

Watershed:
Conserving a Common-Place

BY

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THESIS

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trib•u•tar•y (*noun*)

a river or stream flowing into a larger river or lake.
("Tributary" def.)

A native is a man or creature or plant indigenous to a limited geographical area - a space boundaried and defined by mountains, rivers or coastline (not by latitudes, longitudes or state and county lines), with its own peculiar mixture of weeds, trees, bugs, birds, flowers, streams, hills, rocks and critters (including people), its own nuances of rain, wind and seasonal change. Native intelligence develops through an unspoken or soft-spoken relationship with these interwoven things: it evolves as the native involves himself in his region. A non-native awakes in the morning in a body in a bed in a room in a building on a street in a county in a state in a nation. A native awakes in the center of a little cosmos - or a big one, if his intelligence is vast - and he wears this cosmos like a robe, senses the barely perceptible shiftings, migrations, moods and machinations of its creatures, its growing green things, its earth and sky. Native intelligence is what Huck Finn had rafting the Mississippi, what Thoreau had by his pond, what Kerouac had in Desolation Lookout and lost entirely the instant he caught a whiff of any city...

I don't think you get native intelligence just by wanting it. But maybe through long intimacy with an intelligent native, or with your native world, you begin to catch it kind of like you catch a cold. It's a cold worth catching.

David James Duncan

At its heart, this project is the chronicle of a long intimacy with a variety of generous and intelligent natives and my own native world. While I don't presume to possess a vast stock of intelligence, sufficient to capture the infinite details of this cosmos, this project represents my attempt (however insufficient) to wear this cosmos like a robe, sensing, as Duncan describes, "the barely perceptible shiftings, migrations, moods and machinations of its creatures, its growing green things, its earth and sky."

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CGD

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SUMMARY

Relying on three years of ethnographic fieldwork, the dissertation before you argues that the watershed-based conservation effort in the Clear Creek watershed helps watershed farmers negotiate competing logics of *hyper-stewardship* and *grounded stewardship* by transforming the watershed from scientific into rhetorical language, prompting a measure of identification with the symbolic and material watershed that serves as an inducement to make changes to the landscape for the sake of soil and water conservation. Emerging from this main argument are the related arguments that rhetorical change and landscape change are deeply intertwined, that an emplaced study of conservation rhetoric can inform the growing study of rhetoric-in-action, and that a rhetorical perspective can and should play a significant role in future conservation research and practice.

In these pages, I describe the shifting ideology of stewardship that permeates American agriculture and chronicle efforts on the part of conservation agencies to invent and promote the watershed as a *topos*, or commonplace, to appeal to and yet transform that ideology. Adopting Kenneth Burke's framing of rhetoric as identification, I describe the invention of the *topos* watershed and suggest that this *topos*, in its transformation from scientific to rhetorical language, serves as a particularly potent material and symbolic site for identification. Offering qualitative data collected from landowners and operators in the Clear Creek watershed, I map the rhetorical landscape of agricultural stewardship, paying close attention to what happens when universal rhetorics of stewardship enter the fray at the vernacular level. I then consider whether the *topos*

SUMMARY (continued)

watershed, as it is mobilized by conservation agency staff, succeeds in its rhetorical work to become not only a site of identification but what Burke calls “an inducement to action” (*A Rhetoric of Motives* 42), prompting landowners and operators to embrace conservation efforts in the watershed.

In the three main chapters that follow, I work through three connected arguments: that the ideology and practice of contemporary American agriculture relies upon competing rhetorics of *grounded stewardship* and *hyper-stewardship* (allied with environmental good and environmental harm respectively); that, on the vernacular level, Clear Creek’s farmers and landowners incorporate and act upon these public rhetorics of *grounded* and *hyper-stewardship* in intricate, creative, and even positive ways; and that the watershed-based conservation effort in Clear Creek succeeds insofar as it prompts identification with symbolic and material aspects of the watershed, shifting the rhetorical commonplace of the watershed into a common-place. In my concluding chapter, I offer some tentative but hopefully productive suggestions for how the study of rhetoric – and specifically of the rhetorical forces that affect anthropogenic landscape change – might be incorporated into conservation practice for the sake of more effective soil and water conservation outreach.

I. HEADWATERS: AN INTRODUCTION

head•wa•ters (*noun*)

a tributary stream of a river close to or forming part of its source: *these paths follow rivers right up into their headwaters.* (“Headwaters” def.)

Where I begin this text is the place I found myself every Friday evening during the process of writing this dissertation: folding myself and my backpack into whatever mode of transportation would carry me back west, back home, that week. My hope is that a glimpse into the movement across the landscape provoked by this project and the realizations I arrived at along the way will set the backdrop for the symbolic and material transformations occurring in Clear Creek – my study watershed – and in watersheds throughout the United States and will help to weave together the rhetorical, biological, physical, social, and symbolic forces that I attempt to wrangle together here.

In the process of researching and writing this dissertation, I became quite intimate with the expanse of I-88 and I-80 that connects Chicago, Illinois with Iowa City, Iowa. This umbilical cord of the Midwest stretches the 221 miles from my office at the University of Illinois at Chicago to my home on the southeast side of Iowa City. As I traveled east to west between these two locales each week, the road helped to ease the transition between my split personalities, flowing from the dense concrete cavern of the Eisenhower Expressway, through the sprawling suburbs and then exurbs, across the Mississippi River, through the rolling farms of eastern Iowa, and finally, into the university town I call home.

But this stretch of highway does more than connect the two pieces of my life – my university with my field site – it also reaches across the belly of the Upper Mississippi River Basin, bridging the eastern and western edges of the watershed. And so, on a highway cloverleaf outside of Dekalb, I spot a large, grey coyote negotiating the traffic, seeming every bit at home as she might be in the state forests north of Iowa City.

Peregrine falcons roost and nest on the upper ledges of University Hall, reminding me of the bald eagles who swoop over the wintry Mississippi, the turkey vultures (or turkey buzzards, as we call them in Iowa) who glide across the Coralville Dam, and the red-tailed hawks who adorn the fall fence posts up and down I-80. I catch the sweet sulfur of skunk spray both from the window of my parents' home in Rogers Park, a neighborhood on the north side of Chicago, and on a particularly desolate stretch of I-88. Large swaths of the landscape are often dotted with pheasants and white-tailed deer, while the 2008 floods brought a surge of white pelicans, cranes, egrets, and blue herons to the flooded fields east of the Mississippi.

As five roundtrips became fifty, I began to look beyond the governmental boundaries that separate Cook from Dupage County and the State of Illinois from the State of Iowa. I suspended thought of the competing claims of the Sauk and Fox that pre-date these U.S. American boundaries. I began to consider the cohesiveness of the watershed, of regional similarities, of the interconnectedness of the basin. Put simply, I began to identify with the watershed. And that realization marked the inception of the particular project that lies before you.

I came to recognize the rich, black soil that extends from Illinois into Iowa, the large stretches of prairie grass, the limestone-lined creeks. I came to recognize the effects

of Chicago's industrial waste on the river that – thanks to a triumph of engineering – now flows downstate. I came to recognize the effects that my gallons and gallons of burned gasoline would have on not just the basin, but the planet. And I came to see that I am not the only thing that moves among and between these two poles of Iowa City and Chicago.

When I walked across Harrison Street, for instance, heading from UIC's University Hall to my car in the visitor parking lot directly north, I walked just out of eyeshot of Ceres, the goddess of agriculture who graces the top of the Chicago Board of Trade, just over one mile to the east. Within the building she protects, commodities and futures traders buy and sell the corn and soybeans grown in the fields I would pass on my trip, setting the prices for commodities worldwide, investing their earnings on the global market, and impacting the local choices and practices of the farmers I have come to know in eastern Iowa. As I traveled west on the highway itself, I spotted countless cattle trucks, transporting corn-fed Angus, Hereford, and Charolais to the meatpacking plants that awaited them; sprinkled among them were Walmart semi-trailers transporting goods from Arkansas to all points east, west, north, and south.

The semi trailers, passenger cars, and moving vans cross those 221 miles between Iowa City and Chicago, ferrying products and people from producer to consumer, from Cabrini Green in Chicago to Section 8 housing in Iowa City, from the University of Iowa to the student's suburban home in Naperville, Illinois. The coyotes, hawks, and eagles span large stretches of the watershed. And the Mississippi River anchors it all. Taken together, they comprise a web that informs our experience and understanding of life in the Upper Mississippi River Basin. In an effort to learn more about that web, this dissertation offers a glimpse into one small watershed that helps to constitute that basin in

an effort to elucidate the concerns and consequences that have affected and will affect them all.

Borrowing from ecology, which attends to the embeddedness of individuals in monocultural populations, polycultural communities, and complex ecosystems, this dissertation considers the rhetorics that are embedded within and bind together the interwoven strands of that web – the commodity trader, the corn field, the river, the university, the red-tailed hawk, the farmer – as they emerge in one small watershed. As I analyze the rhetorics that drive and confound efforts for agricultural conservation in this text, my hope is that this project might be useful to understanding the meanings, horizons, and possibilities of soil and water conservation in early 21st century America. Significantly, I insist that this understanding be translated into action: that rhetoric – as a discipline – heed a call to make itself useful to the problems of environmental management that increasingly confront us all.

A. The Argument and the Roadmap

Relying on three years of ethnographic fieldwork, including a two year internship with the Iowa Department of Agriculture and Land Stewardship, interviews with 25 landowners, operators, and conservation staff, and a survey of 397 agricultural landowners and operators in the Clear Creek watershed in eastern Iowa, the dissertation before you argues that the watershed-based conservation effort in the Clear Creek helps watershed farmers negotiate competing logics of hyper-stewardship and grounded stewardship by transforming the watershed from scientific into rhetorical language, prompting a measure of identification with the symbolic and material watershed that

serves as an inducement to make changes to the landscape for the sake of soil and water conservation. Emerging from this main argument are the related arguments that rhetorical change and landscape change are deeply intertwined, that an emplaced study of conservation rhetoric can inform the growing study of rhetoric-in-action, and that a rhetorical perspective can and should play a significant role in future conservation research and practice.

Significantly, I suggest that this study has implications for the fields of both rhetoric and conservation. As rhetoric increasingly takes an interest in rhetoric-in-action and the relationship between rhetoric and the material world, this project offers a situated study of rhetoric to consider the situated consequences of the rhetorics of conservation among agricultural landowners and operators, paying close attention to the material effects of their arguments and imaginings.¹ This project also has immediate consequences for the practice of agricultural conservation outreach. Because 89.5% of Iowa is privately owned farmland, voluntary adoption of conservation measures by private agricultural landowners is a major concern for the protection of Iowa's soils and waterways ("Table 344," "Table 797"). My hope is that this research will improve conservation outreach in my study watershed (and watersheds throughout the country) as it attempts to better understand why and how landowners embrace or reject conservation practices. With those dual goals in mind, this study has something to offer to both rhetoricians and conservationists.

As it works to contribute to both rhetoric and conservation practice, this dissertation parses the relationship between rhetorical change and landscape change. In the chapters that follow, I attend to shifting arguments and imaginings of conservation

and stewardship in American agriculture generally and in the Clear Creek watershed in eastern Iowa specifically. I connect these arguments and imaginings, particularly those embodied in the burgeoning *topos* watershed, to the shifting landscape: the interrelated biological, physical, social, and symbolic aspects of a given geographical area; significantly, landscape, as it is used here, is both material and symbolic.

