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Gasland: The Rhetoric of Images in the New Media Landscape

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Gasland: The Rhetoric of Images in the New Media Landscape

A Thesis

Submitted to the Graduate Faculty of the
University of New Orleans
in partial fulfillment of the
requirements for the degree of

Master of Arts
in
English
Rhetoric and Composition

by

Todd Thaxton

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Abstract

Josh Fox's film *Gasland*, released in 2010, started the national debate concerning the process of hydraulic fracturing, and launched the term "fracking" into the public consciousness. *Gasland*, nominated for four Emmy awards, was the winner of the 2010 Environmental Media Award for Best Documentary, the Sundance Film Festival Special Jury Prize, and the Yale Environmental Film Festival Grand Jury Prize. Using the momentum from the film's popular reception, Fox and the *Gasland* team successfully established a grassroots movement that was responsible for helping create the Frack Act and a moratorium on fracking in the Delaware River Shed.

This thesis intends to determine what made *Gasland* so influential. Through a rhetorical criticism and media analysis, I will show how Fox's film ignited the debate on domestic natural gas production and has created a multi-public literacy that enables social change.

CHAPTER 1

INTRODUCTION

Overview

“I’m not a pessimist. I’ve always had a great deal of faith in people.” The voice-over narration begins against a backdrop of rugged, snow-capped mountains, flanked on both sides by large red and white drilling platforms with their signature ventilation stacks and accompanying multitudes of trucks, storage containers, and containment tanks. “...a great deal of faith in people that we wouldn’t succumb to frenzy, or rage, or greed; that we’d figure out a solution without destroying the things that we love.” As the narration ends, writer/director Josh Fox enters the frame wearing a baseball cap, white t-shirt, and gas mask, instantly creating one of the most powerful visual images of the award-winning documentary *Gasland*.

Fox’s story begins in May 2008, after he received a letter from a natural gas company offering to lease his family’s land in Milanville, Pennsylvania. In an interview with NPR’s Terry Gross, Fox explains that “We were offered about \$100,000 to lease 19.5 acres of my family’s land in the upper Delaware River Basin of Pennsylvania. Within my family, there was a little bit of debate about this. I think at first my father was interested in leasing because he was interested in the money. And I said look, ‘I think I have to look into this, so give me some time to go ahead and get the facts.’” Wanting to know more about the possible environmental effects of the process, Fox began researching information on natural gas drilling, specifically, a stimulation technique known as hydraulic fracturing (HF). Hydraulic fracturing, better known as “fracking,” is the process of injecting millions of gallons of water, sand, and fracking chemicals, including

volatile organic compounds (VOCs) such as benzene, toluene, ethylbenzene, and xylene, up to 8,000 feet deep into pre-drilled gas wells. The contents are forced into the earth under pressures high enough to fracture the bedrock, thus creating a web of interconnected cracks that allow the gas to escape. The typical fracking of a well, which can be repeated as many as eighteen times, uses between one and eight million gallons of fresh water, and up to 300 tons of fracking chemicals, depending on the location of the well and the specific processes used by the drilling company (Fox).

During his initial research, Fox visited Dimock, Pennsylvania where hydraulic fracturing technology was already being used. In Dimock, which is located above portions of the Marcellus Shale—a formation of marine sedimentary rock that stretches through parts of Pennsylvania, New York, Ohio, and West Virginia—Fox met with people who were suffering various health issues, including permanent neurological damage, chronic respiratory problems, and cancers, and who had concerns that their well water was being contaminated by the drilling processes. In his NPR interview Fox describes the situation in Dimock: “There were children who were complaining of getting sick, animals who were getting sick, and the whole place was pretty much laid to waste. I mean, there was like, gas well pads everywhere, incredibly heavy truck traffic. It seemed like normal life had just been turned completely upside down. And I heard all these reports of people who could light their water on fire” (Gross). After speaking with residents who were able to light their tap water on fire due to methane contamination and whose complaints were largely being ignored by the Pennsylvania Department of Environmental Protection (PDEP), Fox began an eighteen-month, twenty-state investigation to discover the truth about HF.

The resulting project took Fox to communities in Colorado, Wyoming, Utah, Texas, and Louisiana, where again numerous individuals were experiencing a *mélange* of chronic health

problems, as well as contamination of water wells and surface water. Chronicled in the 2010 documentary *Gasland*, Fox's cross-country odyssey has sparked a national debate concerning the issue of balancing our need for domestic energy production to decrease American dependence on foreign oil while preserving our national heritage and the ecological systems local communities depend on. Winner of the 2010 Environmental Media Award for Best Documentary, the Sundance Film Festival Special Jury Prize, the Yale Environmental Film Festival Grand Jury Prize, and nominated for four Emmy awards, "*Gasland*," Fox's first foray into documentary, writes Stewart Nusbaumer of the *Huffington Post*, "just might take you from outrage right into the fire of action."

After *Gasland*'s release, communities targeted for future HF wells, concerned citizens, and environmental activists began a nationwide appeal to lawmakers and industry regulators demanding studies on the effects of HF. In October 2011, Cynthia Dougherty—director of the Office of Ground Water and Drinking Water section of the Environmental Protection Agency (EPA) and Chair of the U.S. Senate Committee on Energy and Natural Resources—overruled a 2005 decision by the Subcommittee on Energy and Mineral Resources, which stated that no further testing of HF was necessary. Further, Dougherty demanded a new investigation into the environmental impacts of HF, which is scheduled to be released in 2014.

Due to *Gasland* website's intensive online campaigning and continuing public engagement, fracking of the Delaware River and Marcellus Shale basins, which provide drinking water for millions of Americans in the Northeast, has been postponed in anticipation of new environmental impact studies. The moratorium on fracking in the Delaware River Basin (DRB) is an important victory for the *Gasland* team, as Fox explains in an interview with Amanda Costa:

There was never a question that the film was first off always made to defend the Delaware River Basin, which is a watershed area where I live. I didn't know if the film was going to be a full feature or what was going to happen because we made short segments as I investigated. We showed those segments across the DRB and in some sections of New York to educate people about what this process really was because the gas companies were not being honest.

The theme of corporate misinformation and blatant dishonesty concerning the economic, environmental, and health impacts of HF is a common thread throughout *Gasland* and similar documentaries, such as Debra Anderson's *Split Estate* (2009), that target the natural gas industry and the HF process.

In this project, I will occasionally reference Anderson's *Split Estate* to show that *Gasland* has had a greater impact on constructing a debate on HF. Whereas *Gasland* was mainly produced for, and targeted to, landowners in the East and Northeastern United States, *Split Estate*'s target and general audiences were primarily landowners in the West and Southwestern United States. Another difference between the two films is in which specific legal issues concerning the HF process each focuses on and how it affects landowners and citizens. *Gasland* is mainly concerned with the exemption of the HF process from all existing environmental regulation, whereas *Split Estate* focuses on the issue of surface rights versus mineral rights. Additional differences between the two will illustrate how two documentaries on the same issue can have disparate reception into the public sphere.

Background

As global economies race to find alternative energy sources and struggle to keep up with

an unprecedented increase in consumer demand, transition fuels such as natural gas are being promoted by carbon based corporations (oil and natural gas industries) as the silver bullet solution that will “enhance our domestic energy options, reduce our dependence on foreign supplies, and serve as a bridge fuel to renewable energy sources” (Subcommittee on Water and Power 1). With the United Nations 2012 report on Sustainable Energy and Development estimating that globally there will need to be a 30-40 % increase in energy production over the next 15 years, communities around the globe are increasingly being forced to decide between protecting many of the earth’s remaining undeveloped wilderness areas and unfiltered water supplies or trying to carry on the present fossil fuel-based economy by tapping the last known reserves of carbon-based fuels.

However, unlike most global environmental problems, where the solutions seem almost impossible to implement, the issue of HF is grounded right here in our own backyard, and implementing its solutions is a matter of priority. The fight to change a nation’s personal and economic priorities, based on complex scientific arguments that most people do not understand, is a battle of epic proportions. Recently, there has been an extremely powerful movement within the Conservative Republican party, which is supported by all four of the Republican Presidential candidates and funded by the fossil fuel industry, to stop the funding for and essentially dismantle the EPA—the only federal environmental regulatory agency. One of the most disturbing “back-slide” trends, and one that I focus on in my project, is the ability of, and the process through which, corporations are able to get legislation passed that exempts them from any existing federal or state environmental regulations. Today, with the world facing an environmental/manmade crisis unlike any in modern history, the emerging trends of

environmental deregulation from America's corporatocracy should be a significant concern for all.

Similar to the "spotted owl" debate in the early 1990s and the continuing debate on deforestation, environmental concerns about HF are often pitted against the economic survival of local communities. In her testimony to the Committee on Energy and Natural Resources in 2011, Cynthia Dougherty highlighted this conflict: "As we listened to citizens at public meetings across the country last year, we heard concerns many have for their families, their communities, and their water resources. We also heard from citizens who expressed how much their communities desperately need the income that could be gained from natural gas production" (2). With the EPA estimating that today natural gas supplies 25% of the U.S energy supply and could provide as much as 50% by 2035 (Manuel 2), there is an urgent need for corporate and political transparency regarding the possible environmental and health effects of HF. An extensive political and legal analysis of the process through which corporations are able to exempt themselves from existing environmental regulation needs serious inquiry. According to Fox:

there is no ability for citizens, outside of being organized, to fight these companies in any effective way that protects their rights...how the gas companies got it [HF] exempt from the Safe Drinking Water Act and the 2005 Energy bill, the players behind all this being Dick Cheney, Karl Rove and Halliburton, all these people were pushing this. So there is a very real legal battle going on. It has nothing to do with clean energy or safe energy; it only has to do with their bottom line. (Costa)

Environmental Rhetoric

Throughout U.S. history, Americans have always had a complex and dynamic relationship with the environment and the commodification of natural resources. Literature—starting as far back as the book of Genesis in the Judeo-Christian myths, which states God gave man sole “dominion” over nature—has served as a record and a written testament to man’s beliefs and attitudes towards nature and his role in the natural world. Though this project is not intended to discuss religion or any individual religious views towards environmental issues, a brief discussion of how Judeo-Christian narratives have influenced Western culture’s concept of nature—including how man has attempted to define himself ontologically through his identification with, and his perceived role in, the natural world—is necessary to understand the history of environmental rhetoric and the two opposing ideologies, the anthropocentric and the biocentric, through which individuals define and construct their relationship with nature. An understanding of these two competing ideologies is important to the overall project, in that it helps to highlight the deeply held convictions, both political and theological, that separate the pro-environmental movement from the pro-industry movement, and to establish a theoretical framework that defines how and why individuals identify with one particular view of human interaction with nature over another.

In the United States today, much of the mainstream environmental rhetoric is centered on the binary of economic success versus environmental preservation. This binary is used in every major environmental debate from deforestation to global warming to energy production, and is rooted in the belief that as planetary citizens, either, we are to protect and preserve the environment, or that through divine providence, we have been given the right to exploit and commodify our environment. The pattern of thought that views and interprets everything in

terms of human experience and values is the anthropocentric paradigm. Conversely, the biocentric paradigm, a pattern of thought that is centered in life, states human experience and values should be qualified in terms of how they promote and sustain natural life cycles.

Until the late 1940s, the anthropocentric paradigm was the dominant school of thought in American literature. From the Puritan typological lens that viewed nature as an evil entity out to destroy humanity and should therefore be dominated to Thomas Morton's pastoral lens that considered America a "New English Canaan" and viewed nature as nothing more than a commodity to serve the interests of land owners to the doctrine of our "manifest destiny" that proclaimed Americans have been called upon by a higher power to "civilize" and "domesticate" the land, American culture has been inherently infused with the notion that the land and its resources are a frontier of never ending opportunity and boundless commodities. Today, with evolving awareness from the general public about environmental degradation and preservation and increasing practices of sustainable development, viewing the world through an anthropocentric lens seems anachronistic; on the contrary, it is not only still a fundamental belief held by millions of Americans, but is a political selling point to millions of people who are unemployed and struggling with economic insecurity. In a recent interview with Bob Schieffer, the number two Republican presidential candidate, Rick Santorum, argued that the "radical environmentalists" philosophy that man should protect the earth "is a phony ideal. I don't believe that's what we're here to do... We're not here to serve the earth. That is not the objective, man is the objective." The continuing use of this self-serving mantra to shield people and corporations from any shared responsibility regarding environmental destruction and depletion should be of great concern to anyone hoping for any substantive changes in environmental policies and regulations.

