition to other identities? And how do organizational tactics and strategy influence the formation of that identity? These are some of the questions asked by collective identity theorists (Melucci 1995; Plows 2000). In this study, personal relationships were not explicitly examined in the interview process. However, it is clear that the Western Slope organizers sampled in this study typically viewed the Front Range organizers as an identity group or "type" through terms "environmentalists" and "fracktivists." If data had been collected, it is likely that groups in Denver, Boulder and Broomfield counties (the Front Range communities) would have more personal relationships and identify more with each other, while organizers from counties like Weld, Mesa, Garfield and perhaps La Plata would probably identify with each other based on their political geography. This could explain in part why organization is strained between these two greater groups.

Lastly, the geography of Colorado itself, which is dominated by the Rocky Mountains in the middle of the state, should not be ignored. The Rockies are an enormous natural barrier that can be treacherous, at best, with foul weather in all months, and densely populated areas are typically on the western or eastern sides of the mountains. This geographic barrier may

exacerbate the distance between the Front Range and Western Slope communities and pose a challenge for statewide organization. On the other hand, the natural beauty of Colorado lent to the strength of the Environmental and Health and Safety issue frames.

Limitations to the findings

There are three significant limitations to these findings that resulted from the methodology. Given the nature of undergraduate theses, the time constraint should not be ignored. Interviews were conducted over a three-month time period during a full undergraduate course-load and many other time constraints. Simply put, more participants would have been found if there was more time. Secondly, no compensation was offered for interview subjects, who participated out of goodwill to the author. Third, it came to my attention during the interview process that I personally was not trusted by some activists on the Front Range, who were skeptical of my intentions. Wanting to learn more about why this was the case, I learned that this distrust reportedly resulted from the affiliation of this study with the Center of the American West, a scholarly organization based out of CU Boulder that has facilitated public forums on oil and gas development called frackingSENSE. These forums often had industry leaders and activists in the same room with the goal of coming to some public understanding about how exactly oil and gas development works and how it may impact communities. In some activist circles, these forums were perceived as biased toward the oil and gas industry and the state. Therefore, some individuals did not trust me and this academic pursuit and would not participate. However, this only explicitly occurred in two instances, and it cannot be said how prevalent this sentiment was among the social movement leaders. In any case, the 19 leaders who did speak with me were either unaware of this skeptical contingent or were not themselves

skeptical of my intentions.

It cannot be said whether some key organizations missing from this sample, such as Food and Water Watch and Protect Our Loveland, would have presented a different narrative than what is shown in this paper. However, these two organizations were never explicitly mentioned in interviews as examples of "fracktivists" or "Big Greens," whereas sampled organizations were, as has been shown. It is my suspicion that, had the groups had been sampled, they would have further supported the narrative, but this is purely speculation. Lastly, there is always the possibility that I am not aware of major organizations in this movement, and that the results are skewed by these "unknowns" – however, it is clear in the results that organizers are overwhelmingly voicing concerns about others sampled in the study.

Conclusion

Political geography plays a defining role in strategic decision-making. In Colorado's grassroots challenge to oil and gas development, organization took place primarily on the county level, and leaders tailored messages to their local population or a contingent in that population. However, this process posed challenges for statewide coalition-building in 2014 and 2016, and can explain the reported lack of adequate cooperation in this social movement. Groups here also framed each other and routinely misrepresented each other's perspectives. Moving forward, new political realities suggest that organizers will struggle to work through the ballot initiative process without comprehensive coalition-building. In the social movement literature, more research should examine the relationship between political geography and strategic decision-making, as well as cross-organizational framing.

Appendix

Table 1: Sampled Counties and Randomly Sampled Counties

County	Gas Prod.	Oil Prod	2012 Vote	Organization?	Sampled?
Boulder	Medium	Medium	Blue	Yes	Yes
Weld	High	High	Red	Yes	Yes
Garfield	High	High	Purple	Yes	Yes
Mesa	Medium	Medium	Red	Yes	Yes
La Plata	High	Low	Purple	Yes	Yes
La Plata	High	Low	Purple	Yes	Yes
Broomfield	Medium	Medium	Purple	Yes	Yes
Denver/Boulder	Low/Med	Low/Med	Blue	Yes	Yes
Denver/Boulder	Low/Med	Low/Med	Blue	Yes	Yes
Denver/Boulder	Low/Med	Low/Med	Blue	Yes	Yes
Denver/Boulder	Low/Med	Low/Med	Blue	Yes	Yes
Baca	Low	Low	Red	No	No
Arapahoe	Low	Medium	Purple	Yes	No
Montezuma	Low	Medium	Red	No	No
Larimer	Low	Medium	Purple	Yes	No
Bent	Low	Low	Red	No	No
Gunnison	Medium	Low	Blue	No	No
Kiowa	Medium	Medium	Red	No	No

Table 2: Levels of Gas Production (Natural Gas and Coalbed Methane)
Units in Thousand Cubic Feet (Mcf)

County	2012	2013	2014	Average
Boulder	197,908	190,361	123,542	170,604
Broomfield	153,772	88,264	59,139	100,392
Denver	13,360	10,595	10,295	11,417
Garfield	2,829,984	2,229,258	2,074,496	2,377,913
La Plata	34,496	31,029	29,994	31,840
Mesa	72,122	56,845	65,472	64,813
Weld	36,753,693	53,687,176	81,604,368	57,348,412

Table 3: Levels of Oil Production

Units in 42-Gallon Barrels

County	2012	2013	2014	Average
Boulder	2,616,099	2,747,038	1,990,858	2,451,332
Broomfield	2,037,804	1,652,025	1,328,262	1,672,697
Denver	393,488	330,546	302,575	342,203
Garfield	701,677,061	653,570,381	614,972,281	656,739,908
La Plata	392,253,852	356,903,245	333,643,070	360,933,389
Mesa	47,211,249	38,248,677	36,330,953	40,596,960
Weld	272,757,368	310,702,335	391,874,384	325,111,362

Table 4 : Political Affiliation of Organizations' Counties

Org	County Vote
OL	Blue
WAW	Red
WCC	Purple
GVCA	Red
SJCA	Purple
OGAp	Purple
OB	Purple
FFC	Blue
Colo	Blue
SC	Blue
CCRN	Blue

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