In these pages, I describe the shifting ideology of stewardship that permeates American agriculture and chronicle efforts on the part of conservation agencies to invent and promote the watershed as a *topos*, or commonplace, to appeal to and yet transform that ideology. Adopting Kenneth Burke's framing of rhetoric as identification, I describe the invention of the *topos* watershed and suggest that this *topos*, in its transformation from scientific to rhetorical language, serves as a particularly potent material and symbolic site for identification: the understanding that I came to many miles and many years ago. Offering qualitative data collected from landowners and operators in the Clear Creek watershed, I map the rhetorical landscape of agricultural stewardship, paying close attention to what happens when universal rhetorics of stewardship enter the fray at the vernacular level. I then consider whether the *topos* watershed, as it is mobilized by conservation agency staff, succeeds in its rhetorical work to become not only a site of identification but what Burke calls "an inducement to action" (*A Rhetoric of Motives* 42), prompting landowners and operators to embrace conservation efforts in the watershed.

Throughout this text, I attend to the embeddedness of words in dynamic and interconnected social systems and in the physical and biological world. This orientation emerges from several years of collaboration with local stakeholders as we attempted to make rhetoric immediately useful to a pressing ecological problem: the widespread

impacts of sedimentation and contamination of Clear Creek. By making sense of the ways in which rhetorics and ecosystems come together as agricultural landowners and operators navigate, learn from, and make choices about a particular ecological system, my hope is that this analysis will serve as a model for further grounded collaborations and, as a result, will have widespread implications for both rhetorical theory and conservation practice.

In the three main chapters that follow, I work through three connected arguments: that the ideology and practice of contemporary American agriculture relies upon competing rhetorics of *grounded stewardship* and *hyper-stewardship* (allied with environmental good and environmental harm respectively); that, on the vernacular level, Clear Creek's farmers and landowners incorporate and act upon these public rhetorics of *grounded* and *hyper-stewardship* in intricate, creative, and even positive ways; and that the watershed-based conservation effort in Clear Creek succeeds insofar as it prompts identification with symbolic and material aspects of the watershed, shifting the rhetorical commonplace of the watershed into a common-place. In my concluding chapter, I offer some tentative but hopefully productive suggestions for how the study of rhetoric – and specifically of the rhetorical forces that affect anthropogenic landscape change – might be incorporated into conservation practice for the sake of more effective soil and water conservation outreach.

Before launching into those arguments, I will use this introductory chapter to provide some insight into the rhetorical tradition that I rely upon here, to explore the version of transdisciplinarity that emerges in this work, and to describe my particular rhetorical ethnographic method. I conclude this introduction by offering a quick look

downstream at the chapters that follow. But first, I begin with a description of my field site.

B. The Field Site: The Clear Creek Watershed

My dissertation research is located, quite literally, up shit creek.

Let me explain. This dissertation takes Clear Creek, a 25 mile long creek in eastern Iowa and the ~6500 acre watershed that feeds it, as its subject. In the late 1990s, concerns about pollution in Clear Creek prompted the Johnson County Soil and Water Conservation District to name the creek a priority watershed; the formation of a citizen-based watershed group, the Clear Creek Watershed Enhancement Project (CCWEP), followed in 2001. Throughout the 2000s, the Board worked to spread awareness about conservation practices to remedy pollution, while a statewide volunteer water monitoring group called IOWATER conducted water quality snapshots along the creek.

On a late spring day in 2004, IOWATER volunteer Dave Ratliff decided to track the headwaters of Clear Creek, pursuing the source of elevated chloride levels and a foul smell coming from the water. What Ratliff discovered at the drain tile outlet that forms the basis of Clear Creek is now the stuff of legend in eastern Iowa: “Small strands of a white, fibrous material [...] wrapped around vegetation and accumulating in the shallow pools” (Soenen 18). The white, fibrous material? Toilet paper. Accompanying the toilet paper? Human shit.

Alarmed at the discovery, Ratliff enlisted the aid of other IOWATER volunteers and, later that summer, the group tracked the source of the waste to the small, unsewered (and unincorporated) community of Conroy, Iowa. It turned out that the septic fields of

Conroy were leaching into the agricultural drain tiles in the area, which were carrying the raw sewage to the headwaters of Clear Creek.

Despite the gravity of Ratliff's discovery, IOWATER volunteers and the Clear Creek Watershed Enhancement Project Board were unable to convince regulatory bodies and local governments to take action. Ratliff reported that local regulatory officials told him, "That's great information, but I'm afraid there's not much we can do," "We've known about this situation for years," and "You think that's bad, you should see some other places" (Soenen 19). This apathy was confounded by Conroy's unincorporated status. No municipality wanted to take financial responsibility for solving the problem; Ratliff's complaint fell on deaf ears.

But where Ratliff's initial attempts at deliberative rhetoric failed, his incorporation of visual rhetoric won the day. When Ratliff arrived at the 2005 Iowa Department of Natural Resources Water Monitoring Conference armed with *pathos*-laden photographs of the toilet paper and human waste fouling the creek, attendees sat up and took notice. "Dave's presentation had a huge impact on me," reflected Susan Heathcote, water program director for the Iowa Environmental Council (Soenen 19). It had so much of an impact, in fact, that the Council made failing septic systems their legislative priority.

Thanks in large part to the efforts of the Iowa Environmental Council and increasing public outcry drummed up by articles and editorials in Iowa City and University of Iowa newspapers, water quality data from IOWATER finally landed Clear Creek on the Environmental Protection Agency's 303(d) Impaired Waterways list, which made Clear Creek eligible for an impressive \$1.5 million dollars in federal grants for

remediation efforts (Soenen 20). The community of Conroy inaugurated its sewage treatment lagoon in summer 2009, some five years after Ratliff's initial discovery of the sewage. As a result, Clear Creek's impaired status has been downgraded due to the current absence of particulate matter. What this means in layman's terms is that there is no longer visible shit floating in Clear Creek. Headlines like "Small town pollutes tributary near U. Iowa" (Pulliam) and "Citizens, cities on long slog to water purity" (Goodlove) have disappeared from local papers and the story of Clear Creek has largely been forgotten in a college town with a four year memory.

And yet, Clear Creek's problems continue. Despite the Creek's downgrading, the fecal bacteria problem remains in Clear Creek (from both humans and livestock), as does the important reality that the creek flows directly into the Iowa River, itself holding strong on the Impaired Waterways list and named America's third most endangered river in 2007 by American Rivers. And so, despite the intense focus on the human shit in Clear Creek, the more pressing, persistent, and pernicious threat to the creek has come from and continues to come from modern, intensive agriculture, in the forms of livestock damage, fecal contamination from manure, nitrogen and phosphorous runoff from fertilizers and pesticides, and alarming rates of sheet and rill erosion leading to sedimentation in the creek.

And this is where the Clear Creek Watershed Enhancement Project (CCWEP) comes in. CCWEP, a group that includes private, business, and governmental stakeholders, as well as conservation staff, formed in 1999 to address high bacteria levels, sedimentation, and elevated nitrogen and phosphorous levels in Clear Creek. Thanks to federal and state funding, CCWEP has been able to contribute additional cost-share funds

on top of existing federal funds for agricultural conservation practices like terraces, stream buffers, and waterways on private land in parts of the watershed.

CCWEP brings together private, business, and governmental stakeholders, as well as conservation staff, as part of a local watershed council. The council attempts to address soil and water quality concerns in Iowa's Clear Creek by targeting its outreach efforts throughout the watershed, rather than working with landowners only along the banks of the creek. The idea behind a watershed-based conservation program like CCWEP is that all watershed residents can and should play a significant role in improving the health of a body of water.

As the members of CCWEP well know, the very visible shit problem in Clear Creek tells only a small portion of the story about the damage that has been accruing to Clear Creek over the last fifty or so years. This more pressing agricultural damage to Clear Creek, and the arguments for conservation that surround it, is the ongoing issue that this project addresses.

C. Locating This Text Within the Rhetorical Tradition

Insomuch as this dissertation attends to the symbolic and material dimensions of conservation rhetoric in Clear Creek, it sits in conversation with the work of material rhetoricians like Debra Hawhee and Jack Selzer, scholars who continually remind readers of rhetoric's connection not simply to thoughts and ideas but also to bodies and things in both the ancient (Hawhee) and modern (Selzer) world, and those materialist rhetoricians who study what I refer to here as rhetoric-in-action, often through the use of ethnographic methods, like Ralph Cintron, Carl Herndl, and Candice Rai, among others.

In *Bodily Arts: Rhetoric and Athletics in Ancient Greece*, Debra Hawhee argues that, for the ancient sophists, rhetoric was intimately intertwined with athletics and, as such, both rhetoric and athletics emphasized bodily performance and immanent ways of knowing and producing knowledge. As Hawhee describes, for the ancient rhetoricians, rhetoric was performed, understood, and enacted bodily. Hawhee's argument in *Bodily Arts* draws connections between ancient and contemporary rhetoric, helping us to understand the ways in which the field of material rhetoric flows out of a keen attention to physicality, as well as to the discursive, setting the historical stage for studies that focus on the material and embodied aspects of contemporary rhetoric, like those appearing in Jack Selzer and Sharon Crowley's 1999 collection *Rhetorical Bodies*.

Rhetorical Bodies brings together scholars from a variety of disciplines to explore the lived world and to criticize, from a rhetorical perspective, the current climate in which, as Selzer explains in his introduction to the text, "words have been mattering more than matter" (4). What brings these authors together, according to Selzer, is that they all contribute to two related arguments: that nonliterate materiality should become the object of rhetorical critique and that the literate can only be fully understood in light of its material circumstances. Material rhetoricians do not discount the importance or legitimacy of written and oral texts, but they take very seriously the material conditions that, as Selzer explains, "sustain the production, circulation, and consumption of rhetorical power" (9). The essays collected in *Rhetorical Bodies* remind us that physical bodies inhabit intricate and consequential spaces of power – coercive, hegemonic, and subversive – in order to persuade multifarious audiences, thereby shaping and producing meaning.

In this talk of bodies, though, I do not want to lose sight of materiality more broadly. *Rhetorical Bodies* may not have been aptly named; the authors in the collection do focus on bodies – chapters on cadavers, cannibalism, and a pregnant Demi Moore come to mind here – but their critical lenses extend beyond the body and into other material topics like memorial sites and disintegrating library collections. What seems most important about this collection is its emphasis on the rhetorical dimensions of the material or what Bruce McComiskey, in his review of the text, describes as one of its main foci: “the ways in which ‘things’ (for example, bodies, monuments, and visual images) communicate rhetorical meaning” (699).

I would take McComiskey’s observation a step further and suggest that it is not only that “things communicate rhetorical meaning” (I’m afraid this sort of “reading” of the world lends itself to the most boring disembodied and immaterial “readings” of the symbolics of buildings, sidewalks, “cultural scripts”); rather, things communicate rhetorical meaning, and, further, things come into being and change their material shapes due to rhetorical exchanges. This is not, I suggest here, a one way exchange, where the only relationship between rhetoric and materiality emerges insofar as rhetoric’s symbolicity allows individuals to garner meaning from material objects and landscapes. Through rhetoric humans garner symbolic meaning from material landscapes, but, as I hope this project attests, humans also create and alter material landscapes through their rhetorical interactions.

For all rhetoricians, but particularly for those who I refer to here as materialist rhetoricians (myself among them), words are not abstracts, floating through the world, waiting to be plucked and rearranged at will. Nor are they disconnected from the

material realities that they serve to create, describe, interpret, and amend. Words are tools, means of persuasion, shapers of reality, constructors of existence, means of power. Words inhabit material lives.

In the example that Ralph Cintron once offered in the classroom, the campus of my university, the University of Illinois at Chicago, resembles a concrete prison not (or not only) because I can “read” it this way, imputing the buildings with the symbolic “cultural scripts” of prisons and spaces, but because a group of powerful people sat in a series of board meetings with a series of architects, constrained by the budget allotted to them, sagging under the weight of Mayor Richard J. Daley’s expectations, attendant to the economic decline of Chicago’s downtown, conscious of the dissent in the surrounding neighborhoods and the riots on college campuses across the country, and chose a well-regarded, cutting edge architect who promised to riot-proof the campus, using the building materials available at the time. This back-story, attuned to material constraints, is where rhetorical analyses differ from “readings.”