Paradigm Shift

Around the turn of the twentieth century, author and naturalist John Muir began to publish travel narratives and journals that graphically described and warned against the increasing spread of certain industries and the resulting environmental impacts on the landscape. Muir's concern focused on the large-scale destruction of biodiversity in the Great Plains region due to overdevelopment and unrestricted grazing practices used by the cattle and sheep industries. Muir's work served as a foreshadowing to the revolutionary environmental paradigm shift that was fast approaching. Though there is no official consensus as to when, or even if there was an "official" paradigm shift, I would posit that Aldo Leopold's *A Sand County Almanac*, published in 1949, marked a distinct change in the theoretical and philosophical lenses through which American writers would begin to portray nature as a resource to be preserved and respected. I also contend that Leopold's work ushered in the new biocentric paradigm, and was considered, along with Rachel Carson's *Silent Spring* (1962), the emerging environmentalists' handbook.

The biocentric paradigm, in terms of discussing the persuasive and motivational appeals used in environmental rhetoric, highlights how individuals and groups are able to identify with the need for environmental preservation, and how they are able to identify, understand, and counter certain misconceptions in the belief that the natural world's sole purpose is to serve the interests of a nation's citizens. Additionally, the anthropocentric tradition in American literature is important to this project, because it highlights two distinct flaws contained within *Gasland's* argument and overall conclusions: the absence of a discussion concerning the idea of national security versus the environment as a new post 9/11 binary in the HF debate; and, the absence of any discussion concerning long-term educational strategies, which are necessary to reinvent the

way that we teach future generations about human interaction with the natural world. It is my position that as a society, until we radically alter our fundamental views of and preconceptions about the natural world, the solutions proposed in *Gasland* and other environmentally-themed texts, though well intentioned, are just treating the symptoms of the problem, and in effect, ignoring the cause of the disease.

Argument

This is a project that analyzes—relying on traditional rhetorical appeals, narrative persuasion, and visual argument—why and how *Gasland* has been effective in shaping the public discourse concerning HF. I will argue—using Jacqueline Royster’s definition of literacy, what she defines as the “ability to gain access to information and to use this information variously to articulate lives and experiences, and also to identify, think through, refine and solve problems, sometimes complex problems over time” (45)—that *Gasland* has in fact created a multi-public literacy. By analyzing the film’s outreach strategies (public screenings, and house parties), its website, along with environmentally themed online forums, and media reports, I will show how the film is providing access to vital environmental and political information; and, how this information is being used by the film’s target audience, as well as incorporated to a more general discussion that has sparked public debate, influenced policy makers, and agitated participatory collective action.

If the purpose of a documentary is to educate through evidence, the question must be asked, “Whom is it educating?” In this project, I will divide the film’s audience into three categories: the target, the general, and the opposition (the discussion of the oppositional audience will be reserved for the film’s counter arguments). I will discuss how each of the audiences identifies with, or rejects, the film’s message, and how different persuasive strategies are tailored

to each, based on the audience's previously held personal or social convictions. I define the target audience as the group or public already affected by HF. Because the target audience is already affected, they are active in receiving and promoting the film's agenda, which calls for a nationwide ban on current HF technology. The general audience is a group or public who have not yet been affected by the process of HF, but who are environmentally conscious citizens, such as me. Lastly, the group who views the film as a means to counter the film's argument is the oppositional audience.

To address why the film has resonated with so many people, I will discuss the film's use of a dual narrative strategy, a science narrative and an autobiography narrative, to account for its rhetorical and persuasive success and to analyze how the film's audiences, both the target and general, are influenced by, and identify with, each narrative strategy respectively. Because any discussion of a film's rhetorical efficacy must include its visual elements, I will argue—through examining two specific scenes in the film—that *Gasland* has effectively constructed a valid visual argument. One of my goals is to investigate how documentary films can shape and promote an energy/environmental discourse via different media. To achieve this, I will rely on key concepts from film studies, public culture, narrative theory, and visual rhetoric. I will also draw from theorists, such as Mathew Nisbet who believes “developing theoretical clarity on how documentary film can ethically and effectively promote public life and civic culture will be critical...” (7). Nisbet believes that as more people turn to film and other “non-mainstream” media sources to “frame” social and political issues in ways not available from traditional news coverage, scholars will “need to consider the important dimensions of [documentary film] that engages and empowers publics” (7). I will use public culture theory from Phyllis Ryder, Jorgen

Habermas, and Michael Warner to define what a public is and why it is significant to my argument.

Given that contemporary scholars have extensively studied the entertainment, social, and cultural dimensions of documentary film, but serious scholarship recognizing documentary film as an agent of social change is still in its infancy, I believe this project offers a rich new site for critical inquiry into how documentary film can contribute to the current energy/HF debate. Further, this thesis offers significant scholarly and pedagogical contributions to the field of rhetorical, public culture, and social movement studies by addressing issues of eco-literacy via a visual medium.

My personal investment in this project began some time ago. Growing up just south of the North Georgia Mountains, I have always had a very strong connection to the land, forests, and wildlife. I became active in Greenpeace at a young age and have spent the majority of my adult life fighting for environmental causes. As of late, I have watched as more and more of our protected wilderness areas are being exploited and destroyed by corporations under the guise of the “common good.”

I first viewed *Gasland* because a friend recommended it. As I watched the film, I really began to understand the level of ignorance on the part of the American public about the degree to which our greed and fossil fuel addiction has taken over our everyday existence. To put the entire drinking water supply for millions of Americans at risk just so we can squeeze a few years worth of energy out of it is, in my opinion, something that all of us as a country and as a species should be completely and undeniably ashamed of. As a nation, we spend hundreds of millions of dollars a year incarcerating people for years because of what they choose to put in their bodies; yet, we exempt and even reward corporations for putting far worse chemicals into our bodies

without our knowledge. What would a future society, studying ours, think about a species that was smart enough to land on the moon, yet greedy enough to poison itself? Instead of demanding that oil and gas industries spend their record profits to transition to renewable energies, we allow them to destroy communities, human and non-humans, and endanger what remaining wilderness areas we have left.

The topic of hydraulic fracturing and its environmental effects is important not only in the realm of today's energy and environmental movements, but is equally important to American society and the global community (as Fox's recent op-ed in the UK's *Guardian*, and debates about HF occurring in Poland, France and other European countries have illustrated). Because energy production and the state of the environment are issues that affect us all, the manner in which an independently produced documentary about one man's odyssey to discover the truth has become a national movement should be studied for its ability to combine different types of literacies, and bring together different publics in order to empower a social movement.

CHAPTER 2 LITERATURE REVIEW

Documentary Film Studies

From its inception in the early 1920s, documentary film has been viewed both as a mirror of historical record and as an important catalyst for promoting social change. John Grierson, who coined the term “documentary” in 1926, believed that the genre had potential to influence the ideas and actions of a society unlike other art forms. In the 1932 essay “First Principles of Documentary,” Grierson expressed his ideas on the potential of this emerging genre: “Realist documentary, with its streets and cities and slums and markets and exchanges and factories, has given itself the job of making poetry where no poet has gone before it, and where no ends, sufficient for the purposes of art, are easily observed” (25). Noting an upsurge in the popularity of the documentary genre, artists, theorists, and critics, began to express the need to distinguish documentary from other forms of non-fiction film (i.e. travel films, newsreels). In “Measuring the Impact: The Importance of Evaluation for Documentary Film Campaigns,” Beth Karlin and John Johnson cite early film theorist Richard Barsam’s description of what distinguishes documentary from other forms of non-fiction film: “[documentary] is a film with an opinion and a specific message that aims to persuade or influence the audience” (2). This influence, writes David Whiteman, “has been motivated by desires for social change” (52). The social and political impact of documentary film, according to Whiteman, can be recognized in “the New Deal films of Pare Lorentz in the 1930s to feminist documentaries of the 1970s to the explosion of independent documentary work in the last decade” (52).

Over the past ten years, the documentary genre has experienced a contemporary renaissance. In today's complex and politically-mediated environment, the documentary has emerged as a reflection of, and a critical opposition to, the social order, by creating spaces of resistance in the public sphere. In her essay "Social Issue Documentary: the Evolution of Public Engagement," Barbara Abrash posits that "social issue documentaries are now moving to a new level of civic engagement. Reaching 'beyond the choir' and across borders of opinion, they are developing digital tools to attract, engage and mobilize increasingly diverse publics" (1). The ability of contemporary documentaries to "engage diverse publics" and "promote civic engagement" through emerging technologies has led theorists like Abrash to view them as "laboratories for the public media of the future" (2).

To evaluate *Gasland's* effectiveness in both shaping public discourses concerning HF and in creating a multi-public literacy that enables informed citizens to help influence political and environmental policy, I will use key concepts from David Whiteman's *Coalition Model of Political Impact*. Whiteman's coalition model assesses the multi-public impact of documentary film within three areas: speaker (filmmaker) – text (documentary) – audience interaction. Though Whiteman's model is constructed around three separate areas of assessment, the main focus of my analysis will consider "the impact of a film...on the efforts of social movements to create and sustain alternative spheres of public discourse" (51). Whiteman developed the "coalition model" in response to previous "investigations of the political impact of documentary film," which he viewed as "quite narrow individualistic models of impact" that assessed only the effect of "a finished film on individual citizens within the dominant discourse" (51). By incorporating Whiteman's coalition model into my analysis of *Gasland*, I will illustrate how the film has had a significant impact in educating and mobilizing students, citizens, and activists.

One of the defining characteristics of *Gasland* is that it is an activist documentary, which Matthew Nisbet defines as “films [that] are considered part of a larger effort to spark debate, mold public opinion, and shape policy” (2). Activist documentaries are able to invoke a sense of agency in both the audience and the individual viewer. *Gasland’s* ability to facilitate social change and mobilize the public into taking specific social and political action is essential to my argument that the film is creating a multi-public literacy. To analyze this from a rhetorical lens, I will use Phyllis Ryder’s theory of agency, from *Rhetorics for Community Action*, which states “part of the rhetorical task...is to make the audience believe that, by coming together, they are capable of making change...the sense of agency invoked in public texts insists on the interdependence of the audience members who orient toward each other to gain this agency” (65). Ryder’s definition positions agency as a type of shared experience; however, since documentaries often focus on local issues, and are designed for a target audience affected by those issues, they are also able to effectively promote a sense of personal agency. “Personal agency,” a text’s ability to empower individuals to make definitive and measurable differences in their communities, is the viewer’s reception of, and identification with, a specific issue’s message that evokes a feeling of responsibility and engenders political action.

Reception and Public Sphere Theory

Through an examination of environmentally themed and activist blogs, websites, and comment boards, along with media response to the film, I will demonstrate how *Gasland* is constructing both material and virtual public discourses that enable individuals to believe that through collective action they have power to immediately affect positive change on local and national levels. For this project, I will use Ryder’s definition of publics: “publics [are] the social entities that come together with particular visions of people’s role within democracy. People

come together as a public when they repeatedly encounter texts that have invoked that role, when they start to feel that a particular way of describing what is happening is most accurate, and when they accept and perpetuate that vision” (5).

To define the discourse that enables a public to converse between themselves and with other publics, Jurgen Habermas’ model defines public discourse as “an invitation to shared conversation, one that takes place in published essays as well as face-to-face deliberation, where people work to arrive at new knowledge and new ways to think about and understand the conditions of the world around them” (qtd. in Ryder 109). Here, it is necessary to expand Habermas’ idea of “shared conversation” to include online blogs, websites, and message boards, as well as social media sites like Facebook and Twitter. Part of my argument that *Gasland* is effectively creating a multi-public literacy relies on the extent to which individual citizens with access are continuing their engagement with and discussion about HF via participatory media. To highlight the importance of individual discursive sites and interpersonal actions/skills (e.g. active listening, participation, and other forms of communicative skills) to public debates, I turn to Habermas who posits that “the citizen’s role in this public sphere is to keep thinking, reading, reasoning, talking, and actively engaging with ideas and with fellow citizens” (10). It is through this continual engagement with the issue that individual citizens are able to discern for themselves the truth or falsity of an issue, and are able to decide on the appropriate level of involvement and the specific type of action needed.