And this attention to the materiality of rhetoric – to material’s back-story – is essential to understanding our rhetorical worlds because humans cannot escape or transgress the rhetorical. As John Bender and David Wellbery put it in *The Ends of Rhetoric: History, Theory, Practice*, there is “no explanatory meta-discourse that is not already itself rhetorical. Rhetoric is no longer the title of a doctrine and a practice, nor a form of cultural memory; it becomes instead something like the condition of our existence” (25). As the “condition of our existence,” every human experience can be subsumed under the rhetorical. In light of the rhetoricity of human experience, in Bender and Wellbery’s analysis, rhetoric emerges as a “transdisciplinary field of practice and

intellectual concern” that cannot be viewed as just another ideology or school of thought (25); rhetoric is our base, our superstructure, our foundation, and our individual *techné*. Just as Louis Althusser makes the claim that we are already and automatically ideological subjects, contemporary rhetoricians argue that we are already and automatically rhetorical subjects.

The theory of material rhetoric that emerges in this text builds from this understanding of rhetoric as the “condition of our existence,” from its always-already-ness, its connection to the lived world. Significantly, this text relies on qualitative methods to attend to the lived practice of conservation rhetoric – to an instance or connected instances of rhetoric-in-action – as a means of demonstrating how rhetoric functions as the “condition of our existence”: how rhetoric affects not only our experience of material landscapes, but helps to materially shape those very landscapes.

Material rhetoric attends to the lived world, to everydayness, to the material conditions in which rhetorics are embedded. Indeed, Kenneth Burke, in his *A Rhetoric of Motives*, attends to this everydayness in the discussion of identification that opens that text. As Burke explains, “often we must think of rhetoric not in terms of some one particular address, but as a general *body of identifications* that owe their convincingness much more to trivial repetition and dull daily reënforcement than to exceptional rhetorical skill” (26). In fact, this emphasis on repetition and reënforcement harkens back to Hawhee’s discussion of sophistic rhetoric as embodied and immanent, as “a bodily, habituated practice dependent upon rhythm, repetition, and response” (*Bodily Arts* 193). As this project suggests, emplaced studies of rhetoric-in-action that attend to “trivial

repetition and dull daily reënforcement” and to “bodily habituated practice” are essential to painting a full picture of the uses and effects of rhetoric in the world.

Like Burke, I propose that rhetoric’s everydayness, its habituated practice – not simply its conscious and coordinated performance – offers a means through which individuals negotiate the contentiousness and *agon* of everyday life, or what Burke refers to as “the Scramble, the Wrangle of the Market Place, the flurries and flare-ups of the Human Barnyard, the Give and Take, the wavering line of pressure and counterpressure, the Logomachy, the onus of ownership, the War of Nerves, the War” (*A Rhetoric of Motives* 23).

In this case, I attempt to open a window onto the rhetoric-in-action of the Clear Creek watershed’s farmers, landowners, and conservation staff in order to demonstrate how watershed rhetoric offers a means for these individuals to negotiate “the Scramble, the Wrangle of the Market Place, the flurries and flare-ups of the Human Barnyard”; as I will demonstrate in the chapters that follow, watershed rhetoric offers to help them negotiate the tensions between *hyper-stewardship* and *grounded stewardship*, between economic pressure and environmental concern, between obligation to their grandparents and responsibility to their children, by offering a material and symbolic site for identification. Watershed rhetoric shapes landowners’ and operators’ views of both the symbolic and material landscape and, in so doing, prompts actions that affect and shape the material landscape.

D. An Exercise in Transdisciplinarity

While this text is firmly rooted within the rhetorical tradition, its attention to the material landscape and its concern with the grounded realities of agricultural conservation practice – in addition to the shaping influence of my training in the Landscape, Ecological and Anthropogenic Processes NSF-IGERT program at the University of Illinois at Chicago – mark this as a transdisciplinary text. I would suggest that any project that attends to ideologies of *hyper-stewardship* and *grounded stewardship*, to economic pressures and environmental policies, to family obligations and responsibilities, and to pollution, sedimentation, and conservation practices must, by definition, be a transdisciplinary study. Recall Bender and Wellberry’s insistence that rhetoric itself is a “transdisciplinary field of practice and intellectual concern” (25). While this project makes a conscious contribution to the field of rhetoric, my intention is for this text to have relevance beyond the field. And while disciplinary boundaries and distinctions can be useful in terms of defining useful methodologies and mores, I want to suggest that finding a solution to anthropogenic soil and water quality problems such as those facing Clear Creek demands a systemic, transdisciplinary approach. Because of its grounding in a particular, ecological problem, this project attempts to cross both deep disciplinary and extra-disciplinary divides.

Not surprisingly, then, my hope is that this work emerges as what Debra Hawhee describes as transdisciplinary work in *Moving Bodies: Kenneth Burke at the Edges of Language*. As she explains there, “What distinguishes transdisciplinarity from interdisciplinarity is its effort to suspend – however temporarily – one’s own disciplinary terms and values in favor of a broad, open, multilevel inquiry” (*Moving Bodies* 3). She

continues: “Interdisciplinarity is marked by disciplinary affinity – closely allied fields such as history and literary studies or gender studies and rhetorical studies sharing methods and cross-listing courses – whereas transdisciplinarity is marked by shared interest in a particular matter or problem but often draws together radically different approaches” (*Moving Bodies* 3). This work is built around a particular matter or problem – ongoing pollution and sedimentation in Clear Creek – and attempts to bring together differing approaches – rhetorical analysis and ethnographic interviewing and fieldwork framed against ecological knowledge – in an effort to better understand and respond to that problem. This project emerged from an attempt to bring rhetoric to bear on a practical, ecological dilemma and has become an argument for a transdisciplinary approach through which rhetoric is integrated with ecology for the practice of conservation.

I refer to the problems facing Clear Creek as an “ecological” dilemma – rather than an “environmental” one – because I attend throughout this text to the widespread systemic causes and effects of contamination and sedimentation in Clear Creek. While the “environment” stands in as the vague colloquial word referring to the natural world, ecology refers to the study of relationships between organisms and their environments.

As the Ecological Society of America explains, ecology is:

The scientific discipline that is concerned with the relationships between organisms and their past, present, and future environments. These relationships include physiological responses of individuals, structure and dynamics of populations, interactions among species, organization of

biological communities, and processing of energy and matter in ecosystems. (“About ESA”)

In short, ecology is relational and situated. It is broad in scope but specific in focus. As a field of study, it attends to the relationships between individuals, their communities, and their particular material circumstances. In these ways, ecology’s concerns are remarkably similar to rhetoric’s, a point to which I will return in chapter five.

It comes as somewhat of a surprise, then, that more research has not been devoted to the productive overlaps between rhetoric and ecology. The limited existing academic work that concerns itself with both rhetoric and ecology tends to fall into what I call the *rhetoric-as-ecology* or *rhetoric-of-ecology* approach.

In the past few decades, a handful of rhetoricians like Marilyn Cooper, Jenny Edbauer Rice, and Anis Bawarshi have borrowed the metaphor of the ecosystem to reframe the rhetorical situation of speaker-audience-text, while the groundbreaking shared work of rhetorician John Lyne and ecologist Henry Howe on punctuated equilibria arguably founded the sub-discipline of rhetoric of science in the mid-1980s. It is important to note the differences between these two fusions of rhetoric with ecology – that of *rhetoric-as-ecology* and *rhetoric-of-ecology* – and then consider how the work before you differs from them both.

The work of Cooper, Edbauer Rice, and Bawarshi represent what I refer to as a *rhetoric-as-ecology* approach. As early as 1986, Marilyn Cooper conceived of an “ecological model of writing” (367), a model meant to call attention to the social (and not solitary) nature of textual production. Since then, this notion of the ecological model has found its way into the work of rhetoricians like Anis Bawarshi and Jenny Edbauer Rice;

Bawarshi posits genres as “rhetorical ecosystems” (8) through which writing is produced, while Edbauer reframes rhetorical situations as “rhetorical ecologies” in order to conceive of rhetorics as malleable and fluid rather than static and fixed (9). In each case, an emphasis on the ecological nature of rhetoric and writing serves to call attention to the embeddedness of texts and utterances within multiple systems of discourses and ideologies. In so doing, these authors reframe our understanding of rhetoric and writing as social processes.

But while Bawarshi and Edbauer Rice talk about “rhetorical ecosystems” (in the case of the former) or “rhetorical ecologies” (in the case of the latter), it occurs to me that both authors are actually borrowing the metaphor of ecology to craft a revised conceptual model of the rhetorical situation; that is to say they are talking primarily about an ecological view of rhetoric rather than a rhetorical view of ecology. And so, while I find value in this very useful notion of the ecosystem of the written or spoken text (a heuristic that reminds us to consider the rhetorical ecosystem of all texts, including scientific ones), that will not be my focus in this project.

Rather than borrowing the metaphor of ecology to elucidate the workings of rhetoric, this dissertation has more in common with the rhetoric-*of*-ecology approach of Lyne and Howe and subsequent scholars in the sub-discipline of rhetoric of science. At least since Thomas Kuhn’s 1962 *The Structure of Scientific Revolutions*, the idea of science as a rhetorical, which is to say persuasive, endeavor has been building momentum. This rhetorical understanding of scientific knowledge, what is commonly referred to as a rhetoric of science approach, represents a variety of rhetorical work like Leah Ceccarelli’s *Shaping Science with Rhetoric*, Jeanne Fahnestock’s *Rhetorical*

Figures in Science, Alan Gross' *The Rhetoric of Science*, Lawrence Prelli's *A Rhetoric of Science: Inventing Scientific Discourse*, and the pieces gathered in *Landmark Essays in the Rhetoric of Science*, among others. In these and similar texts, authors offer rhetorical analyses of the discourses and practices of particular scientists, scientific texts, and scientific fields in order to contribute to an understanding of the ways in which science is, in fact, much more malleable, persuasive, and contingent than it has long been portrayed or, at least, apprehended.

Still, I am concerned that at times this approach can lend itself to a critique of the sciences and of scientific knowledge production rather than a consideration of how rhetoric can work constructively with the sciences. This dissertation is an attempt to engage in that productive discussion of transdisciplinary collaboration. In the way that this project investigates both the rhetorical moves that make conservation happen (or not happen) in the Clear Creek watershed and the connections between those shifting rhetorics and shifting landscapes, this study attempts to add an awareness of rhetoric to the study of ecology, "the scientific discipline that is concerned with the relationships between organisms and their past, present, and future environments" ("About ESA"), and, subsequently, to conservation practice. Ecology is concerned with multiple, overlapping, and interconnected layers; the work before you offers an example of what might happen if we connect the concerns of ecology with a concern for the multiple, overlapping, and interconnected rhetorics that are embedded within actual, existing, material ecosystems. Further, this work is an attempt to consider the practical, emplaced benefits of connecting these two perspectives.

I should be clear that in positing this emphasis on rhetoric, I am not suggesting that ecology adopt an anthropocentric view, in which the human species is taken as the sole lens through which the functioning of all ecosystems is understood and, further, evaluated and valued. Rather, I am suggesting that if ecology concerns itself with relationships, interactions, and organization, and if we live in an increasingly anthropogenic world, the practice of ecology might be well-served by considering the role that rhetoric plays in stitching together, unraveling, and ordering of many of those relationships and interactions.

E. Methodology: Rhetorical Ethnography

1. In Theory

In light of these transdisciplinary goals, the text before you relies on a variety of methods and disciplinary approaches. This work offers rhetorical analyses of historical texts, public documents, ethnographic interviews, and survey data, adopting a critical approach to the ways in which language and landscapes offer points of identification for American farmers.

For my primary method, I adopt an emerging sub-discipline of rhetoric that is increasingly referred to as rhetorical ethnography. Rhetorical ethnography weds ethnographic methods with rhetorical analysis, thereby allowing rhetorical ethnographers to pay close attention to the material conditions that produce and are produced by the rhetorics through which we come to understand our places in the world. I have adopted rhetorical ethnography as my primary method in this study because rhetorical ethnography provides a self-conscious window onto both the ordinariness of daily lives

and landscapes and the wide-reaching economic and environmental policies within which farmers, landowners, and conservationists make decisions about their land.

Ethnography emerges as a research method from the field of anthropology, a field that has a deep history of concerning itself with food, agriculture, and environmental conflicts. Johan Pottier's *Anthropology of Food: The Social Dynamics of Food Security* serves as an excellent example of food anthropology. In his text, Pottier, a social anthropologist, offers an ethnographic study of the official debate on world food security, and how this debate has – to ill effect – become divorced from the everyday realities that food insecure people face. Pottier is concerned with the ways that “expert” policies not only fail to solve problems of food insecurity but can, in fact, serve to exacerbate the problem; he suggests that the only way to evaluate these “expert” global discourses and policies is by marking their effects in particular locations.²

Pottier's argument, that we need to combine an analysis of structured impediments to food insecurity with an analysis of differential local experiences, is the brilliance of his text. Ethnography emerges, in this view, as the tool for performing this sort of analysis, sensitive to global structures *and* local experiences. What Pottier urges is for the researcher to situate agricultural practices and knowledges *in life*. In the words of Gayatri Spivak, Pottier insists that policy-makers and researchers speak *with* their subjects, not just speak *to* them. This speaking with and then theorizing from informs the best sort of ethnography, and rhetoric, when added to that, offers the researcher a way to consider the manner in which discourse informs our understandings of the world and of ourselves.

Anna Lowenhaupt Tsing's *Friction: And Ethnography of Global Connection* offers maybe the best recent example of an anthropologist using this method of speaking with and theorizing from to elucidate a people's connection with the environment and, quite usefully, highlighting the productive tensions inherent to environmental conflicts. In her ethnographic study of Indonesian forestry and environmentalism in the 1980s and 1990s (a text to which I return in detail in chapter three), Tsing attends to friction, tension, conflict, and fragmentation in both the content and form of her text. Each chapter of her text is an ethnographic fragment of her work with the local people of the Kalimantan forest, the United Nations, and environmental groups, a method she refers to as "patchwork ethnographic fieldwork" (x).

In her attempt to understand the connections between local and global practices and discourses, Tsing chooses to focus in on friction, the central *topos* and organizing principle of her text. Tsing is particularly interested in universals – so often eschewed by rhetoricians – but her interest in universals (like "rights" and "justice") flows from her interest in fragmentation and friction. Most particularly, Tsing uses friction as a heuristic for understanding the ways in which universals "enter the fray" (270). There is inevitable and productive tension between universalizing rhetorics and the ways in which they are enacted on the ground. As Tsing explains, the use of friction as a heuristic allows us to see the ways in which "heterogenous and unequal encounters can lead to new arrangements of culture and power" (5). Tsing's entire text is an attempt to elucidate the reciprocal forces of global and local, to highlight the ways in which global policies and local responses shape each other and to argue for the need to situate oneself in a given place in order to get a better sense of how global policies and practices are resisted or

adapted in local settings. Tsing's work gets at the heart of the work that I have attempted in Iowa, with an emphasis on the friction of national food policies, hegemonic agricultural discourses, and local practices. And ethnography seems to me the most useful way to get at this ordinariness, these everyday rhetorics.

But I am not the only person proposing this sort of rhetorical ethnography. Some of the key players in the creation of rhetorical ethnography include Michael Carrithers (who argues that social interactions are the terrain on which cultures are [re-]made and that rhetoric is the currency of that remaking), Carl G. Herndl (who responds to the critique of ethnography by insisting that we move into a critical relationship to discourse, attentive to both material and institutional restraints), and Ralph Cintron (who questions the objectivity of the ethnographic text and attends to everyday life and to the *agon* contained within it). These are scholars who make use of the access that ethnography provides to situated local realities in order to theorize about material, social, political, economic, and ideological connections. The text before you makes the same move, making use of ethnography to theorize about the connections between materiality and rhetoricality in the Clear Creek watershed.

2. In Practice

Given this interest in using ethnography to theorize about the connections between materiality and rhetoricality, my qualitative research began with ethnographic fieldwork and interviews first in Chicago and then in the greater Iowa City area. I began attending local food and sustainable and urban agriculture events including lectures, demonstrations, and discussion groups and spent approximately 100 hours as a

participant observer at a one acre urban farm on Chicago's near west side and approximately 300 hours as a participant observer with Local Foods Connection, a non-profit organization that purchases shares of locally grown produce for low-income families in the Iowa City area. Through Local Foods Connection, I began approximately 50 hours of participant observation on various eastern Iowa farms and became intimately involved in an agricultural land use dispute in Johnson County, Iowa. I spent approximately 50 hours talking with the farmer involved in the dispute, helping to craft a series of appeals to the Johnson County Board of Supervisors and participating in an appeal hearing on her behalf. I took copious field notes throughout this multi-year process, filling approximately 10 notebooks. I then conducted a series of seven interviews with members of the sustainable agriculture community first in Chicago and then in the greater Iowa City area. These structured interviews lasted anywhere from one to four hours and were audio recorded and later transcribed by me. My interviewees were self-selected individuals with whom I had made contact through the course of my participant observation.

As I talked with these interviewees about their views on agriculture, stewardship, and conservation, it became apparent that, because of my interest about the effects of contemporary agriculture on the local environment, I ought to be talking with some of the commodity farmers who largely rule agriculture in the state of Iowa, rather than focusing solely on small-scale diversified growers. This feeling was supported by my participation in the 2009 annual meeting of the Johnson County Farm Bureau, a meeting I was able to attend thanks to my relationship with Local Foods Connection. As I listened that evening to the concerns and passions of the corn and soy growers in the county, it

became obvious that these commodity growers had a significant impact on the agricultural landscape of eastern Iowa including its soil and water quality.

Around the same time that I became interested in talking with commodity growers in eastern Iowa, I began work in the Landscape, Ecological and Anthropogenic Processes (LEAP) program at the University of Illinois at Chicago, a National Science Foundation Integrative Graduate Education Research Traineeship (IGERT). As the only humanities student in the program (housed in the Department of Biological Sciences), I hoped to learn more about the material life of arguments for agricultural conservation. A major focus of LEAP training is forging connections between academia, practitioners, and the public. In order to meet this goal, the LEAP program requires that its students complete an internship with an external body. After reading about the Clear Creek Watershed Enhancement Project online, a citizen group advocating for water quality in the creek, I chose to approach the group about an internship.

In November 2008, I met with Clear Creek Watershed Coordinator James Martin when we discussed my serving as an intern on the project through the Iowa Department of Agriculture and Land Stewardship.³ Martin thought that I could help IDALS put together a much anticipated women landowners meeting, as well as creating and distributing a survey about conservation attitudes and behaviors among landowners and operators in the watershed. I attended the November 2008 meeting of the Clear Creek Watershed Enhancement Project Board of Directors and I was sold (continuing to attend monthly meetings through the time of this writing, summer 2011).

Early that following spring (2009), I began the process of creating a women landowners meeting in the watershed. Working from an existing county database of

women landowners in the watershed, I created and distributed a mailing about the event, then followed up with approximately 30 women by phone (thanks to a small database of phone numbers kept by county conservation staff). I booked a local hall where county conservation staff would offer a presentation about conservation programs and be on hand to answer questions. In all, six women attended.

After that meeting, I started to create a mailing list that would allow us to reach the ~1000 agricultural landowners and operators in the two county watershed for the planned survey of conservation attitudes and behaviors. In the midst of planning, we were approached by University of Iowa geographer David Bennett and Southern Illinois University agricultural economist Silvia Secchi, who were interested in conducting a survey about biofuels in the watershed as part of a NSF funded agent based modeling project. We decided to combine our efforts and, after some six months of collaboration, we produced a survey that was distributed throughout the watershed in April 2010.

Thanks to our updated mailing list, approximately 1000 surveys were distributed by mail throughout the watershed. Over the course of the summer and early fall, 397 of those surveys were returned to the Soil and Water Conservation District office. I kept track of those coded returns, sending payment information to Dr. Secchi at Southern Illinois University Carbondale and bringing the surveys to Carbondale that summer. At that point, three of Dr. Secchi's graduate students entered each completed survey into an Access database that was shared by the research collaborators. That survey data played a role in informing my analyses here (and will serve as the focus of future analyses), though in this text I focus explicitly on qualitative data collected over the last several years in eastern Iowa.

Throughout the process of designing, distributing, and collecting those surveys, I talked with Martin a great deal about my interest in qualitative research, and he began to identify possible interview subjects in the watershed. While my only screening criteria for these interviewees was that the interview subject needed to have some connection to the Clear Creek Watershed – either farming or owning land in the watershed or participating in the activities of the Clear Creek Board – participation in Board activities and initiatives or contact with conservation staff proved to be the most reliable way of connecting with potential interviewees. In light of that, Martin put together a list of possible interviewees and then personally contacted each of them to introduce me and my project. (A service for which I am eternally grateful.) Martin then passed a list of interested parties on to me and I went about contacting each of them by phone to explain the project and arrange a time for an in-person interview. Those interviews were completed with 18 Clear Creek-specific subjects (throughout spring and summer 2010). After arranging an interview time by phone, I drove out to meet subjects at their homes, often on farmland in the Clear Creek watershed. I sometimes met with single individuals and sometimes with husbands and wives at the same time. Interviews lasted anywhere from 30 minutes to four hours, averaging about 90 minutes. I followed an interview script approved by the Office for the Protection of Research Subjects at the University of Illinois at Chicago, but also allowed conversations to flow naturally. Each interview was audio recorded with the approval of interview subjects and subsequently transcribed by me.

I added that interview data to the field notes I had collected throughout the approximately 500 hours I spent collaborating with Martin and the Clear Creek

Watershed Enhancement Project over the course of our three years together. This included notes recorded at board meetings, landowner meetings, field days, farm visits, and drives through the watershed and paddles down the creek itself. After all of this qualitative data was compiled, I began my rhetorical analyses, framed by analyses of public and historical documents. I conducted rhetorical analyses of the combined data where I attended to common phrases, themes, arguments, and ideas about agricultural conservation in the Clear Creek watershed in eastern Iowa. The chapters that follow highlight the results of these analyses.

F. Looking Downstream: Chapter Descriptions

As I have described to this point, the work in front of you relies on a mixed-method and mixed-discipline approach to examine the connection between rhetorical change and landscape change. On a theoretical level, it works to connect rhetoric with ecology: to consider the multiple, overlapping, and interconnected rhetorics that are embedded within actual, existing, material ecosystems. Meanwhile, on the practical level, it adopts the Clear Creek watershed as a case study against which to test the power of the *topos* watershed to prompt identification and subsequent action among agricultural landowners and operators.