Any thorough analysis of public discourse theory requires an understanding and definition of the spaces in which these deliberations take place. In his book, *Publics and Counter-Publics*, Michael Warner argues:

The Public sphere environment...can be seen as the context of modern social movements, including identity politics. Social movements take shape in civil society, often with an agenda of demands vis-à-vis the state. They seek to change policy by appealing to public opinion. They arise from contexts of critical discussion, many of them print-mediated. The question for debate, then, is to what extent the environment for critical social movement is becoming more undemocratic, 'refeudalized,' or colonized by changing relations among the state, mass media, and the market. (50)

I agree with Warner that there is an attack on modern social movements due to the co-opting of mass media that serve the capitalist interests of the state and private corporations of which they are part. To understand this, one only has to look at the type of coverage environmental, political, and economic protests receive from the establishment media, which often neutralize protest messages through applying public labels that are not open to interpretation. Labels such as *radical, extremist, leftist, anti-establishment, anti-capitalist* are often used to describe movements that challenge the status quo and neoliberal policies, that seek environmental justice, and that move toward social equality. What Warner calls the "refeudalization" of mass media markets in the U.S. has given rise to the popularity of activist documentaries, which through social media technologies, such as online blogs, Facebook, and Twitter, are able to continue the discourse started by the filmmaker and extend it into different publics and affected and non-affected communities.

Narratives

In her book *Rhetorical Criticism: Exploration and Practice*, Sonja Foss explains that "narratives organize the stimuli of our experience so that we can make sense of the people,

places, events, and actions of lives” (33). Foss continues, arguing that because they are scripted and construct a particular framework through which to view the world, “narratives play a critical role in decision-making and policy making in our institutional lives...Narratives induce us to make certain decisions in the context of these institutions and also help us justify those decisions” (33). The study of narrative strategies in activist documentary film should help scholars move towards a better understanding of a documentary’s persuasive and rhetorical efficacy.

For the purpose of this project, I have divided *Gasland*’s text into two distinct narratives: The science narrative and the autobiography narrative. For the analysis and critique of the science narrative, I will use the theory proposed by Walter R. Fisher in *The Narrative Paradigm*, which is considered “a dialectical synthesis of two traditional strands of rhetoric: the argumentative, persuasive theme and the literary, aesthetic theme” (2). Offering his theory of the narrative paradigm as an “alternative view” of human decision-making and action, Fisher argues that the narrative paradigm “insists human communication should be viewed as historical as well as situational, as stories competing with other stories constituted by good reasons, as being rational when they satisfy the demands of narrative probability and narrative fidelity, and as inevitably moral inducements” (2). Fisher’s theory challenges the belief that rhetorical communication must be in a classical argumentative form; instead, he believes that the means for determining “meaning, validity, reason, rationality, and truth must be a narrative context: history, culture, biography, and character” (3). Quoting from theorist Michael Goldberg, Fisher writes, “Neither ‘the facts’ nor our ‘experience’ come to us in discrete and disconnected packets...Rather, they stand in need of some narrative which can bind the facts of our experience together into a coherent pattern and it is thus in virtue of that narrative that our abstracted rules,

principles, and notions gain their full intelligibility” (3). Fisher is arguing that an individual’s actions and decision-making process can be influenced as effectively by the narrative as by traditional argumentation. Based on the premise that all humans are essentially storytellers, Fisher understands the narrative form to hold a wider influence, because unlike the argumentative form that has to be taught and learned, the “narrative impulse” is internalized and acquired as a natural process of communication.

Using narratives as a form of persuasion is unique to political discourse when compared to the traditional argumentative form, which invites participation by experts and is dominated by the “rational superiority” of their arguments. From the narrative paradigm view, “the experts are storytellers and the audience is not a group of observers but are active participants in the meaning-formation of the stories” (13). Due to Fisher’s position that all humans are essentially storytellers, any one person could be considered an expert when it comes to public moral argument, which serves to break down the established discursive hierarchy found in the argumentative form. The role of stories and of storyteller is crucial to the narrative paradigm:

From the narrative perspective, the proper role of the expert in public moral argument is that of a counselor, which is...the true function of the storyteller. His or her contribution to public dialogue is to impart knowledge, like a teacher, or wisdom, like a sage. The expert assumes the role of public counselor whenever she or he crosses the boundary of technical knowledge into the territory of life as it ought to be lived. Once this invasion is made, the public has its own criteria [truth] for determining whose story is most coherent and reliable as a guide to belief and action. (13)

Applying the narrative paradigm to *Gasland* requires an examination of Fox's role in the film as protagonist/narrator. In addition to being the writer/filmmaker, Fox assumes the role of storyteller, and as such, presents the public with a narrative that acts to inform and engage individuals on current life/social issues in an attempt to persuade them to view those events through a certain lens. The audiences' role then, is to examine the facts, their values, themselves, and society in order to come to a consensus of the truth and validity of the narrative's appeals. Because people are inherent story tellers, they have an internal basis for judging narratives for and about them; and, because the argumentative form requires specialized knowledge of issues, reasoning, and rules of rationality, the narrative form, which works by suggestion and Burke's concept of "identification," is the most effective way for Fox to present his position to the public, especially via film which lends itself to storytelling as a medium.

Before constructing a theoretical framework for the film's autobiographical narrative, a clear definition of the different types of appeals used by both narrative forms is needed. In classical rhetoric, the Greek philosopher Aristotle divided the means of persuasion into three categories: *Logos* (logic) appeals to the audience's sense of reason; *pathos* (emotion) appeals to the audience's values and emotions; and *ethos* (character/credibility) makes an appeal to the audience based on the speaker's credibility and authority on the subject. For the purposes of this project, I will base my discussion around Aristotle's concept of *ethos* and how it has been complicated by positionality, postmodernism, and contemporary notions of the subject. In his article, "Aristotle's Concept of Ethos, or if not Somebody Else's," S. Michael Halloran writes that *ethos*, in its basic form, is the "argument of authority, the argument that says in effect, Believe me because I am the sort of person whose word you can believe" (60). According to Halloran, people "become just by the practice of just actions, self-controlled by exercising self-

control, and courageous by performing acts of courage” (61). Through habit people develop certain values. Ethos—the authority of argument—is embedded in the values of a culture and defined through action, behavior, and character. Fox, throughout the film, uses several different narrative and cinematic techniques to establish his ethos and project his authority to speak on the subject of HF. The public’s identification with the speaker/writer through shared values or actions, or through a shared belief or opinion on a certain issue, gives the speaker/writer credibility with the audience.

For this project, an analysis of how people are influenced or persuaded through identifying with a specific issue, person, or group contributes to the understanding of how people become involved and move from inaction to action. Kenneth Burke, in his theory of identification, posits that “a speaker persuades an audience by the use of stylistic identifications; his act of persuasion may be for the purpose of causing the audience to identify itself with the speaker’s interests; and the speaker draws on identification of interests to establish rapport between himself and his audience” (qtd. in Hochmuth 136). According to Burke’s theory, “identification” may be deliberate, as when a speaker intentionally identifies his interests with that of his audience. But identification could also act as an “end,” as when individuals long to identify themselves with a certain group or community. Burke’s theory of identification is important to my analysis of *Gasland*’s narrative strategies, because it explains the function of certain rhetorical appeals, and offers insight into the motives that influence people to take specific social/civic actions.

One of *Gasland*’s unique characteristics as an activist documentary is its use of an autobiographical narrative. Infusing an autobiographical dimension into an activist documentary is a rhetorically powerful strategy that deserves critical inquiry, because “personal narratives,

describe places, refer to specific people, and use a variety of rhetorical moves that heighten pathos and urgency” (Ryder 75). Additionally, Jim Lane, in his book *Autobiographical Documentary in America*, writes that “innovative autobiographical representations powerfully link the everyday to the broader social order... [and] have become a potent site of American cultural production where private individuals and history coalesce” (5). *Gasland*’s ability to influence the public sphere through the use of autobiography stems from the film’s chronological movement from the everyday (the gas company’s \$100,000 offer to lease Fox’s land) to the larger social context (Fox’s investigation into the process of HF) to the site of cultural production (Fox’s production of *Gasland* and the development of a social action campaign) where Fox’s private life and social “history” become intertwined. The movement from the everyday to the larger social order to the site of cultural production allows different publics, movements, or individuals to be able to recognize and identify with the filmmaker, the film’s subject, or the film’s message. As with the narrative paradigm, the use of autobiography in documentary film allows for an examination of culture through its relation to the self.

The use of autobiography in film emerged from the counterculture movements of the 1960s and 1970s. At this time, documentarists began introducing autobiography into documentary as “a political act in and of itself,” and personal discourse, especially autobiographical discourse, became an “attempt to understand and express one’s own history through new media in the context of shifting U.S. politics” (Lane 21). However, filmmakers were not only trying to represent and understand their personal histories, but through “personal themes, autobiographies, and self-representations,” they wanted to record and inform “much of U.S. cultural life” (Lane 21). As the use of autobiography in documentary film gained momentum, filmmakers began to use the documentary genre to comment on, and identify with,

alternative social groups that were formed around sexual, ethnic and racial identities. The use of autobiography in documentary film enables one to explore representations of the self and connects the self with a broader social identity.

As a means of analyzing and evaluating the autobiography narrative in *Gasland*, I will discuss how the narrative builds ethos through the development of a personal voice with which audience/viewer identifies. Further, I will explore how identifying oneself with the filmmaker influences individuals to re-examine his/her position in regards to certain socio-political issues, and in certain cases, can even persuade a person to action.

Visual Rhetoric and Cultural Associations

Though most scholars who study argumentation focus on its verbal dimensions, recent technological and cultural developments have prompted scholars to re-examine visual communication to determine and evaluate the suggestive, persuasive, and argumentative claims of the visual image. In his article “Building Visual Communication Theory by Borrowing from Rhetoric,” Keith Kenney defines traditional rhetoric as “a battle of words, in which speakers attempt to overcome resistance to a course of action, an idea, or a particular judgment by effectively expressing their thoughts in particular situations” (322). Most neoclassical scholars and critics, following Aristotle’s lead, disregarded the symbolic meaning of non-verbal and non-oral communication; however, contemporary scholars, such as Anthony J. Blair and Charles Hill, have begun to extend the concept of rhetorical communication to include constructed visual images that are intended to persuade or influence individuals. In our visual-media saturated world, the persuasive and influential power of photographs and other types of visual images is all too obvious. However, just because images have the power to influence and even persuade, can they create an argument? In addressing the validity of visual arguments, Kenney writes that

“visuals must provide reasons for choosing one way or another; counter other arguments, perhaps via substitution or transformation; and cause us to change our beliefs or to act” (326). In order to identify the persuasive appeals used in *Gasland’s* visual arguments, I will again use Burke’s theory of identification. The idea of persuasion through identification will be critical in analyzing how specific images can persuade individuals or a public to engage in social or political action based on how they identify with specific cultural images.

In “The Rhetoric of Visual Arguments,” Anthony J. Blair suggests that “visual arguments constitute the species of visual persuasion in which the visual elements overlie, accentuate, render vivid and immediate, and otherwise elevate in forcefulness a reason or set of reasons offered for modifying a belief, and attitude or one’s conduct” (50). Though most “visual arguments” are a combination of both verbal and visual communication, Blair argues that the “advantage” of visual arguments “over print or spoken arguments” is in the visual’s “evocative power” (51). Part of a visual argument’s power is the ability of the image “to evoke involuntary reactions” from the viewer. Thus, according to Blair, “The use of...visual arguments can almost guarantee the ethotic and pathetic rhetorical influences that the arguer intends” (55). Just as *Gasland’s* scientific and autobiographical narratives offer a unique reading of the documentary’s social and political influence, the film’s use of visual argument, its understanding of the persuasive power of the image, and its cultural associations, when combined together, offer a rich site of analysis for rhetorical, visual culture, and documentary film studies.

Pedagogical Theory

Highlighting the importance of social issue/ activist documentaries in informing and educating the public on complex social and political issues is a key goal of this project. Even though documentaries provide media for public knowledge and often focus on controversial

social and political issues, their sociopolitical impact has received only a limited amount of serious critical attention by scholars and educators, especially in regards to pedagogical possibilities. In addition to arguing that *Gasland* is playing a major role in constructing multi-public literacy on HF, I will conclude this project with a discussion of the film's potential to facilitate educators in developing environmental- and political-themed writing assignments for first-year composition classes. I will use key concepts from place-based, critical, and eco-composition theorists to argue for *Gasland*'s pedagogical importance. The need to educate future generations about human interaction with and necessary preservation of the ecological systems they depend on cannot be overstated.