This idea about prompting identification and subsequent action emerges from Kenneth Burke's work in *A Rhetoric of Motives* and his discussion of the distinction between science and rhetoric. In Part I of *A Rhetoric of Motives*, Kenneth Burke offers a brief discussion of the relationship between rhetoric and science that develops from his observations about the role of rhetoric in anthropological discussions of magic. (Burke's

thoughts about science emerge almost as a sidebar to his main point: that rhetoric is not simply magical, “not mere ‘bad science’”; rather, rhetoric, for Burke, is an “art” [*A Rhetoric of Motives* 42]. Still, as is so often the case with Burke’s writing, gargantuan thoughts emerge from the humblest of passages.) Burke refers to his longstanding interest in anthropology and points to anthropology’s own preoccupation with witchcraft and magic. As Burke explains, anthropological wisdom has it that magic is “an early form of bad science” (*A Rhetoric of Motives* 41), and so, the logic goes, science has since emerged to describe and explain reality. As such, according to Burke, scientists (in this case anthropologists) position science in opposition to magic; because of this opposition, “Scientific knowledge is thus presented as a terminology that gives an accurate and critically tested description of reality” (*A Rhetoric of Motives* 41). In Burke’s analysis, science has come to refer to “a ‘semantic’ or ‘descriptive’ terminology for charting the conditions of nature from an ‘impersonal’ point of view, regardless of one’s wishes or preferences” (*A Rhetoric of Motives* 41). Science is understood as “scenic” rather than what I might call participatory (*A Rhetoric of Motives* 41). It is connected to stasis rather than movement. Unlike “the basic function of rhetoric,” which Burke refers to as, “the use of words by human agents to form attitudes or to induce actions in other human agents,” scientific language is understood as “merely descriptive” (*A Rhetoric of Motives* 41). Where rhetoric moves, science merely reports. And so, as Burke succinctly explains, “Whereas poetic language is a kind of symbolic action, for itself and in itself, and whereas scientific action is a preparation for action, rhetorical language is an inducement to action (or to attitude, attitude being an incipient act)” (*A Rhetoric of Motives* 42).

I point to Burke's distinction between scientific action (and scientific language) and rhetorical language throughout this text. In my analysis, the watershed *topos*, as it emerges in watershed-based conservation efforts, is successful only inasmuch as it shifts from scientific language to rhetorical language, from preparation for action to an inducement to action. When it is successful, the watershed shifts from its role as "a 'semantic' or 'descriptive' terminology for charting the conditions of nature from an 'impersonal' point of view, regardless of one's wishes or preferences" to a word that can "form attitudes or [] induce actions in other human agents" (*A Rhetoric of Motives* 41). It encourages participation and movement. It encourages identification. It succeeds in prompting agricultural operators and landowners to act: to build terraces, install grassed waterways, adopt no-till methods, and encourage their neighbors to do the same.

But in adopting Burke's distinction between the language of science and the language of rhetoric, I do not mean to suggest that scientific language is arhetorical, nor do I believe that Burke thought that either. Burke is careful to point to the way that scientific knowledge is "presented," the way that science has come to be understood as (in quotes in Burke's text) "semantic," "descriptive," and "impersonal" (*A Rhetoric of Motives* 41). Of course scientific language has persuasive power. At least since Thomas Kuhn's 1962 *The Structure of Scientific Revolutions*, the idea of science as a rhetorical, which is to say persuasive, endeavor has garnered attention from rhetoricians, philosophers, and scientists. But I focus here on Burke's typology because I feel it is useful as a heuristic: one that helps to mark the point at which – cognitively – we come to allow ourselves the possibility to heed the call of language: the point at which the watershed ceases to describe (or only describe) "a region or area bounded peripherally by

a divide and draining ultimately to a particular watercourse or body of water”

(“Watershed” def.) and offers itself as a symbolic and material site for identification, a mental map, a rallying point, “an inducement to action (or to attitude, attitude being an incipient act)” (*A Rhetoric of Motives* 42).

This project considers the ways that the *topos* watershed collapses poetic language and scientific action to become rhetorical language (with the symbolicity and materiality that entails) – to become “an inducement to action.” In so doing, it is my hope that this project serves as an example of collaboration between rhetoricians and conservation practitioners, speculating at an answer to the question: How can rhetoric make itself useful to the ecological problems facing the 21st century?

The following chapters work, from varying perspectives, to answer that question.

Chapter two, “Riverbed: Material Rhetorics of Agricultural Stewardship,” attends to the rhetorics that so frequently ground arguments for agricultural conservation: rhetorics of agricultural stewardship. In its pages, I draw from historical and textual sources to argue that the ideology and practice of contemporary American agriculture relies upon at least two competing rhetorics of stewardship: what I refer to here as *grounded stewardship* and *hyper-stewardship*. Where rhetorics of *grounded stewardship* center on the long-term care of a specific, local landscape, rhetorics of *hyper-stewardship* center on the short-term management of agricultural resources for the sake of feeding the world’s population. Significantly for the study at hand, I argue that rhetorics of *grounded stewardship* are allied with environmental good in the American imaginary, while rhetorics of *hyper-stewardship* are allied with environmental harm (and that there are some very compelling reasons for this, as I will describe). Further, I argue here that

hyper-stewardship has become the dominant rhetoric in American agriculture, deeply intertwined as it is with the technological advances of the Green Revolution and American economic policy, defining and constricting the possibilities for heroism available to America's farmers.

But, as I suggest in that chapter, this binary is a dangerous fiction. When environmental advocates adopt rhetorics of *grounded stewardship* to the exclusion of rhetorics of *hyper-stewardship*, they implicitly shore up the power of this binary, unnecessarily forcing agricultural operators and landowners to choose between their desire to care for their local landscape and their desire to manage their property for the sake of the world's growing population, America's economic health, and their own financial benefit. As I argue throughout this text, in the current zero sum equation, conservation will almost always lose.

Where chapter two attends to rhetorics of stewardship on the macro scale, chapter three, "Confluence: Vernacular Voices of *Grounded Stewardship* and *Hyper-Stewardship*," turns its attention to the micro: to the ways that those universal rhetorics engage at the level of the everyday. Based on my ethnographic fieldwork with Clear Creek's farmers, landowners, and conservation staff, this chapter seeks to address what happens when these rigid, public rhetorics of *grounded stewardship* and *hyper-stewardship*, in the words of anthropologist Anna Lowenhaupt Tsing, "enter the fray" (270). In this chapter, I detail the ways in which these rhetorics of *grounded stewardship* and *hyper-stewardship* emerge in the vernacular rhetorics of Clear Creek's farmers and landowners and play a crucial role in their decision-making about conservation and the resultant impact on the material landscape. Despite the seeming rigidity of these

rhetorics on the macro scale, I suggest here that, on the vernacular level, these rhetorics play out in complex ways. Clear Creek's farmers and landowners struggle to talk, think, and act amongst these conflicting rhetorics, and, ultimately, they incorporate these public rhetorics in intricate and even positive ways. While the rigid instantiations of rhetorics of *grounded stewardship* and *hyper-stewardship* work to create a false binary that forecloses the possibilities for action amongst the farmers of Clear Creek, I argue here that opportunities for invention and action emerge at the vernacular level: that even rhetorics of *hyper-stewardship* can be mobilized for the sake of positive environmental change.

Chapters two and three work to describe the rhetorics of stewardship in American agriculture through the specific lens of the Clear Creek watershed's farmers, landowners, and conservation staff. Where those chapters describe and analyze the discourses of American agriculture that form the backdrop for rhetorical interaction in Clear Creek, chapter four, "Watershed: A *Topos* Becomes a Common-Place," turns to contemporary efforts on the part of conservation staff to alter that backdrop through the implementation of watershed-based conservation initiatives. In so doing, this chapter, highlighting qualitative data collected from Clear Creek's farmers and landowners, offers a situated analysis of the relationship between rhetorical change and landscape change.

After chronicling the rise of the watershed *topos* in contemporary government-sponsored conservation efforts, I adopt Kenneth Burke's framing of rhetoric as identification to argue that the watershed *topos*, as it is mobilized in contemporary conservation efforts, serves as a potent material and symbolic site for identification. Offering my ethnographic research in the Clear Creek watershed in eastern Iowa as a test case, I consider how farmers' and landowners' identification with the watershed has

prompted changes to the landscape for the sake of soil and water conservation. I then consider the implications of this argument for extending Gregory Clark's theorization of the rhetorical landscape, suggesting that rhetorical landscapes contain elements of both the symbolic, as Clark suggests, and the material.

Finally, chapter five, "Delta," serves as the concluding chapter. That chapter revisits the connections between the preceding body chapters and looks ahead to consider how the emplaced study of rhetoric might be incorporated into conservation practice for the sake of more effective soil and water conservation outreach.

Notes

1. Candice Rai coined the term “rhetoric-in-action” to label the focus of her research in her dissertation, “Rhetorics of Democracy in Contested Urban Space.” As she describes there, a project that studies “rhetoric-in-action” attends “to the ways that individuals use discourse to get things done in dynamic social situations” (29). As she continues, “An ethnographic study of rhetoric-in-action, then, focuses on the flexible use of rhetoric within a field site” (29). I have adopted Rai’s term here because I think it offers a useful shorthand for the sorts of rhetorical studies, like this one, that concern themselves with the origins and consequences of rhetoric in situated use.

2. This is an argument echoed in Arturo Escobar’s 1995 text *Encountering Development: The Making and Unmaking of the Third World*, in which Escobar attempts to study development as a discursive field, explaining the ways in which the “Third World” has been constructed through the language of development and critiquing development as a fundamental structure of modernity.

3. James Martin served as the Watershed Coordinator for the Clear Creek project through 2011. Though the Clear Creek Watershed Enhancement Project has an all-volunteer board, Martin provides direction and technical assistance to the Board through a position funded through multiple layers of grant funding. EPA 319 funds for the Clear Creek project are channeled to the Iowa DNR, which then gives a portion of that money to the Iowa Department of Agriculture and Land Stewardship for the project.

II. RIVERBED: MATERIAL RHETORICS OF AGRICULTURAL STEWARDSHIP

riv•er•bed (*noun*)
the bed or channel in which a river flows. (“Riverbed” def.)

Insomuch as this text is interested in how persuasive arguments for soil and water conservation are made in the Clear Creek watershed, I begin by attending to the rhetorics that so frequently ground arguments for agricultural conservation: rhetorics of agricultural stewardship. But what is stewardship and what has it come to mean? And what role does it play in the imagination and practice of agricultural conservation?

This chapter addresses those related questions by considering the prominent role of stewardship in the rhetorical backdrop of American agriculture. In its pages, I draw from historical and textual sources to argue that the ideology and practice of contemporary American agriculture relies upon at least two competing rhetorics of stewardship: what I refer to here as *grounded stewardship* and *hyper-stewardship*. Where rhetorics of *grounded stewardship* center on the long-term care of a specific, local landscape, rhetorics of *hyper-stewardship* center on the short-term management of agricultural resources for the sake of feeding the world’s population. Significantly for the study at hand, I argue that rhetorics of *grounded stewardship* are allied with environmental good in the American imaginary, while rhetorics of *hyper-stewardship* are allied with environmental harm (and that there are some very compelling reasons for this, as I will describe). Further, I argue here that *hyper-stewardship* has become the dominant rhetoric in American agriculture, deeply intertwined as it is with the technological

advances of the Green Revolution and American economic policy, defining and constricting the possibilities for heroism available to America's farmers. As this chapter details, the binary between *hyper-stewardship* and *grounded stewardship* is sustained by the very public rhetorics of agricultural chemical and seed companies on the one hand and sustainable agriculture advocates on the other and emerges in interpretations of the Bible and the foundation that text offers for stewardship.

But, as I suggest in this chapter, this binary is a dangerous fiction. When environmental advocates adopt rhetorics of *grounded stewardship* to the exclusion of rhetorics of *hyper-stewardship*, they implicitly shore up the power of this binary, unnecessarily forcing agricultural operators and landowners to choose between their desire to care for their local landscape and their desire to manage their property for the sake of the world's growing population, America's economic health, and their own financial benefit. I return to this point in the following chapters, but, as I propose here, in the current zero sum equation, conservation will almost always lose.