In the preface to *Ecological Literacy: Education and the Transformation to a Postmodern World*, environmental activist and scholar David Orr writes, "This generation will require leaders and citizens who can think ecologically, understand the interconnectedness of human and natural systems, and have the will, ability, and courage to act." As our society continues to move from a print/text based society to a digital/text society, as Gregory L. Ulmer and others have theorized, the use and study of film to connect people with important social, cultural, and political issues is emerging as a new field of critical study. This emerging discipline has the potential to offer significant contributions to the field of composition, because many first-year composition classes require students to reflect on and examine events and experiences that help shape their view of society and the world. Borrowing from education theorists such as Gruenewald and Freire, I will develop a theoretical framework that highlights the potential significant contribution of documentary film to first-year writing programs. In *A Critical Pedagogy of Place*, David Gruenewald states that the challenge for educators is to "reflect on the relationship between the kind of education they pursue and the kind of places we inhabit and leave behind for future

generations” (3). This challenge can be met, Gruenewald believes, through the combination of critical and place-based theories. Place-based pedagogies are essential in educating individuals and communities about the types of direct influence they can have on the social and ecological places they depend on.

CHAPTER 3
GASLAND: DISCOURSE, LITERACY, AND CHANGE

Question Authority

I remember reading once that Benjamin Franklin, one of our nation’s founding members, was quoted as saying, “It is the first responsibility of every citizen to question authority.” At the time, I recall being somewhat puzzled as to why such a highly esteemed political authority figure would want people to question his, and others, political authority. Finding the courage and conviction to stand up and question the privileged members of the dominant political power structure seems a daunting task. Not only does it seem intimidating, but how does one begin to go about finding and acquiring the skill and resources necessary for such an undertaking? Skills and resources are—if the goal of those in power is to stay in power—how individuals or groups find the means to educate themselves about things that those in power do not want them to know. And if people are able to educate themselves on such issues, how do they find the tools and resources necessary to contact those in power and present their cases effectively, so that those in power, as well as other members of the community, will take their position seriously?

In this chapter, I will explore these questions and try to define—in terms of the debate surrounding HF and the political and economic power structures that have thus far enabled its proliferation—what it means to challenge the dominant way of thinking on controversial issues, how individuals enter into such a discourse, and what tools are necessary to create an alternate discourse. To effectively develop my argument that *Gasland* has created a multi-public literacy concerning HF, I will analyze the film, its audience, and the tools provided by the official website. First, through an analysis of the film along with media reports and online archives, I

will illustrate how *Gasland* has intervened into the public discourse regarding HF, and how the film has been successful in educating and mobilizing its target audience as well as a larger general audience. Second, using parts of Whiteman's coalition model, I will explore how and why *Gasland* has been effective in creating and continuing its own discourse about HF. Third, I will examine what part the film played in helping to implement a moratorium on fracking in the Marcellus Shale and what role it played in drafting the *Frack Act* that is currently going through Congress. I will conclude that due to *Gasland's* continuing engagement with the HF issue, combined with the tools provided by film the team and the website, which have been instrumental in helping citizens and policy makers draft legislation targeting HF, *Gasland* has created a new multi-public literacy.

Media Archives

Though fracking technology was developed in 1948, only recently has the term become a political buzzword and a source of intense debate and media scrutiny. To illustrate that there was an ongoing and active discourse before *Gasland's* release, I searched the online archives of three leading mainstream media outlets: The New York Times (NYT), The Washington Post (WP), and The Guardian UK (GK). The search revealed the first articles about HF dating back to August 1986. One of these early articles, *Tainted Well-Water Mystery Spoils Tranquility of Southwest New York*, written by NYT reporter Thomas J. Knudson, describes Marilyn Crowell's Chautauqua County farm located in southwest New York State: "When Marilyn Crowell turns on the faucet in her rural home here, the water smells so bad that she gags... [in] southwest New York, contaminated ground water has become an everyday experience for many residents. Their wells are contaminated with brine, petrochemicals or gaseous compounds such as methane." This article, and others, were the first to describe the environmental effects that have become

commonplace in communities across the nation that are experiencing large-scale exposure to HF processes. After these initial reports, the subject of HF did not resurface in the media for many years. According to the NYT online news archives, there were no more articles on HF until 2002. Similarly, the WP and GK news archives showed no new articles until 2005 and 2001, respectively. From 2000 to 2009, the subject of HF appeared in the online archives of NYT 28 times, the WP 25 times, and the GK 8 times. Given that there were 61 articles before *Gasland's* release, there was obviously concern about the process of HF.

However, after *Gasland's* release, articles published in the mainstream media increased significantly. From 2010 to 2012, there was a substantial increase in the amount of media coverage concerning HF. Research showed 237 articles on the NYT, 22 articles on the WP, and 53 articles on the GK during those years. In addition, online blogs and forums debating the issue increased significantly. A search of the NYT blog section revealed that "*Gasland*" had 101 blog results and "fracking" had 1,460 blog results. The WP showed that "Hydraulic Fracturing" had 6 blog results, "*Gasland*" had 6 blogs and 4 online forums, and "fracking" had 54 blog hits and 5 forums.

Even though there was a significant increase in the amount of media coverage on HF after *Gasland's* release, with online blogs and forums discussing the issue, the question remains if there is a direct correlation between the film and an increase in the public discourse. To answer this question, one must only look at the term "fracking." Although Fox did not coin the term "fracking," it would not be commonplace if it were not for *Gasland*. The gas industry's slang or common use term for Hydraulic Fracturing is "hydro-fracking." However, in discussing HF in the film, Fox shortened the industry's term, and brought the word "fracking" into the mainstream. Therefore, an analysis of the term's use in media reports and online communities is

sufficient to address *Gasland*'s contribution to the ongoing discourse. According to the NYT, there were no published articles on “fracking” before 2009; yet, there were 26 in 2010 and 151 in 2011, the year after the film’s release. The WP showed no articles before 2010, but reported 131 articles from 2010 to 2012. Similarly, the GK reported there were no articles on “fracking” before 2010; however, there were 89 articles published in 2011 and 27 published so far in 2012. These statistics, along with the emergence of online blogs and forums specific to the HF debate, reinforce my argument that *Gasland* has intervened in, and had a significant impact on, the public discourse regarding HF.

Gasland, although significant to the HF debate, was not the first documentary produced on the topic. In 2009, Debra Anderson released a documentary, *Spilt Estate*, which examined the controversial practice of horizontal fracturing and the debate over land owners’ legal claim to surface rights and mineral rights. In comparing *Gasland*'s popularity to that of *Spilt Estate*'s, although both film’s targeted similar audiences—mostly middle class landowners affected by the process of HF and who were victims of the gas industry’s deceptive practices—*Gasland* should receive most of the credit in terms of bringing widespread attention to HF’s damaging effects and educating both the general public and activists to take necessary steps to protect themselves and their communities.

As a means of comparing the popularity of *Gasland* and *Spilt Estate*, I performed both a YouTube search of each film’s official trailer and an Advanced Google search of each film’s title and reviews. The YouTube search showed *Spilt Estate*'s trailer had 23,318 views, and the Advanced Google search showed it had 4,960 results. When compared to *Gasland*'s 1, 596, 242 YouTube views and 105,001 Google results, it can be reasonably asserted that the film has had a far greater impact on the HF issue and the debate. NPR’s Amanda Lin Costa commented that

Fox's "homemade documentary...may just change the political climate and environmental stance this country is about to take on fracking...If you haven't seen '*Gasland*' yet, you are missing out on learning about one of the most heated and important environmental dialogues going on in this country."

Alternative Discourses

In "Documentaries on a Mission," Karen Hirsch argues that an "understanding of the relationship between film and culture...needs critical attention" (22). Hirsch states that the study of documentary films should not be limited to the subject/content alone, and that "a [documentary] film should be studied for how community forums and other public screenings help create a space for alternative interpretations about an issue not available within mainstream discourse or new coverage" (22). Echoing Warner's belief in the refeudalization of mainstream media organizations, Hirsch believes that the creation of public spaces where individuals and groups come together to discuss alternative views (in effect creating alternative/counter discourses) on important social issues has been influential in the rising popularity of independent documentaries. For the purpose of this discussion, I refer to political and corporate rhetoric, as well as the establishment media's representation of HF, as the dominant discourse. Likewise, I refer to environmentalists,' activists,' and concerned citizens' rhetoric as the alternative discourse.

The creation of these discursive spaces is important to this section's discussion, as well as to my overall argument, because they create arenas for inclusive participatory dialogues on controversial issues often ignored by corporate sponsored news outlets. Though online blogs and digital forums are important public discursive spaces, it is *Gasland*'s use of public screenings

and public forums (sometimes referred to as “house parties”) has been instrumental in the film’s popularity and in its ability to educate and mobilize the target and general audience(s).

Target Audience

Often, the perceived success or failure of a documentary’s effectiveness in promoting its message as a means to influence political beliefs and behaviors is based on the extent in which the audience/viewer is able to identify with and develop a sense of connection to the film’s subject, message, and potential course(s) of action. The most important aspect of audience engagement is for a documentary filmmaker to become familiar with the audience and to understand how that audience can potentially contribute to the film and its social change initiative. For Fox and the *Gasland* team, becoming familiar with the target audience was as easy as walking next door: “There is no way for people in the anti-fracking movement to go home. They are home and the battle is in their front yard” (Costa). Fox and the *Gasland* team devised a strategy to divide the target audiences into “those directly affected by the drilling and those not yet directly affected... *Gasland* focused their outreach on the areas in New York and Pennsylvania that the drilling industry was targeting [and would target in the future]; driving rural and urban audiences to see the film and take immediate action” (Fledgling Fund16).

Once the film team has started the process of active audience engagement, their next step is to develop close-knit relationships with local partners as a way to establish a local outreach campaign. The Fledgling Fund’s “Target Audience Snapshot,” recounts how Fox and the *Gasland* team organized public discussions so that people could come together and “share their stories with their neighbors, tell how they had personally been affected, and participate in designated local actions, organized by the film’s non-profits partners...they also used their community screenings to begin to build a national registry of stories from people affected by

drilling, picking up where the film left off” (16). This passage points to several unique strategies devised by *Gasland*'s head grassroots coordinator, David Braun, and the film team. First, using billboards to urge people to understand the “consequences of the drilling” and to promote a general conversation about community members’ unique experiences with gas drilling, is an effective use of a dominant (advertising platform) site of public address. The film team, through identifying and developing a discursive site in the public sphere has entered into the debate surrounding HF, and has encouraged others to do the same by continuing the conversation cross different publics, groups, and communities. Next, the use of public screening forums, combined with the creation of national registry to record the experiences of individuals from diverse communities, creates a powerful multi-public literacy that offers a rhetorically effective use of alternative sites of public discourse; and in “picking up where the film left off,” the *Gasland* team has successfully created and sustained its own discourse on HF—a necessary component to demonstrate that *Gasland* has created a multi-public literacy.

A discussion of the geographical categories by which rural and urban audiences were separated is necessary in order to show that the issue of HF is not just a rural or urban problem, or a white or black problem, but rather “us against them” problem. According to Burke, this type of situational identity is “...identification through antithesis. The act of uniting against a common enemy” (Cheney 148). The common enemy in this case is the natural gas industry and its practice of widespread pollution and ground water contamination. The *Gasland* team decided to include communities not currently experiencing HF, but those that were under future consideration for drilling in their target audience. These communities are important target audiences for two reasons. The first reason, which relates to film’s ability to create a multi-public literacy, is to provide these communities with knowledge, so they decide whether or not to lease

their land to the drilling companies. The second reason requires an understanding of the economy versus the environment binary. When corporations move into an areas and set up massive industrial infrastructures, they often create hazardous economic and environmental situations for the local residents, which I call eco-blackmail. For example, take a community that has already been leased/bought by the oil industry. When environmentalists converge on that type of community—one where pollution is already occurring—more often than not, they are met with resistance from within the community. This is due in part to community members being already dependent on the gas industry for their livelihoods. The industry in this case becomes the status quo, and because it is the dominant industry in the area, people have very few economic options. Often, out of necessity, community members turn to the industry for work, because they have no other means of support. These individuals are trapped in a no-win situation and are experiencing eco-blackmail. However, by targeting areas that are not influenced by the industrial status quo, environmentalists are not having to confront an already existing environmental versus economic dichotomy and can work within the community to find sustainable solutions that will help grow the economy while preserving the local ecosystems.