A. The Grounds of Stewardship in American Agriculture

Stewardship, “the conducting, supervising, or managing of something; *especially*: the careful and responsible management of something entrusted to one's care,” is part and parcel of American agriculture, occupying a central role in agriculture since its very beginnings (“Stewardship” def.). As the intentional transformation of the natural landscape for human benefit, agriculture demands its practitioners attend to the responsible management of the resources under their care; on a very practical level, farmers' survival and livelihood demand it.^{1,2}

This emphasis on stewardship, on the “careful and responsible management of something entrusted to one’s care,” is often grounded in the Bible and the versions of stewardship that emerge in its pages, leading even federal conservation agency staff to point to the Bible as a grounds for arguments in favor of soil conservation. In a celebrated 1939 speech in Jerusalem to gathered conservationists, United States Soil Conservationist Walter Clay Lowdermilk imagined that Moses, had he “foreseen what suicidal agriculture would do to the land of the holy earth” (24), might have added an Eleventh Commandment for good measure. As Lowdermilk decreed:

Thou shalt inherit the Holy Earth as a faithful steward, conserving its resources and productivity from generation to generation. Thou shalt safeguard thy fields from soil erosion, thy living waters from drying up, thy forests from desolation, and protect thy hills from overgrazing by thy herds, that thy descendants may have abundance forever. If any shall fail in this stewardship of the land thy fruitful fields shall become sterile stony ground and wasting gullies, and thy descendants shall decrease and live in poverty or perish from off the face of the earth. (24)

While Lowdermilk exercised some artistic license in his speech (and clearly, in borrowing the authority of Moses, he considered the context of his Jerusalem audience as any good rhetor should), his Eleventh Commandment, issued from the standpoint of a Dust Bowl era conservationist, had a historical and textual precedent. A notion of stewardship of the land, of serving as a faithful steward, emerges in the Old and New Testaments of the Bible.

The concept of stewardship, of the “responsible management of something entrusted to one’s care,” is found in the opening passages of the Old Testament of the Bible. As early as Genesis, the Hebrew God places the protection of his earthly creation in the hands of humans. In Genesis 1.26, this God says, “Let us make man in our image, after our likeness; and let them have dominion over the fish of the sea, and over the birds of the air, and over the cattle, and over all the earth, and over every creeping thing that creeps upon the earth.” He then commands man and woman in Genesis 1.28 to “Be fruitful and multiply, and fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the earth,” while in Genesis 2.15 we read, “The Lord God took the man and put him in the garden of Eden to till it and keep it.” From these passages, we understand that humankind has dominion over God’s creation and is charged with subduing it, tilling it, and keeping it for the brief time we each have on earth. For as God reminds humankind in Leviticus 25.23-24, this responsibility is a temporary one. As he explains, “The land shall not be sold in perpetuity, for the land is mine; for you are strangers and sojourners with me. And in all the country you possess, you shall grant a redemption of the land.” As strangers and sojourners, every human contributes a small portion to the eternal care of God’s creation. The Old Testament establishes that creation rightly belongs to God and that humans are held accountable for the care of God’s creation; they are the stewards of God’s work on earth.³

These themes of dominion, subdual, and redemption are the source of ongoing debate in Christian circles, one I cannot begin to do justice to here. But Biblical rhetorician Megan Marie offers this concise and useful analysis of the ongoing

controversy over Biblical stewardship. As she explains, “Some Christians see themselves as dominionists who, in the tradition of Adam, were given the land to ‘name’ and ‘govern.’ Others see the gift of ‘Creation’ as something that Christians are called to use responsibly and that caring for ‘God's world’ is a way of showing devotion to God/others” (Marie). Between the dominionists and what many refer to as the evangelical environmentalists, we see the split between a model of management and one of care contained in the definition of stewardship itself. Where dominionists imagine themselves as the steward managers of God’s creation on earth, actively manipulating the natural world for humankind’s advantage, evangelical environmentalists imagine themselves as steward caretakers, protecting – rather than exploiting – God’s creation. In so doing, dominionists take up a rhetoric of *hyper-stewardship* – of short-term management – while the evangelical environmentalists take up a rhetoric of *grounded stewardship* – of long-term care – and ally themselves with environmental damage (or, at the least, exploitation) and environmental protection respectively.

This split between models of management and care carries into academic Biblical studies. Since Lynn White’s landmark 1967 *Science* essay, “The Historical Roots of Our Ecologic Crisis,” where he argues that the roots of modern environmental problems can be traced directly to “the orthodox Christian arrogance toward nature” (1207), scholars have debated the role that the Bible plays and has played in providing a foundation for either environmentalism or exploitation.⁴ I am not interested in entering this extensive and ongoing debate for the sake of arguing that one interpretation of Biblical stewardship is more correct than another. Rather, as a rhetorician, I am drawn to the idea that people point to two primary understandings of stewardship – of care and management – in the

Bible's pages and that these understandings of stewardship correspond with the rhetorics of *grounded stewardship* and *hyper-stewardship* that I point to in this chapter. Still, by suggesting that rhetorics of *grounded stewardship* and *hyper-stewardship* emerge in interpretations of the Bible, I do not mean to make a causal argument. I am not arguing that the Bible offers two distinct versions of stewardship – one *grounded*, one *hyper*, though it may – that have prompted a similar split in American agriculture. Rather, I am suggesting that interpretations of the Bible – and not the Bible itself – betray the same split between *grounded stewardship* and *hyper-stewardship* that emerge in public rhetorics of American agriculture and, as I discuss in the following section and the following chapter, in the everyday language of Clear Creek's agricultural operators, landowners, and conservationists.⁵

1. Russell and Vernon

Two of my interviewees in the Clear Creek watershed, a landowning farmer named Russell and a conservationist named Vernon, drew explicit connections between agricultural stewardship and Christian stewardship during our talks, but, tellingly, mobilized rhetorics of Biblical stewardship in the varying ways I have proposed above: Russell for a version of *grounded stewardship* connected to long-term care of the local landscape and environmental good and Vernon for a version of *hyper-stewardship* connected to short-term management for the sake of a growing nation and environmental harm.

Russell is a fourth generation Clear Creek farmer who has participated in a number of government sponsored conservation programs on the ~1500 acres he farms

throughout the watershed. As Russell and I talked one spring morning, I asked him whether or not his views on stewardship play a role in the decisions he makes on his land. His answer betrayed the importance he places on the notion of Christian stewardship. As Russell explained:

I'm a Christian guy, so it's not our ground. It's God's and nature's. He lets us use it, so we take care of other people's stuff. We're just, we're borrowing it for our time while we're here. So we gotta take it back and leave it in as good a shape as we got it, or better. That's the way I feel. It's the thing to do.

Russell's view, that, as a farmer, he needs to "take care of" God's ground during his brief time on the earth for the sake of future generations, influences the decisions he makes and the actions he takes on his property. He identifies with the role of steward of God's handiwork on earth and mobilizes that identification for the sake of soil and water quality. This sense of duty has prompted Russell to participate in government conservation programs and to adopt a number of costly conservation practices on his farm. He has been willing to undertake these projects because of the version of stewardship he sees emanating from the Bible: that of the *grounded steward*, one who takes a long-term view of caring for the land even if it hurts him financially at the present time, one who works to protect the environment for the generations to follow.

Like Russell, Vernon also made a connection between agricultural stewardship and Biblical stewardship when we talked, but Vernon offered a competing interpretation of the Bible's influence on agriculture. Vernon, now in his 80s, has been retired for over a decade from his work with the state agricultural extension service. He played a

prominent role in getting the Clear Creek Watershed Enhancement Project off the ground and keeping its momentum going in its early years. As we talked early one summer morning, we touched on stewardship several times during our discussion. Just before closing, I asked Vernon if he thought that “stewardship” captured the broader sense of conservation that he had been struggling to encapsulate and make an argument for as we talked. Vernon answered:

Stewardship is a good word, uh, but... subject to interpretation. I, you know, I agree it's a good word. [Long pause] It *is* broader than conservation. [Pauses] Um, for a lot of people, stewardship may not mean, uh, may be *slowly* using resources [laughs] instead of *fastly* using up resources. You know what I mean? [Laughs]

Vernon is hesitant to lionize stewardship because of the varying forms it takes in practice. In his lifetime of work with eastern Iowa's farmers, he seems to have glimpsed the ways in which stewardship can be mobilized for environmental harm, not just for environmental good. For Vernon, the slow use of resources does not equal sustainable use, and too much of stewardship, for Vernon, has emerged as slow use. In fact, this question of stewardship so troubled Vernon that he followed up with me via email a few days after the interview to elucidate his thoughts.

Like Russell, Vernon referenced a Christian God in his explication of his thoughts about stewardship. But, unlike Russell (and perhaps because of his challenging experiences with farmer outreach during a lifetime of work in the extension service), Vernon referred to this Christian view of stewardship in mixed terms. Unlike Russell, who borrowed rhetorics of *grounded stewardship*, Vernon attended to what I am calling

rhetorics of *hyper-stewardship* – of management, productivity, and short-term gain – that can emerge from a Christian notion of stewardship. As Vernon explained in his follow-up email:

Stewardship is a great ideal but its practices may be interpreted differently. Growing up I was taught to admire our ancestors who broke sod and drained wetlands, making productive the great prairie resource God provided.

Vernon's ancestors saw their role as one of management, not care. They exercised their dominion over the prairie soils, tilling the land and subduing it. Their concern was with the short-term use – not long-term care – of the landscape. They saw it as their duty to make productive this prairie landscape, contributing to the growth of their families and the growth of the young nation. But, as Vernon acknowledged, in attempting to make use of the land – by breaking the sod and draining the wetlands – they caused a great deal of harm to the landscape, harm that Vernon spent a lifetime in the state extension service trying to counteract. In Vernon's work with the extension service, he has no doubt worked with farmers who, like Russell, have been motivated to make practical improvements for the sake of soil and water quality based on their view that God has entrusted them with the care of their property during their short time on earth. But, in his work and in his life, Vernon has also witnessed the ways that the imperative to manage a useable resource provided by God has prompted American farmers to make detrimental changes to the landscape.

And these detrimental changes to the landscape are what prompted Vernon's ancestors' westward march to Iowa in the first place. As Vernon described:

Some of my ancestors came from Europe during the 17th and 18th centuries, leaving depleted soils. In a few generations of farming in New England and/or Pennsylvania the soil had become less productive so they moved to the Midwest for more fertile opportunities.

These same ancestors who Vernon was taught to admire were following God's command to "grant a redemption of the land" (Lev. 25.24). But in making use of the land, they depleted the soils of England, Pennsylvania, and, later, Iowa. In Vernon's analysis, they saw themselves as good stewards, just as he was taught to view them in his youth, but their farming system was not sustainable. But, as the logic goes, their actions were justified – even praised – because of the role they were playing in making use of the resources that God has provided for a growing nation.

Russell and Vernon demonstrate how competing rhetorics of *grounded stewardship* and *hyper-stewardship* emerge in interpretations of the Bible. Christian notions of stewardship can be – and have been – used as justification for actions that have had both environmentally positive and negative effects. These varying interpretations of the Bible – emerging in the Christian community, in the academic work of White and his critics, and in the vernacular rhetorics of Russell and Vernon – offer the Janus face of stewardship: rhetorics of *grounded stewardship* allied with environmental good and rhetorics of *hyper-stewardship* allied with environmental harm.