General Audience

For a general audience, forum screenings help to stimulate discussions, and in doing so “the effect of the documentary is multiplied...for those who have not seen the film. By failing to engage the audience, one would let their ideas stagnate rather than activate the audience to spread said ideas. Word of mouth spreads the impact far beyond those who saw the movie” (Nisbet 2). Further, the ability of public forums to extend the conversation is uniquely important, because it offers “access to marginal groups to the dominant public discourse and to the development of ‘counterdiscourses’ outside of the dominant sphere. This creates what Susan

Herbst calls ‘parallel public spaces’ and Nancy Fraser terms ‘parallel discursive arenas’...where citizens can act with dignity, independence, and vision” (Whiteman 56).

To reach the film’s general audience, which is defined as those not affected by HF, but who are environmentally concerned citizens, the *Gasland* team had to engage publics “beyond the choir.” To achieve this, they promoted public screening forums and “House Parties,” in which media kits including discussion prompts for use before and after the film were sent to viewers free of charge. This was an effective tactic for engaging and educating diverse publics, utilizing alternative and dominate sites of discourse, and offering communities the tools needed to develop agency and influence social/political change. The creation of counter/ alternative discourses and the establishment of discursive arenas that are open to all individuals, that encourage participation in public debate, and that develop the agency needed to affect positive social change, is the basis for my firmly held belief that *Gasland* has created a multi-public literacy in support of sociopolitical action.

Political Success in a Digital World

The *Gasland* film team, through public screenings and forums, has been very successful in empowering individuals to make changes in their local communities through creating and linking individuals with activist groups like Tioga County Gas Watch; however, most of *Gasland*’s success in implementing significant social and political changes and conjuring widespread support for proposed moratoriums, protests, and other acts of civil disobedience can be directly related to its official website, *Gasland: A Film By Josh Fox*, and its online petition campaigns. The ability of the *Gasland* team to effectively create strategies that are impacting policy makers, and their ability to achieve significant legislative recognition, is the last criteria

by which I will evaluate the film's success in starting a public discourse, educating and mobilizing the public, and providing the tools and resources to influence social policy—and in effect, its success in creating a multi-public literacy concerning HF.

Evaluating *Gasland*'s official website illustrates how and why the film's outreach strategy programs have been so instrumental in bringing together citizens and activists from across the country. Even though there is enough evidence to support the argument that *Gasland* was able to enter into the existing discourse on HF and successfully shape its own discourse on the issue, analyzing the official website highlights just how much of an impact on the public discourse and in the public sphere the film has actually had. The areas of the website that are the most effective in informing the reader and connecting the reader to relative outside resources/contacts are: the "Contact Your Elected Official" link; the "Find Out About Local Organizations" link; and, the "Check Out Action Alerts" link. Each area creates a space of agency for individuals and communities by fostering their ability to coordinate and implement local collective actions that have a tangible impact in their community. While there are other links that appear to be as engaging, such as the "Share Your Story" link, much of the forum and discussion information is being archived and not available to view. However, before beginning analysis of the site's discursive areas, there are a few items on the site that should be considered. In the center of the web page is a tab that reads "Actions Taken." This tab indicates the number of officially registered members of the "*Gasland*" community, which currently stands at 122, 241 people. There is a FAQ sheet and a link to Energy-in-depth's official response to *Gasland*, which the gas industry sponsored to counter the claims made by Fox in the film. Going head to head with the gas industry PR firm, Fox's evidence proved true and he reaffirmed his research.

For this reason, during the filming of *Gasland 2*, one of the lobbyists for the gas industry had Fox arrested in the capital building for filming a public hearing.

The first website area, “Contact Your Elected Official” (CYEO) is an interactive space that offers a visitor direct access to their local representative’s email, office address, and phone, just by entering in the zip code. The next section, which is the “Find Local Organizations” tab, allows visitors to select their state and get an instant listing and description of all the active social and environmental groups in the area. A visitor can also add their local grassroots organization to the list. The last section and the one that seems to be the most relevant to the goals of this thesis is the “Action Alert” tab. Under this tab, there are information posts about local and national demonstrations, active online petitions to sign, and the status updates of any current anti-fracking legislation. Additionally, there is a link to sign up for email newsletter updates.

Website tools have been invaluable in helping *Gasland* to assist policy-makers in creating anti-fracking legislation. For example, a petition from the *Gasland* website that garnered 500,000 signatures helped influence policy-makers to create The Fracturing Responsibility and Awareness of Chemicals Act, or the “Frac Act.” The Frac Act “aims to repeal the exemption for hydraulic fracturing in the Safe Drinking Water Act. It would require the energy industry to disclose the chemicals it mixes with the water and sand it pumps underground...information that has largely been protected as trade secrets” (*Gasland.org*). Although the Frac Act did not pass Congress the first time, it has been reintroduced for a second round. This is yet another way that *Gasland* has created a multi-public literacy and sparked a nationwide movement that is engaging and educating communities about the dangers of HF. In summarizing the important impact the film has had on the public and the HF debate, Fox explains how *Gasland* “wasn’t going to be a feature film or a play, though now it may become both and a book and a sequel at this point. I

wanted to create a conversation between people around me that were leasing land but perhaps had a cultural divide” (Costa).

CHAPTER 4 THE HAUDRAULIC FRACTURING PARADIGM

Storytellers

Human beings, by nature, are essentially storytellers. Through narration, a type of human interaction, we establish values and build meaning. We use these established values as a means to understand human decisions and to form individual and collective conclusions about people and the world. Through narrative interaction, communities are able to use stories to give value and order to the human experience and to try and discern some “truth” about the human condition. According to Fisher’s theory of the *Narrative Paradigm*, we use stories, “to induce others to dwell in established ways of living...[that] narratives enable us to understand the actions of others because we all live out narratives in our lives and because we understand our own lives in terms of narratives” (8). In other words, narratives educate people about the intentions and motives of others, and through recognizing and comparing shared experiences, help people to validate the truth and accuracy of certain claims.

I contend that *Gasland* is more than just a film or documentary. It is a story—a narrative written for those who distrust and fear the corporatization of our environment, and the political bureaucrats that regulate it, as well as for those who value our remaining wilderness areas and fresh water sources; a narrative written to educate people about corporate deception and the motives behind it, to inform people about future decisions they will face, and to persuade them to consider which future course of action to choose; a narrative written to give people the agency to resist the increasing corporate insurgency and to serve as a vehicle for enabling positive social and political change.

In the previous chapter I discussed how *Gasland* was able to give individuals, as well as communities, the agency to impact public policy and, in doing so, has created a multi-public literacy. Yet, the question remains, why? Why has *Gasland* resonated with so many people? Why has the film been so effective in influencing such a large and diverse audience? What is so inimitable about the film that it has become a cornerstone in the public debate over HF?

To answer these questions, in this chapter I will argue that the way in which Fox presents his argument(s) to the audience/viewer—his use of narrative as a persuasive form (the Narrative Paradigm), his use of a narrative to humanize, or simplify, the complex scientific evidence presented in the film, and his use of autobiography to establish ethos and to build an important emotional connections with the audience, combined with the dramatic power of the visual argumentation's pathetic appeal—is why *Gasland* has been so effective in mobilizing and empowering concerned citizens, activists, and diverse publics into taking collective social action against the process of HF. I will also argue that *Gasland*, along with creating a multi-public literacy, is in fact establishing multiple literacies, ranging from environmental to energy and to scientific.

For my analysis, I will divide *Gasland's* narrative(s) into three sections: the introduction sequence, which introduces the theme(s) of the film and its argument; the scientific narrative, which uses the narrative form to validate and explain the science; and the personal (autobiographical) narrative, which explains Fox's personal investment in the HF debate. The personal narrative, using Burke's theory of identification, also works to set up the anthropocentric – biocentric binary previously discussed. A discussion of the film's narrative threads and the effects of its persuasive appeals necessitate identifying and defining its audience. Since I have already identified and defined the three types of audiences in the previous chapter, I

will apply the same definitions to this discussion; however, in this section, I will refer to the target and the general audience as the “audience/viewer.” I will use this as a general term throughout the discussion, and it will be inclusive of individuals viewing the film, as well as larger groups, and if needed, I will define the audience in more specific terms. Additionally, I will identify and discuss the arguments presented by the oil and gas industry to counter *Gasland*'s scientific evidence and the claims of well water contamination and serious health effects made by the families interviewed in the film.

Introduction Sequence

I choose to separate the film's introduction, or opening sequence, from the other narrative threads, because it introduces *Gasland*'s overall theme that change is still possible, which even though we live in a democracy, large corporate interests often override the will/interests of the people. Through the dramatic combination of verbal and visual elements, the concluding segment of the introduction suggests to the audience/viewer that they have a choice. Though the scientific and autobiographical narrative contain themes specific to the focus of that section, the possibility of change is the unifying trope that works to unite each section to the work as a whole. Not only does the introduction sequence set up the film's main theme, but it creates a unique and powerful visual argument, which is an important aspect of my rhetorical analysis in this section.

Beginning with the film's first voice over, “...I've always had a great deal of faith in people that we wouldn't succumb to frenzy, or rage, or greed. That we'd figure out a solution without destroying the things we love,” combined with an image of Fox wearing a baseball cap, gas mask, and playing a banjo, while standing in front of a gas well and drilling rig that is foreground to a backdrop of pristine snow-capped mountains, Fox establishes *Gasland*'s

rhetorically powerful use of image and text. Through a rhetorical lens, most visual arguments are a combination of both verbal and visual elements, with the verbal putting the effect of the visual into its proper context. Within the traditional argumentative form, though not common, there are examples of true visual arguments where the verbal is not needed to clarify the argument. To clarify what constitutes a true visual argument, I refer back to Blair who explains that “visual arguments constitute the species of visual persuasion in which the visual elements...render vivid and immediate, and otherwise elevate in forcefulness a reason or set of reasons offered for modifying belief, and attitude or one’s conduct” (50). In other words, a visual argument uses only visual elements to identify the issue, to persuade the viewer that the issue is problematic, and to suggest to the viewer that some form of change is necessary.

The opening scene is an example of how visual arguments work independently, because the image can stand alone, without the need for verbal elements to contextualize its meaning. The construction of this visual argument utilizes several persuasive appeals. First, it uses logos, an embedded assumption that we need to stop polluting/poisoning our environment. This type of appeal focuses on preserving nature and its natural life cycles and is thus biocentric. Understanding that we need to replace what we want out of nature with what nature wants or needs from us is a key concept in the shift towards a more biocentric view of our impact on and relationship with the land. Second, the argument relies on audience/viewer’s ability to identify and understand the difference between the scenic and industrial landscapes. Referring to what Edmund Burke called subliminal effects of nature’s aesthetics, the argument relies on the idealized notion that humans will choose the beauty of undisturbed landscapes to that of developed and industrialized landscapes; however, a recently published “nature calendar” disturbed by the oil and gas industry highlighting the “beauty of drilling rigs in the natural

landscape” that displays drilling platforms at night like lighted city skylines put this idealized view into question. Third, the visual argument’s persuasive appeal relies on the audience/viewers ability to identify with the cultural icons in the image, which invoke a sense of civic responsibility to protect the landscapes that have been instrumental in defining our national heritage. The visual argument’s ability to appeal to the audience/viewer on multiple persuasive levels reinforces my position that a main reason for *Gasland*’s success is its effective visual strategies.

A basic argument construction requires that there must be one or more propositions (P), and that these propositions arrive at an inference (I), which then leads to a conclusion (C). Applying this basic formula to the opening scene one could argue that: (P1) Gas and oil wells pollute (illustrated by the “hazardous chemicals” labels, and the smoke coming from the ventilation pipes); (P2) pollution is harmful to humans (Fox wearing a gas mask); (P3) industrial gas and oil wells destroy natural landscapes (demonstrated by the juxtaposing of the pristine mountains against the stark industrial landscape surrounding the well, and the fact that the nation-state is being re-defined through wilderness and not urban/corporate); (P4) natural landscapes are important to Americans and our national heritage (general knowledge and highlighted by the cultural icons of the baseball cap and the banjo, which he plays in front of the Rocky Mountains). (I) Therefore, because oil and gas wells pollute and destroy natural landscapes, they are harmful to humans and the environment and also our nation; and, (C) because oil and gas wells are harmful for humans and the environment, people should work to stop the spread of gas wells.

Now that a basic argumentative outline has been established, it follows that there need be a persuasive dimension that suggests possible consequences for accepting or dismissing the

visual argument's conclusion. In the text, Fox's use of the past perfect tense "I have always had," suggests that the narrator is beginning to lose faith in people; he is beginning to believe that as humans, we are incapable of finding a solution (to the energy crisis) without destroying what we love (the environment). The text engages the audience by compelling them to look inward in order to try and understand why the narrator is beginning to lose his faith. At the same time, the documentary—through a quick montage of flashing images that emphasize the sunlight glancing off water's in scenic rivers and Edenic woodlands, which stand in contrast to bleak frames of industrial drilling sites, haunting satellite images of destroyed landscapes, and barren gas wells that are visible from space—suggests to the audience exactly what is at stake in the debate concerning HF—the preservation of our country's vital water supply and remaining wilderness areas. By not explicitly stating that he no longer believes people to be capable of a solution, the narrator implies that there is still time for change. Fox begins the debate by suggesting the possibility of salvation—of finding a solution to the energy crisis without destroying the environment or communities. By suggesting the possibility of change, the film's warning of serious environmental and public health consequences is counterbalanced through the possibility of and suggestion for individual and collective action.

Within the first few minutes of the documentary, Fox developed a brief outline of his argument, instilled in the audience/viewer a sense of agency by suggesting that there is still time for change through individual and collective action, and tried to persuade the audience to take a specific course of action by juxtaposing scenic images of undeveloped wilderness areas against images of desolate industrial drilling sites. In short, Fox has given the public a choice. The combination of image and text is an effective rhetorical strategy, in that the narration (text) works to articulate the film's position on HF, while the images create a dramatic impact,

heightening the seriousness and urgency of the issue, which supports my point that the film's effectiveness in engaging and mobilizing the public is due, in part, to its creative narrative and rhetorical strategies.

Dual Narratives

In my analysis of *Gasland*'s introduction sequence, I only briefly discussed how the film combines both the verbal and visual elements to create a strong multi-themed persuasive appeal. However, in both the scientific narrative and the personal narrative the use of both the verbal and visual elements becomes so interconnected that for the purposes of simplicity, I will use the term "argument" to include both elements, but will specify when my discussion is focused on one element in particular. In addressing the inherently persuasive nature narratives, Sonia Foss explains that "Narratives play a critical role in decision making and policy making in our institutional lives...Narratives induce us to make certain decisions in the context of these institutions and also help us to justify those decisions" (333). In this sense, *Gasland* is a narrative that works to persuade the audience/viewer on the validity of its claims and attempts to influence the decision that the audience/viewer ultimately will make, which re-enforces my position that *Gasland* is creating a multi-public literacy, or the tools and resources necessary for social change.

My analysis of *Gasland*'s scientific narrative and personal narrative will be two fold. First, I will rely on the eight elements commonly used to properly discuss any narrative: setting, characters, narrator, events, temporal relations, causal relations, audience, and theme. Though all of these aspects are important to narrative criticism, I will only focus on the events, audience, and theme, because these elements are essential to my analysis of the film's argument; however when necessary, I will broaden my scope to include any of the appropriate narrative elements.

Second, my analysis will discuss *Gasland*'s persuasive influence using Fisher's theory of the *Narrative Paradigm*. This analysis is important because it illustrates how the narratives employed different elements at different times to increase the audience's identification with the filmmaker, the film, and its message, and it shows how the persuasive appeals are tailored to the audience in a way that increased its rhetorical and persuasive efficacy. This is crucial in showing how the film's rhetorical and influential effectiveness was due to its narrative strategies.

Scientific Narrative

Throughout the scientific narrative, there is no fixed setting. The audience travels with Fox as he crosses the country trying to discover the truth, if such a query is possible, about HF. The audience follows Fox from his childhood home in Milanville, Pennsylvania to communities in New Mexico, Colorado, Wyoming, Arkansas, and Louisiana. Even though these scenes changed with great frequency, they are constructed to show not only a personal and professional side to Fox—his commitment to the truth and his thoroughness in researching, which works to establish his ethos—but also to show the scope of the problem as a national issue by introducing a multiplicity of characters, each who add their own voice and experience, thus helping to validate Fox's argument. Essentially, the narrative validates the science, while the science legitimates the narrative (Frentz, Rosteck).

The scientific narrative begins with a fast-moving sequence of footage showing the gas industry's promotion of natural gas as the domestic answer to Middle East oil. The viewer sees images of super-highways overlapped with gas station signs listing prices of gas followed by a digital map of North America that highlights the country's major shale basins. The voiceover begins, "America's shale basins contain a virtual ocean of natural gas." The screen cuts to a politician giving an interview to an establishment media outlet, "what I want is to use our

resources in America. It's cheaper, and it's ours. It's ours." The narrator cuts in, "What would it mean if the United States and the rest of the world adopted natural gas as the fuel of the future?"

This passage offers several important insights to the perspective of those concerned with the HF debate. Likewise, it contains several key issues/themes that are used by both the pro-fracking and anti-fracking proponents. For the pro-fracking argument, the passage points out that the natural gas extracted by the HF process is a domestic source of energy, "it is ours." The position that HF will lessen our dependence on foreign oil is one that will surface throughout the continuing debate, and is an extremely important counter argument, which I will discuss in detail later. It also points out that natural gas is a cheap source of energy, which is a very persuasive appeal to the average-working American, who is struggling to make ends meet in a very challenging economy. The narration ends with asking the question "what would it mean if the rest of the world adopted natural gas...?"

I do not know the answer to that question, nor, in my opinion does anyone else; however, by applying what is known about natural gas uses in this country, the question offers two points for critical analysis. First, having the narrator ask the question against a backdrop of changing images ranging from gas station signs listing the price of gas and cars driving on an expressway, frames the question in such a way that it equates the use of natural gas to driving our personal vehicles. However, natural gas use for personal transportation is a false perception that is often used as a rhetorical strategy by the gas industry. According to Hybridcars.com, in this country "just one-tenth of 1% of all gas consumed is used as fuel for vehicles," and there is only one mass-marketed car that uses natural gas as fuel, the Honda Civic GX. Most of the natural gas is used to generate electricity, heat houses, and facilitate industrial processes. Clearly, natural gas production will not end our dependence on the foreign oil needed to drive our cars.

The second point of analysis has to do with the economic theory of diminishing returns. The rules of diminishing returns state that in a capitalist economy, the producer of a commodity (auto fuel) will use the best method (ground drilling for oil) and stock first. Then, as supplies start to run out, and in order to keep up with increasing demand, the producer will move to the second best option (in this case importation). Again, as the supply runs out, the producer moves down the line to the next best option (off shore drilling). Then as the situation worsens, and demand keeps going up, the producer gets to the point where any method, no matter how bad for the environment, will be used to sustain increasing growth and to meet market demand. Hence, you have shale oil and gas, the dirtiest and most damaging process.

What this highlights is that instead of making the inevitable transition to renewable energy and forcing manufacturers to drastically increase fuel efficiency, the oil and gas industry is more concerned with profits than with conservation and sustainability. The industry's theology of always putting profit over the environment and the well-being of communities is an example of, how in many ways, capitalist societies still view nature through an anthropocentric lens, positioning human interests at the center of the natural world and our relation to it. The view that people are the center of the entire natural world, and have been given "dominion" over its resources, is an egocentric fallacy and a prime example of what Aldo Leopold viewed as man's ignorance of good intentions. Though industries, such as the oil industry, spend millions of dollars every year to convince the public that everything is fine and that to fear human impact on the environment is "irrational," the evidence supporting the fallacy of the anthropocentric view is all around. The very idea that in less than 200 years of large scale industrial commoditization of the earth's natural resources has decimated ecosystems worldwide that have survived for millions of years, and less than two centuries of human activity has put the planet in a critical

state, should be more than enough (though it often does not work) to convince the audience of the need for a paradigm shift.

After the initial segment of the scientific narrative, the audience is shown footage of politicians applauding former U.S. president George W. Bush and former U.S. vice-president Dick Cheney during a *State of the Union* address. During this scene, Fox's voice over notes, "...the 2005 Energy Bill pushed through Congress by Dick Cheney exempts the natural gas industries from the Safe Water Drinking Act, the Clean Air Act, the Clean Water Act, the Superfund law, and about a dozen other democratic and environmental regulations." On the screen the audience is shown all the exemptions in bold to dramatize the effect. Though Fox never explicitly states the significance of the environmental exemptions, often referred to as the Halliburton loophole, the implication is understood. And the question then becomes—if HF is safe, why would it need to be exempted from all Environmental Protection Acts within the last thirty years; especially, as Fox points out, the Superfund Law, which would make the industry legally and financially responsible for their actions. Even if the industry needed to exempt the HF fluid for proprietary secrecy, why would they need exemption from the Superfund Law, which only targets sites of serious environmental pollution and the processes responsible for them?

An important issue emerging from this passage that deserves, if not demands critical attention, is that in passing the Halliburton loophole, the gas industry has become self regulating. In an industry that uses such complex and potential hazardous material and techniques, how can anyone rationally argue this is a good scenario? This is an appeal to the audience/viewers concept of logic (logos). This appeal, though it reaches all audiences, seems especially tailored

for individuals who may be skeptical of the science—people who are not yet sold that there is a problem with HF.

At this point in the film, Fox re-enforces the message that a corporation (i.e. Halliburton), due to its political connections, was able to take a relatively unstudied technology (HF), exempt it from any federal regulatory oversight, or any governmental environmental impact study, and use it unrestricted nationwide, often in very sensitive environmental conservation areas; moreover, if the public is able to force law makers to require the industry to conform to existing environmental laws, the industry is cleared from any possible litigation no matter the extent of the pollution. Here, Fox is retelling a familiar narrative concerning today's political culture—corruption. By repeatedly highlighting the blatant corporate corruption, Fox is appealing to not only the target audience, but even to the oppositional audience, who could not possibly deny that there is something off about the entire process of exempting a technology, on the request of the industry, that has generated widespread complaints of water contamination from any federal studies on its environmental impact; and exempting the industry from any future litigation due to the process. These discrepancies can also be analyzed in their temporal and causal relations. Through the temporal lens, 2005 was H.W Bush's and Dick Cheney's last term in office, which meant that they could pass controversial legislation without having to worry about reelection. Also, through the causal lens, because both Bush and Cheney are major share holders and are intimately connected with Halliburton, they stand to make a lot of money through the rapid growth of the HF industry.

Fox focuses on the 2005 Energy Bill as an example of political corruption, and to show how it the bill was instrumental in expanding the domestic drilling boom. The voice over continues, showing a montage of natural gas company logos, “And when the 2005 Energy Bill

cleared away all the restrictions companies...began to use the new Halliburton technology and began the largest and most extensive domestic gas drilling campaign in history, now occupying thirty four states.” The screen then cuts to a diagram of a natural gas well:

The fracking itself is like a mini earthquake...In order to frack, you need some fracking fluid. A mix of over 596 chemicals, from the unpronounceable (the screen reads “Thiocyanomethylthio-benzothiazole”), to the unknown (the screen reads “Proprietary chemicals”), to the too well known (the screen reads “Ethylbenzene—a known carcinogen”). The brew is full of corrosion inhibitors, gellents, drilling additives, biocides, shale control inhibitors...”

In this passage from the film, the scientific facts are presented in a way that allows for an analysis using Fisher’s *Narrative Paradigm*. The way in which Fox simplifies the science through using narrative makes the argument more of a conversation between filmmaker and audience; this allows for a greater understand of the complex science by a wider audience, which is important in the film’s ability to created a multi-public literacy. The scientific narrative’s ability to articulate very complex scientific evidence in a way that the average person can understand without feeling “talked down to” certainly adds to *Gasland*’s overall effectiveness in educating and mobilizing citizens to action. While this could be done with the traditional argumentative form as well, it would require experts discussing the issues and would make the presentation more of a debate, therefore alienating a large segment of the audience. The scientific narrative contributes to the public discourse by discussing the issues and using the evidence to inform and educate the audience/viewer. In this way, it gives the audience resources and possibilities to make positive social and political changes. The narrative paradigm, because it

works by suggestion and identification, offers a rich insight into the film's persuasive efficacy. The above passage illustrates how the narrative persuasive appeal works by suggestion.