I suggest here that this schism – between *grounded stewardship* and *hyper-stewardship* – is shored up by competing interpretations of Christian stewardship, as we saw above, and perpetuated by contemporary presentations of agricultural stewardship. And so, in the following section, I turn to some examples of what I am referring to as

rigid rhetorics of *grounded stewardship* and *hyper-stewardship* – taken from agrarian writer Wendell Berry and agricultural corporations Monsanto and DuPont respectively – to demonstrate this schism and to better characterize my terms.

B. Rigid Rhetorics of *Grounded Stewardship* and *Hyper-Stewardship*

I propose here that the ideology and practice of American agriculture is built upon and sustains a binary between rhetorics of *grounded stewardship* and *hyper-stewardship*, a dangerous fiction that forecloses the possibilities for conservation practice, a point to which I will return in subsequent chapters. But what exactly do I mean by *grounded stewardship* and *hyper-stewardship*?

In general, I propose that:

Grounded stewardship is characterized by a concern with...

- care vs. management
- husbandry and cultivation
- the local and mid-scale
- long-term thinking
- connection to place
- duty to land

And is allied with environmental good.

Hyper-stewardship, on the other hand, is characterized by a concern with...

- management vs. care
- efficiency and productivity
- the global scale
- short-term thinking
- connection to agricultural identity
- duty to nation-state

And is allied with environmental harm.

In the previous section, I pointed to the ways that these competing versions of stewardship emerge in interpretations of the Bible – where evangelical environmentalists focus on the long-term care of God’s creation on earth, while dominionists emphasize management and immediate use. This split emerged in the views of Russell and Vernon, as well, where Russell cited the Bible as the source of his focus on the long-term care of his local landscape, while Vernon pointed to the ways that his ancestors used the Bible as justification for their concern with productivity and efficiency in the short-term, a concern that has had devastating environmental consequences.

I argue that these competing versions of stewardship are perpetuated in the public rhetorics of contemporary agriculture, where we witness the increasing schism between the rhetorics of mainstream, industrial agriculturalists and advocates of small-scale, sustainable agriculture. And so, I turn here to a few examples of what I refer to as rigid rhetorics of *grounded stewardship* and *hyper-stewardship* emerging from agrarian Wendell Berry and agricultural corporations Monsanto and DuPont respectively as a means to demonstrate my point and elucidate my terms.

1. Wendell Berry

In the summer 2002 issue of *Orion Magazine*, billed as “America’s Finest Environmental Magazine,” agrarian writer and philosopher Wendell Berry published an essay entitled “The Agrarian Standard.” The piece finds Berry mulling over the state of agrarianism twenty-five years after the publishing of his widely read book *The Unsettling of America: Culture and Agriculture*. As Berry describes, he wishes that the argument he proposed in *The Unsettling of America* – that increasingly global, corporate agriculture

was threatening local economies and livelihoods everywhere – was not still so relevant; but, as Berry laments, “the conditions [the text] describes and opposes, the abuses of farmland and farming people, have persisted and become worse over the last twenty-five years.” Berry works to remind the reader of what he sees as the ravages of industrial agriculture and to define an agrarian philosophy that he urges his readers – rural and urban alike – to adopt.

Throughout the piece, Berry juxtaposes the global scale and scope of industrial agriculture against agrarianism’s emphasis on local economies and cultures. As Berry explains, “The large agribusiness corporations that were mainly national in 1977 are now global, and are replacing the world’s agricultural diversity, which was useful primarily to farmers and local consumers, with bioengineered and patented monocultures that are merely profitable to corporations.” In industrial agriculture, according to Berry, “problems correctable on a small scale are replaced by large-scale problems for which there are no large-scale corrections. Meanwhile, the large-scale enterprise has reduced or destroyed the possibility of small-scale corrections. This exactly describes our present agriculture.” In short, for Berry, large-scale agriculture, with its emphasis on technology, profitability, and the global scale is detrimental to the human and non-human landscape.

Agrarianism, by contrast, as Berry proposes, is intensely focused on the local scale, an emphasis that, for Berry, is complicit with the connection to place and duty to land that I posit as integral facets of rhetorics of *grounded stewardship*. And so, as Berry explains, “The people of ‘the cutting edge’ in science, business, education, and politics have no patience with the local love, local loyalty, and local knowledge that make people truly native to their places and therefore good caretakers of their places.” Berry

mobilizes rhetorics of *grounded stewardship* to make his argument for agrarianism. To be a true agrarian, in Berry's framework, is to attend to the local scale, to feel a connection to place and to feel a duty to that place: to serve as a good caretaker of your place.

For Berry, this willingness to serve as a good caretaker of your local land is not necessarily connected to an allegiance to an agricultural or farmer identity – an allegiance to the project of feeding the world's population, as we will see in the next section – that I posit as a characteristic of *hyper-stewardship*. Rather, as Berry describes, “Agrarian farmers know that their very identity depends on their willingness to receive gratefully, use responsibly, and hand down intact an inheritance, both natural and cultural, from the past.” In Berry's argument, their identity is wrapped up in their connection to place, and, significantly, it is wrapped up in a connection to place that attends to long-term thinking, to both the past and the future: the need to “hand down an intact inheritance.”

Berry's framing of agrarianism, then, relies upon what I am referring to as rhetorics of *grounded stewardship*. Berry's argument attempts to appeal to its audience through its concern with the local scale, with long-term thinking, with the connection to place, and with the duty to land. It asks the reader to identify with and act upon these rhetorics of *grounded stewardship* in order to have a positive environmental impact. The concerns of *hyper-stewardship* – of the global scale, of short-term thinking, of connection to a farmer identity, of duty to one's country or the country's project – have no place here. They are oppositional rhetorics that Berry's lifetime of writing positions itself against. For Berry, to ally oneself with rhetorics of *hyper-stewardship* – of productivity, global thinking, short-term profit, and duty to nation – is to ally oneself with

environmental harm. But those antithetical rhetorics are mobilized by rhetors in other circles, most notably in the communication of two of industrial agriculture's largest corporations, agricultural giant Monsanto and chemical giant DuPont.

2. Monsanto and DuPont

Monsanto describes itself quite simply as “an agricultural company,” but they are perhaps better known as a publicly traded multinational corporation that serves as the world's leading producer of both the herbicide glyphosphate (known commercially as “Roundup”) and genetically engineered seed. A visit to the home page of the Monsanto web site during the summer of 2010 greets you with a large, rotating banner at the top of the page. Monsanto's message is superimposed over four crisp photos of what we understand to be America's farmers: a forty-something African American male smiling in front of a combine; a thirty-something white male staring into the distance while holding a baby dressed in pink; a father or grandfather walking through a field of partially harvested corn with a laughing boy; and a vibrant young family including a man, woman, and child smiling as they squint into the sunset. Words flash in front of the photographs:

“The world's population is growing /

To keep up with population growth, farmers will have to produce more
food... /

More food in the next 50 years than in the last 10,000 years combined. /

America's farmers will meet this challenge.”

(“Monsanto”)

The vigorous men and women in the photos, smiling and gazing into the distance, seem to assure us that this is so: America's farmers *will* meet this challenge. And they will live up to these expectations because the fate of the world depends on it. In the banner, Monsanto hails every impulse towards *hyper-stewardship*, entreating each visitor to embrace his role as one of America's farmers and participate in the national project. Monsanto doesn't need to ask farmers to purchase Roundup and Roundup Ready seed to answer this call. They trust farmers to fill in the blanks – to know that the use of herbicide and genetically modified seed is an integral part of the national project to increase production for the sake of the world's growing population.

In proposing this argument (that America's farmers need to meet the needs of a burgeoning global population), the Monsanto banner offers what I am referring to as a rhetoric of *hyper-stewardship*. Monsanto focuses the viewer's attention on the growth of the world's population, telling the visitors to its site – largely farmers – that their primary concern needs to be a focus on population growth on the global scale and the role they can, should, and will play in meeting the needs of this growing population. As Monsanto's farmer models gaze into the distance, not the foreground, the local landscape disappears underneath this rhetoric of *hyper-stewardship*; the global scale and the demand to participate in a national agricultural project take precedence.

So too does short-term thinking take precedence over the long-term. As Monsanto explains, America's farmers will produce “more food in the next 50 years than in the last 10,000 years combined.” As Monsanto tells us, *this* 50 years matters more than the last 10,000; the time is now, and farmers need to purchase RoundUp and RoundUp Ready seed to meet this demand. In this configuration, they must inhabit their

farmer identities and embrace the duty before them: “farmers will have to produce more food.” The web site’s visitors are entreated to join the ranks of the smiling and thoughtful faces presented before them: as American farmers, it is their duty to meet the challenge of global hunger, and it is their duty to meet this challenge *now*.

Monsanto engages rhetorics of *hyper-stewardship* not only to make an immediate sale, but also, I suggest, to support existing rhetorics of *hyper-stewardship* at work in 20th and 21st century American agriculture that support their long-term economic interests. They appeal to farmers’ existing concerns with the global scale, with short-term thinking, with their identification with American agriculture, and with their sense of duty to a larger national project: the desire to feed the world’s hungry on Monsanto nurtured American grain. And these concerns take precedence over the local landscape. Monsanto is not advocating environmental damage – they claim to help farmers “produce more food using fewer resources (“Monsanto”) – but this demand to produce takes precedence over all else.

Monsanto is not the only agricultural corporation relying upon and perpetuating these rhetorics of *hyper-stewardship*. A September 8, 2009 press release from seed giant Pioneer Hi-Bred International, Inc. (a subsidiary of DuPont), describing DuPont Crop Genetics Research & Development Vice President William S. Niebur’s speech to the World Seed Conference in Rome, Italy, frames this link between global stewardship and seed technology as “a moral imperative” (“DuPont Leader”). As the press release describes, Niebur appealed to the assembled crowd at the conference to heed the call of this “moral imperative,” saying:

At the end of the day it is up to us as plant breeders to do everything we possibly can to help ensure no individual goes hungry... We are in an unprecedented position to keep pace with growing societal needs thanks to new technologies, an advanced understanding of crop genetics, and talented researchers focused on making a difference for the world.

(“DuPont Leader”)

Again and again, agriculturalists are told that the embrace and economic support of synthetic herbicides and genetically modified seed is essential to meeting this “moral imperative” to take responsibility for the world’s population, a moral imperative that they acutely feel. This language is persuasive because it taps into farmers’ existing motivations and desires. They *want* to play a role in feeding the world. They *want* to do what is best for their global neighbors. And to do that, they need to keep pace with production.

These are the competing rhetorics of stewardship in contemporary American agriculture. This binary offers the backdrop against which farmers and landowners make decisions about their land. Rhetorics of *grounded stewardship* and *hyper-stewardship* have become the competing filters through which to view the practice of American agriculture: one supposedly environmentally positive and one not.

But *hyper-stewardship* – and the focus on management, efficiency, productivity, global scale, short-term thinking, and duty to country and a shared agricultural project to which it refers (and the environmental degradation that it has fostered) – has become the dominant rhetoric in contemporary American agriculture, shaping and being shaped by the material conditions of American farming. As I detail in the following section,

rhetorics of *hyper-stewardship* have helped to drive and justify detrimental changes to the material landscape. And at no time has this connection – between rhetorics of *hyper-stewardship* and environmental degradation in the material landscape – been more evident than in the wake of the so-called Green Revolution.

C. Rhetorics of *Hyper-Stewardship* Feed the Green Revolution

Hyper-stewardship has become the dominant rhetoric of American agriculture, in large part due to its intimate connection with the technological advances known collectively as the Green Revolution, and it is a dominance shored up, as I will explain, by economic forces. While rhetorics of *hyper-stewardship* are not, in and of themselves, environmentally damaging, their complicity with the environmental aftermath of the Green Revolution has helped to frame them that way in the eyes of critics. Thus, as we will see in my discussion of the conservation effort in Clear Creek in the following chapter, to advocate for conservation at the present time is to adopt rhetorics of *grounded stewardship* in opposition to rhetorics of *hyper-stewardship*. To understand this connection, you must understand the economic and environmental changes ushered in by the Green Revolution.