In the last segment of this sequence, Fox describes in detail the millions of gallons of fresh water that are used in the fracking process, a series of satellite images display how the gas wells, and the desecrated landscapes accompanying them, are visible from space. "They started out west: New Mexico, Colorado, Texas, Wyoming, and Oklahoma—and in the south—Arkansas, Louisiana, Alabama, 450,000 wells." As the math is calculated on the screen in black and white, the voice over reads, "450,000 wells, that can be fracked up to 18 times, using between 1 and 7 million gallons of water; equals something like 40 trillion gallons of water, all infused with the 596 chemicals in the fracking fluid and now they are coming east." The screen cuts to a quick series of images depicting rivers, wild life, and wetlands. "They're proposing 50,000 gas wells along a 75 mile stretch of the Delaware river, and 100,000's more across New York, Pennsylvania, Ohio, and West Virginia. From 1972 until now... all this had been protected."

Most people today are aware of periodic water shortages in their communities (i.e. droughts and not being able to water lawns) and they know the cost of their water bill and have heard about the need to cut down on waste; one of the main environmental problems concerning HF is ground water contamination. The film, through its narrative, describes the massive amounts of fresh water used to frack the existing gas wells, up to 40 trillion gallons. The science narrative also explains that infused within this water are up to 596 toxic chemicals. In the HF process, about 60- 70% of the water is recovered, leaving the rest in the ground. Fox is using the narrative to set up a type of enthymeme—an assumption that it is never a good thing to leave that amount of toxic water in the ground near peoples' homes and wells. Another example of

persuasion by suggestion is the way in which Fox ends the passage “From 1972 until now...all this had been protected.” Though Fox is not directly stating that the land and water are going to be destroyed, like many doomsday environmental texts (Rachel Carson’s *Silent Spring* as an example), he is suggesting that the future is unknown. He is suggesting that we are now in control of what happens next. If enough people identify with the fallacy of the gas industry’s argument and identify with the need to protect this area, then things will work out; yet, if we don’t act, if we wait, or we are too busy, then we had a chance to change things, and in the end it is our own fault for not standing up and fighting the good fight. Fox is empowering individuals to change things, but he is not prescribing our fate for us, instead he is leaving it up to us which destiny we choose.

Personal Narrative

In discussing this interaction between text, filmmaker, and audience, Jim Lane suggests “the documentarist is typically a witness to the events, as evidenced by the documentary image and sound, and serves as a social agent...” (4). The ability of a filmmaker to be perceived as a social agent depends largely upon the degree to which he/she is able to influence or persuade the audience/viewer on the validity of the argument, and the degree to which the filmmaker is able to influence the public into taking up the intended cause. An analysis of *Gasland*’s use of autobiography is necessary to demonstrate how the film establishes Fox’s ethos, and based on his perceived credibility and authority, how the audience identifies with Fox, the film, and the film’s message; and how through its identification with Fox and his message, the audience is then persuaded to take a specific course of social or political action and to become citizens.

The filmmaker's creation of a morally sound and socially conscious self image, which the audience/viewer identifies with and objectively validates, offers the audience not so much a view of "the world"; rather, it offers a view of the documentarist's world (Lane). Through direct access to the documentarist's world, the audience/viewer becomes privy to the temporal unfolding of personal-life events framed against the perception and interpretation of the author/narrator. The narrator's vocal interpretation of the events playing out on the screen in conjunction with how the filmmaker acknowledges "the presence of the camera" underscores the subjective nature of the documentary form and allows for a more truthful depiction of reality. The representation of truth "emerges from the interplay of the referential and the ideologies of discourse" (Lane 92). This emerging truth develops the connections needed to establish the filmmaker's ethos. Though it is not always easy for a filmmaker to bring the audience into his personal world, it is important as Fox explains, "I recorded most [autobiographical scenes] between two and six in the morning, alone at home. It's a homemade project...it's quiet...it's intimate, a dream space and very personal and from the heart...I'm not an actor so I couldn't recreate that honesty later in the studio. The truth of the movie is it is my story that I am personally invested in" (Costa). By bringing the audience into his personal world, Fox is giving the audience/viewer the honesty needed to establish his ethos.

The autobiographical sequence of the film begins with Fox driving in his car. "Hi, my name is Josh Fox...this is my house. It's in the middle of the woods, tucked away on a dirt road in a place called Milanville, Pennsylvania." As the voice-over introduces Fox as the filmmaker, narrator, and protagonist, a series of childhood scenes and images frames the chronology of the narrative. A worn picture of Fox's father and pregnant mother standing inside the wooden frame of the house as it is under construction flashes on the screen as the camera zooms in on his

pregnant mother. Fox's voice begins, "The house was built in 1972 when I was born. My parents and their hippy friends built it, and my family and my brothers and sisters grew up pretty much the same way I did—little by little." The documentary's chronology appears through a montage of homemade video clips, showing the family at various stages of the house under construction, the family having dinner during a holiday celebration, and clips of a young child playing. The sequence of, and the audiences' associations with, these images invites the audience/viewer to reflect, along with Fox, on their own childhood. Enabling the audience to nostalgically reflect on its own childhood is important in that it helps the audience identify with Fox's motive in wanting to protect the land that he grew up on. It also helps to develop his character, by projecting him as someone with integrity and as someone with values, which is crucial in developing ethos and presenting himself as someone "you can trust."

One of the ways in which Fox uses a pathetic appeal is in his appeal to the audiences' nationalistic emotions. "There's a stream that runs down the property..."—the documentary is continually moving between scenes of unspoiled wilderness, pristine rivers, and Fox's narration—"...that connects to the Delaware river." The voice-over pauses to a long sequence of images depicting children playing in a river, wildlife drinking from the river, and the beauty of undeveloped wilderness. "I've been learning more and more how water's all connected." As the voice-over fades out, Emmanuel Leutze's famous painting of George Washington crossing the Delaware appears on the screen. The interplay of the referential (the wilderness areas threatened by HF are important to our nation's history and heritage) and the ideologies of the discourse (as Americans, we are all connected to these areas and have a responsibility to protect them) begins to represent the validity of Fox's argument—again developing his ethos. Fox—through a carefully edited and strategically placed series of images—has shared his personal connection to

the land and the Delaware River with the audience/viewer, while the voice-over works to strengthen and put into the proper context his connection Delaware and the land. In an emotionally powerful move, Fox uses the text/image relationship to remind the audience/viewer of his/her personal connection to the Delaware and to the land. Fox is exploiting the nationalistic emotions associated with Leutze's painting—that it was the American soldier's familiarity with and dependence on the Delaware that he was able to defeat the British empire, that without this familiarity with the land and rivers, America as we know it might not exist—to persuade the audience that it is not just he and his family who have a personal connection to these rivers and forests, but all Americans. This type of appeal is not used to influence the target audience, because they are fighting for their own backyards; rather, it is designed for people who do not live near the area, and who may not be overly environmentally concerned, but who understand that our nation was built from the resources these rivers and lands provided, who understand we have a responsibility to preserve them for future generation, and who understand their own history and connection to the land. Fox appeals to the historical/nationalistic emotions of the audience to help preserve the environment to counter the gas industry's post 9/11 nationalistic appeal that developing domestic sources of energy at all cost is best for the nation. As our nation moves into an era of environmental challenges unlike any we have experienced before, it is important that as scholars, educators, and as planetary citizens we remember that the ability of a society to connect its future generations to the land, and remind them of its historical/cultural importance, develops a foundation necessary for a biocentric shift. A complete paradigm shift, one that puts nature and the understanding of its natural cycles at the center of human experience, will serve as the only long-term solution to not only our country's but the global environmental and political crisis.

After the opening scenes of the autobiographical sequence, the documentary focuses on Fox's travels in Pennsylvania and across the country. During his cross-country sojourn, Fox meets with families in communities who, even though separated by thousands of miles, are experiencing the same adverse health and environmental effects. In summarizing his experience, Fox states: "I've been on the road three and a half weeks. ...everywhere I went it was the same story. Huge banks of compressor stations in people's backyards. Wells drilled right across the street from people's houses... Land farms where toxic sludge from waste pits right next to residential communities. Too many stories to recount..."

As the voice-over sounds, a continuum of images showing massive drilling structures next to schools, compression farms fenced off with razor wire, and children playing next to sludge pits that, when the wind blows, covers toys with toxic dust. These images reinforce and add a dramatic impact to Fox's narration. The images act as a testimony to Fox's experiences, and work to emotionally stir and influence the audience into accepting Fox's argument that something must be done about the increasing use of HF as a means to extract natural gas. The film's inclusion of several different communities from across the country is important, because not only is *Gasland's* discourse targeted to communities in Fox's home town and in the Delaware watershed, but it is reaching out to communities across the country; in effect, it is helping to create a nationwide conversation on the issue of HF. Further, the inclusion of different communities also heightens the urgency in the general audience. By showing how rapidly the process is spreading, individuals who may have never thought about where their natural gas is coming from may start to wonder what is happening in their own communities.

The autobiographical dimension of the documentary has helped the audience/viewer to identify with Fox as more than just a filmmaker; they view him as someone who is concerned

about the well being of his own community and communities across the country. The autobiographical narrative makes a pathetic appeal based on Fox's connection to the land and the audience/viewer's own sense of identification to the land and rivers. The inclusion of stories and visual evidence of environmental damage and physical suffering in several different communities reinforces and legitimizes Fox's position by offering a multiplicity of voices. These appeals alone, however, are not enough to persuade the majority of people into taking action. People often view the suffering of others as something remote and removed from their general sphere. Persuading others to get involved and take participatory action requires the ability to offer local solutions to larger problems. It requires not the ability to offer localized solutions, but the ability to transfer a large part of the weight and responsibility of the problem, if it continues unopposed, to the inaction of the audience/viewer. The documentary's final voice-over attempts such a transfer:

I don't know what's going to happen around here. I don't know if all this is going to be destroyed. I don't know what's going to happen around the rest of the United States, whether all the friends I had made on this trip are going to get some relief. I guess in a large part that's up to you. One thing I've found deep inside is a love for this whole country...there are pieces of my backyard that aren't my backyard anymore; they belong to everyone else too.

In the closing voice-over, Fox strategically leaves open his view of the future. He continues the idea of possible salvation, which he started in the film's opening scene. By ending the film, with the statement "I guess in a large part that's up to you," Fox is again evoking the audience's sense empowerment by offering the possibility of change through localized action. Fox is also using a plethora of rhetorical appeals to try and persuade the audience to take

immediate action. He is using the audience's sense of identification to themselves as good stewards of the planet, their identification with others as responsible members of a society, and their identification with the land to persuade the audience that it is part of their civic duty to protect our natural resources. Fox wants to put the responsibility of safe energy production back onto society and force them to look at themselves as part of the problem and as part of the solution. By stating he doesn't know if all the friends he's made on this trip will ever get any relief, Fox is making an emotional appeal to the audience. He is relying on the inherent goodness of people to feel compassion and empathy to the people that as companions in his travels, the audience has gotten to know as well. By restating his belief that we are all connected, Fox is appealing to our sense of community. He is forcing the audience to reflect on what they would want if this was happening to them. He is making them question "who would be there for me?" It is this type of reflection by the audience that mobilizes individuals to actively seek out information on what is going on in their own communities; it brings different communities together for a common cause. Through informing different communities on what is happening around them, by sharing the experiences of others, and by motivating people to take action, *Gasland* is creating a multi-public literacy regarding the process of HF.

Industry Response

In response to *Gasland*, the natural gas industry launched a massive nationwide public relations campaign and created *Energy in Depth*, a non-profit organization that promotes HF. *Energy in Depth* is a public relations campaign sponsored by Shell and all the Super Majors, a term applied to the six largest oil companies in the world, and according to Fox, "those guys do everything from attacking *Gasland* to attacking families that speak out...They specialize in smear campaigns...In the media industry, both sides of the fracking debate are covered, even

though one side is obviously representing the industry itself and is only propaganda” (Costa). Responding to the scientific evidence presented in the film, *Energy in Depth* released “Debunking *Gasland*,” a fact sheet that offers a line by line repudiation. “I was actually shocked that they attacked the movie,” Fox tells Costa during an interview:

We didn’t think there was anything in the film that needed to be defended. I think, especially when they attacked our Oscar nomination and said the nomination should be rescinded, it just showed how bullying and arrogant they are. It was like a temper tantrum that caused a lot of attention on the film and caused us to spend two or three weeks putting ‘The Truth About *Gasland*’ together, a forty four page PDF showing all our research behind the film.

Because engaged research should include both sides of an issue, this section will discuss two of the counter arguments presented by the gas industry in response to claims made in *Gasland* regarding the process of HF and the use of HF as an issue of national security. My argument in this section is twofold. First, one of the reasons why visual arguments are problematic is that they can often be misleading because of the inability to contextualize the situation and offer counterpoints based on individual/special circumstances. For visual arguments, there are three types of context that are important in determining the validity of a visual argument: immediate visual context, immediate verbal context, and visual culture (Kenney 325). I will focus on the immediate verbal context, or lack thereof, as being problematic in *Gasland*’s presentation of individuals lighting their tap water on fire. Second, I will argue that the inclusion of national security issues in the HF debate has added a third dimension to the traditional economy versus environment binary, which works to silence the opposition to HF through intimidation and fear.

During his research, Fox met with three separate families in different parts of the country who were able to light their tap water on fire due to methane contamination. Scenes of people lighting their tap water on fire have become one of the most iconic images of the film, as well as one of the most debated. A recent post on YouTube entitled *My Water's on Fire Tonight (The Fracking Song)*, which was uploaded in May 2011, has been viewed over 250,000 times. Another YouTube video entitled *Can You Do This with Your Tap Water* shows one of the scenes from *Gasland* of a homeowner lighting his tap water on fire; this video has received over 357,000 views. Additionally, entire online forums, such as waterunderattack.com, have been dedicated to the debate surrounding this phenomenon. However, gas industry proponents argue that the scenes are misleading, because methane seepage into ground water wells often occurs naturally and is common in areas where there is no drilling activity. In her article, *Gasland Producer Mised Viewers on Lighted Tap Water*, Alyssa Carducci writes, "In *Gasland's* most poignant scene, a man is filmed lighting his tap water on fire. The movie asserts that hydraulic fracturing has made this possible by contaminating nearby water sources...investigative journalist Phelim McAleer, however, discovered and proved residents in the man's neighborhood have been able to light their water on fire since the at least the 1930s" (1). She goes on to cite independent research conducted by McAleer, who recently produced *FracNation* in support of the gas industry. During his investigation, McAleer found three separate geological studies, dating back to the 1930's, that concluded methane contamination of ground water wells is often a natural occurrence and is not related to the process of HF.

Though the ability to light tap water on fire is a very persuasive and striking image, the misrepresentation that this phenomenon is directly caused by HF, is counterproductive to the film's message. The lack of an immediate verbal context to balance the persuasive appeal of the

image makes the visual argument invalid and misleading. What is problematic about misleading arguments in films such as *Gasland* relates back to issues of *ethos*. A filmmaker's credibility is crucial in persuading an audience of the validity of his argument, especially when the argument is of an extremely controversial nature as is *Gasland's*. Also, the use of misleading evidence in support of one's argument strengthens the validity of the opposition's counter argument, such as NatGasNow's January 2011 YouTube posting entitled *The Truth about Gasland*, which directly addresses this issue and has been viewed over 370,000 times. A filmmaker need for credibility in presenting controversial issues cannot be overstated, and the misrepresentation of evidence, no matter how well intended, often works to add skepticism to the validity of the film's message.

The second counter argument from the gas industry focuses on the need for domestic sources of energy, and cites the process of HF as a critical component for domestic energy production. Though the issue of national security was not directly discussed in the film, and only mentioned briefly in closing remarks by Congressman Dan Boren, a powerful lobbyist for the oil and gas industry, future environmental debates should give serious critical attention to the use of the "national security" label as a rationale for, and a way to silence objection against, future energy policies that have serious environmental and social consequences. By considering HF an issue of national security, the government not only gives the gas industry unrestricted use of federal land for gas extraction, but it also gives the industry and the government unprecedented legal authority to intimidate and harass local environmental and activist groups who speak out on the issue, by labeling them as eco-terrorists. The misuse of federal authority to intimidate its citizens has become a common tactic, as a recent scandal, which resulted in the resignation of James Powers, Head of the Pennsylvania Office of Homeland Security, and Pennsylvania's

Governor, Ed Rendell, issuing an apology for spying on local environmental groups and activists.

The Pennsylvania scandal involved Tom Ridge, the former director of The Department of Homeland Security, who took over as the Marcellus Shale Coalition's chief spokesperson. According to Fox:

We started to get leaked communications that Pennsylvania's intelligence bulletins, which were secret documents distributed to law enforcement, said that eco-terrorism was on the rise in Pennsylvania related to fracking and that one of the places these eco-terrorists could gather were at *Gasland* screenings...these were not radicals, but rather stay-at-home moms and dads, college professors, and concerned land owners..." (Costa)

However, local and state police were not the only law enforcement agencies involved:

The group that Pennsylvania hired [to monitor citizens] was called The Institute of Terrorism Research and Response and their website featured sophisticated surveillance techniques and an Israeli Swat team...and when one activist Virginia Cody posted this intelligence bulletin on line, the director of Homeland Security in PA wrote to her and told her she should take it down and indicated in his letter that the Homeland Security office in PA was collaborating directly with the Marcellus Shale Coalition and Tom Ridge. (Costa)

A discussion of the gas industry's use of intimidation and public smear campaigns demonstrates that the film is effective in giving citizens the tools to educate themselves on the issues, and is empowering them to stand up in opposition against powerful corporate interests.

In the film, an example of how the gas industry's rhetoric distorts not only the facts presented to regulatory committees—but also stigmatizes concerned citizens who speak out against HF, and who are demanding transparency in the HF process by repealing its exemption from the Safe Water Drinking Act—is shown in Congressman Boren's remarks before the Subcommittee on Energy and Minerals: "I'm proud that I'm supported by the oil and gas industry, because they employ a lot of people in my state. And I'm going to stick up for them, and I'm tired of people trying to shut down an industry when they are not educated on the facts...and if you weren't able to do this HF, how much more would we be dependent on foreign oil and terrorism?"

In an attempt to refute the environmental concerns of New York citizens, the congressman, in this passage, reframed the public's request to have the oil and gas industry comply with the Safe Water Drinking Act, into an exaggerated rhetoric of fear claiming that an "uneducated" public wants the gas industry "shut down," forcing the country to depend on "foreign oil and terrorism." The congressman's rhetoric marks a unique addition to the traditional dichotomy that is often used to refute the need for environmental regulation and conservation. Traditionally, corporations and their political allies have used the false dichotomy of "jobs versus the environment" as a way to gain support from their working-class conservative base. However, environmental/energy debates post 9/11 have been subjected to a third dimension, which posits environmental concerns against issues of "national security" and "the war on terrorism." The new dichotomy of "national security versus the environment," relies on a "culture of fear" based on 9/11 public culture, and propagated by the establishment media, PR campaigns run by the oil and gas industry promoting "American Energy," and a general populace that is often overwhelmed by the complexity of, and conflicting claims about, the

politics and science surrounding these issues. These counter arguments are important to *Gasland*'s oppositional audience, because they offer the ultimate reasoning for our continued anthropocentric ideology. For some it is morally and publically difficult to defend destroying the environment for corporate profit; however, when one offers the blanket of “national security” under which to hide, it becomes much easier to argue for destructive environmental policies, thus continuing the anthropocentric paradigm.

As a society, until we begin to understand that only a complete paradigm shift to a biocentric understanding of nature actually occurs, there will be no lasting solutions to the energy or environmental crisis. Only a complete and revolutionary overthrow of the continuing anthropocentric paradigm—made possible by creating and implementing intensive environmental and ecology focused curriculums—will dismantle the current economic and political power structures that are suppressing man’s full potential to understand and preserve the natural cycles and ecological systems that every living being depends on.

Conclusion

Throughout this project, I have argued how *Gasland* has been influential in empowering and mobilizing individuals, activists, and communities to educate themselves on the facts and, when needed, to take specific social and political actions necessary to protect their families and communities from the destructive environmental practices used by natural gas industry. In concluding this thesis, I will argue that environmental and ecology-based curriculums are necessary for educating future generations on the importance of the environmental decisions they will have to make in their lifetime, and how documentary films, such as *Gasland*, can facilitate

educators in developing environmentally themed curriculums for first year college composition programs.

One of the most important themes found in *Gasland* is that we are living in a time where the possibility for effecting meaningful social and political change is at its highest. Over the last two decades, modern environmental and grassroots movements have helped to create powerful legislative environmental reforms, as well as create a focus on both formal and informal environmental education. This renewed focus on education has instilled a new found enthusiasm in both theorist and students alike. Christopher Manes, a leading environmental theorist, welcomes this revived enthusiasm, stating that, “in order to act, a person has to believe success is possible, and many young people have that belief...without vision nothing is possible. But young people have imagination and vision, and imagination is what will save us. That’s all it takes, a vision, even if it seems impossible. The impossible is exactly what’s required to solve our environmental problems” (23). However, vision by itself is not enough; if we are to have any real results in the debate between environmental preservation and energy production, only a complete and radical overhaul of our current education curriculum will meet the needs of our current situation. In his work *Pedagogy of Indignation*, a reflection published posthumously in 2004, Paulo Freire writes about the importance of creating and implementing an environmental pedagogy:

It is urgent that we assume the duty of fighting for the fundamental ethical principles, like respect for the life of human beings, the life of other animals, the life of rivers and forests. I do not believe in love between men and women, between human beings, if we are not able to love the world. Ecology takes on fundamental importance at the end of the century. It has to be present in any

radical, critical or liberationist educational practice. For this reason, it seems to me a lamentable contradiction to engage in progressive, revolutionary discourse and have a practice which negates life. A practice which pollutes the sea, the water, the fields, devastates the forests, destroys the trees, threatens the birds and animals, does violence to the mountains, the cities, and to our cultural and historical memories. (46-47)

In this passage, Freire is commenting on the ethical responsibility of educators to create a radical, liberationist educational practice that focuses on, and develops a respect for all life. Freire is calling for a biocentric paradigm shift and is reinforcing my assertion that only a radical environmental and ecology based curriculum is capable of such a task.

Throughout his life, Freire viewed education as a political act. Education is political, because it is always a certain theory of knowledge put into practice, and it demands that different realities, or different ways of knowing and experiencing the world, be acknowledged and understood (Freire 71). Teaching, according to Freire, “can never be divorced from critical analysis of how society works, and teachers must challenge learners to think critically through social, political, and historical realities within which they are a presence in the world” (Jackson 6). Because documentaries, especially activist documentaries such as *Gasland*, offer an alternative, and require a critical, way of viewing the world, and motivated by the desire for social change, engage diverse publics to create a sense of agency and individual empowerment, they offer educators a unique and powerful tool that crosses all social boundaries, allowing for a radical and liberatory praxis.

Activist documentaries offer not only a critical lens through which to view the world, but they are able, as in the case of *Gasland*, to create multi-public literacies regarding complex social, scientific, and political issues, and like education, literacy too is political. Literacy, as a social practice, offers the tools needed to be able to read the world, and “reading the world needs to go with rewriting the world...the more informed and better we read the more we can rewrite, becoming able to write what is not yet written” (Jackson 7). Because documentary films offer the critical tools needed for students to be able to “rewrite the world,” they should be viewed as an important new pedagogical tool for composition classes.

In *Composition and Sustainability*, Derek Owens argues that English and composition studies can have an important role in “imagining and developing” curricula that promote environmental awareness and environmental sustainability. With eco-composition emerging as a relatively new field of study, and ethical concerns about using a classroom to push a social agenda, Owens proposes that even though it is difficult for educators to “honor the disciplinary needs of their departments,” and work toward improving the daily “environments in which students live and work, they have a responsibility to “at least construct working pedagogical stances that seek to promote environmental sustainability within their courses and research” (141). For Owens, imagining a “Sustainability Across the Curriculum Movement” is a matter of “re-education and invention.” It’s a matter of understanding the complexity of “our responsibilities as educators working with a threatened generation” (151). For composition studies, documentaries offer the ability to engage students by exposing them to complex and important social issues, issues often not covered in the mainstream media; and through simplifying these complex issues, documentaries offer composition instructors the ability to engage in the debate with their students and offer writing projects that matter to them. Echoing

Fox's mantra that runs throughout *Gasland*, Freire states that "Change is difficult, but it is possible" (77). Lastly, I would not presume to say that *Gasland* is the first activist documentary to confront complex environmental, social, and political issues, although it is one of the most important. Research into how documentary films engage and empower citizens, and act as agents of social change, would provide further insight into the medium's limitless possibilities.

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