The Green Revolution refers to the dramatic increase in crop production through fertilizers, pesticides, and high-yield crop varieties beginning in the mid-1940s, but the story of the Green Revolution actually begins at the turn of the 20th century. When German chemist Fritz Haber created a process for fixing nitrogen in 1909 and fellow German chemist Carl Bosch made the process possible on a large scale, they essentially unfettered the limits of human population, allowing for the explosion of the global

population through the increase in food production enabled by the use of synthetic nitrogen fertilizer.⁶ Because the discovery meant that the limited availability of nitrogen was no longer a constraining factor on food production, the invention of the Haber-Bosch process set in motion the search for ways of capitalizing on this technological advance by further increasing agricultural yield.

Enter Norman Borlaug: Iowa born agronomist and, like Fritz Haber and Carl Bosch, winner of the Nobel Prize for his contribution to sustaining modern life. Borlaug's research on high-yield wheat varieties in Mexico in the mid-1940s kick-started the Green Revolution. His pioneering work on specialty crop varieties, coupled with his tenacity in exporting his innovations to the developing world, marked the beginning of the modern era of American and global agriculture. These two scientific innovations, the Haber-Bosch process and the creation of high-yield crop varieties, swiftly and dramatically changed the face of agriculture and of the landscape on which it depends.

I want to suggest that the Green Revolution – this embrace of high-yield crops and synthetic fertilizer – succeeded, ideologically and thus materially, through its exploitation of pervasive rhetorics of agricultural stewardship grounded in the rhetoric of dominion that emerges from the Judeo-Christian tradition. I contend that the technological, economic, and social aspects of the Green Revolution flourished in the United States because they built upon existing rhetorics of stewardship and sustained pervasive rhetorics of *hyper-stewardship*: couching these technological advances in the language of productivity, efficiency, maximization, nationalism, and profit, and, most especially, in the language of contributing to the shared national project of feeding the starving world. And Borlaug was the first prophet of this particular gospel.

In his acceptance speech on the occasion of being awarded the 1970 Nobel Prize for Peace (awarded because, in the words of the Nobel Committee, “More than any other single person of this age, he has helped to provide bread for a hungry world” [“Helping to Feed”]), Borlaug offered his commendation “of the Nobel Committee which had the perspicacity and wisdom to recognize the actual and potential contributions of agricultural production to prosperity and peace among the nations and peoples of the world” (“Acceptance Speech”). For Borlaug, increased agricultural production promised prosperity and peace.

Borlaug continued, framing the innovations that garnered him the Nobel Prize for Peace in the terms of an ongoing war, summoning America’s farmers and agronomists to battle (a move replicated by Monsanto in their web site’s call to arms). As Borlaug reflected on the Prize, he explained:

The obligations imposed by the honor are far greater than the honor itself, both as concerns me personally and also the army of hunger fighters in which I voluntarily enlisted a quarter of a century ago for a lifetime term. I am acutely conscious of the fact that I am but one member of that vast army and so I want to share not only the present honor but also the future obligations with all my companions in arms, for the Green Revolution has not yet been won. (“Acceptance Speech”)

In thanking the Nobel Committee for the award, Borlaug asked farmers to identify with a particular agricultural identity and to inhabit that identity as they contributed to the shared national project of feeding a growing world. And Borlaug continued, noting the ways in which the key to winning this war against global hunger exists within the

mastery and management of nature, science, and progress. In Borlaug's vision, the material land disappears beneath the heavy monologic rhetorics of productivity and efficiency for the sake of alleviating hunger, rhetorics of *hyper-stewardship*. As Borlaug detailed:

For we are dealing with two opposing forces, the scientific power of food production and the biologic power of human reproduction. Man has made amazing progress recently in his potential mastery of these two contending powers. Science, invention, and technology have given him materials and methods for increasing his food supplies substantially and sometimes spectacularly. ("Acceptance Speech")

Borlaug's particular gospel of *hyper-stewardship* – of the mastery of science, innovation, and technology in the effort to alleviate world hunger; of management, efficiency, and productivity for the sake of a growing nation in an increasingly powerful global position – was an attractive one, made all the more so by its framing in the language of war.

America's farmers enlisted in Borlaug's "army of hunger fighters," a uniquely American army. They heeded Borlaug's call for "mastery" over food production, thanks, I would suggest, to their deep desire to inhabit the heroic role offered by Borlaug's argument.

America's farmers were a willing audience, conditioned to enlist in Borlaug's army due to a longstanding tradition of stewardship grounded in the Biblical model of dominion over the earth.⁷

And it is no wonder that present-day farmers have been influenced by Borlaug's powerful rhetoric (as I will discuss in detail in the following chapter). In the years since his Nobel Prize, American seed companies have shaped Borlaug's vision in their own

corporate images, propagating the rhetorics of *hyper-stewardship* that would shape 20th and 21st century agricultural life and logic. Agricultural companies feed upon farmers' existing identifications and turn them into a narrow version of stewardship, one with negative environmental consequences. We saw how Monsanto and DuPont have propagated rhetorics of *hyper-stewardship* in their advertisements and corporate communications, but they are not alone in this impulse.

Rhetorics of *hyper-stewardship* are pervasive in contemporary American agriculture. They saturate everyday life. Watch a televised University of Iowa Hawkeye football game on a Saturday morning in Iowa and you are bombarded with seed company and chemical company appeals to apply fungicide, fertilizer, and pesticide, to grow the latest high-yield variety, or, in my favorite version, to become the farming version of a pen-pal with the Chinese village that relies on your Iowa soybeans. These advertisements appeal to Iowa's farmers' sense of wanting to have a benevolent effect on the world; they want to connect with their global neighbors. In subtle and not so subtle words and images, these advertisements seem to be telling farmers that, with every purchase of Monsanto Roundup Ready seed, they are serving as benevolent protector of the world's growing population. These advertisements tap into farmers' existing desires and identifications, asking farmers to identify with their common project. And this strategy seems to have worked.

The advances of the Green Revolution coupled with these rhetorics of *hyper-stewardship* and this impulse towards management comprise a heady cocktail; through the innovations of the Green Revolution, American farmers can now take responsibility for their own farms, their own families, their own nation, and, significantly, for the lives

of the undernourished and underprivileged throughout the world. The Green Revolution allowed the American farmer to extend his reach from steward of his own property, to steward of God's whole world. And in this very transition, from steward of a 40 acre parcel to steward of the world's nations, emerges what I refer to as the *hyper-steward*.⁸

The *hyper-steward* is that American farmer who fully inhabits the role of steward – on the local, national, and international scales; steward of household, property, state, nation, globe – and inhabits that role through the acceptance and integration of the rhetorics and practices of technology and mechanization. The *hyper-steward* embraces technological advancement, not (or not only) in the name of economic success, but in the name of efficient and productive management for the sake of all. The *hyper-steward* is Genesis' Adam – for whom God has given dominion “over the fish of the sea and the birds of the air, over the livestock, over all the earth and over all the creatures that move along the ground” – writ large. In the face of economic instability and global hunger, the *hyper-steward* wields synthetic fertilizer and high-yield corn.

But, in the wake of the Green Revolution, the *hyper-steward's* singular concern with production, compounded by the particular economic confines of American agriculture, has had a profound impact on the material landscape – an impact that has served to conflate rhetorics of *hyper-stewardship* with environmental damage in the eyes of critics. I turn to this process in the following section.

D. Environment and Economics in the Wake of the Green Revolution

As I detailed in the previous section, the Green Revolution came to prominence in large part because of its ability to rely upon and foster rhetorics of *hyper-stewardship*.

The technological advances of the Green Revolution, coupled with rhetorics of *hyper-stewardship* and the economic landscape of 20th and 21st century agriculture, prompted a level of production that has had dire consequences for the landscape of the Upper Midwest and beyond.

If you have ever driven through or flown over Iowa, you know that it is a farm state, planted virtually corner to corner in soybeans and corn. Iowa's climate, topography, and exceptionally fertile soils make nearly the entire state prime land for farming. Thanks to the scientific advances of the Green Revolution, Iowa cashed in on an exponential boom in commodity crop production over the last 60 or so years. According to the most recent U.S. Census, a remarkable 89.5% of Iowa's land area is privately owned farmland ("Table 344," "Table 797"), and that high intensity of agricultural production does not come without an environmental cost. As Matson et al describe in their study of the ecological impacts of contemporary farming:

It is now clear that agricultural intensification can have negative local consequences, such as increased erosion, lower soil fertility, and reduced biodiversity; negative regional consequences, such as pollution of ground water and eutrophication of rivers and lakes; and negative global consequences, including impacts on atmospheric constituents and climate.

(504)

The type of farming that rules the state of Iowa, then, can have damaging effects at the local, regional, and global scales. The type and intensity of farming that most Iowans do seems not to be, in the most basic sense, sustainable; regardless of the wider

environmental cost, at the most basic level Iowa's soils can likely not continue to support it.

Intensive agricultural practices resulting from the advances of the Green Revolution – the widespread application of chemical fertilizer, the disappearance of headlands and stream buffers, the practice of clean tillage, and so on – have hastened soil erosion on Iowa farms, pushing soil loss in the state of Iowa well above the T value, what is known as tolerable soil loss, the maximum annual amount of loss that soil can tolerate without an adverse effect on productivity (Cruse et al).⁹ Soil loss due to erosion has choked Iowa's creeks and streams with sediment, sediment that carries with it high levels of nitrogen and phosphorous (from chemical fertilizers), as well as *E. coli* in fecal matter from widespread livestock watering in unfenced waterways and unsewered rural communities.

The problems caused by sheet and rill erosion in Iowa's watersheds spread well beyond the state. Nutrient saturated runoff from the Upper Mississippi River Basin, of which Iowa is a major part, has been cited as the major contributor to the growing hypoxic zone (or "dead zone") in the Gulf of Mexico. As Scavia and Nassauer describe in the introduction to their extensive study of the connections between Midwestern agriculture and Gulf hypoxia, "Agriculture in the Mississippi River Basin (MRB) has been identified as the leading cause of depleted oxygen in the 'dead zone' of the Gulf of Mexico" (1). In other words, post-Green Revolution intensive agriculture in Iowa is depleting Iowa's soils and choking its waterways with sediment and excess nutrients. And this impact continues downstream.¹⁰

Despite these near- and far-reaching consequences, the force of American agricultural policy combined with fluctuating grain prices have meant that Iowa's farmers have had to overlook these environmental problems in the face of both the real and perceived demands of increased production. I talked with Frances, a well-known organic grower just outside of the Clear Creek watershed, about this two-fold economic and psychic pressure. Thanks in large part to a series of serendipitous events, Frances made the daunting financial choice to leave conventional agriculture for vegetable cultivation, but she described the difficulties faced by her own brothers during our talk. As she described, economic pressure has constricted their options, specifically their desire to produce without synthetic pesticides and genetically modified seed. As Frances explained:

I grew up on a farm and I understand what you do because of financial pressure. [The banker] told [my brothers] they couldn't be organic anymore. That they had to do it *his* way. That's what happens – there's a lot of people that when the debt load gets big enough, the bank tells 'em what to do. They tell 'em when to sell their corn – they tell 'em everything. And you know what? Lots of farmers have gone under because of it.

While Frances herself has decided to farm in a manner that has minimal negative impact on the surrounding landscape, she betrays a sympathy and understanding for the ways that farmers' environmental decisions are circumscribed by economic and emotional pressures. She offered this reflection on farmers who choose productivity despite the

likely byproduct of environmental damage, making a connection between the economic realities of farming and the personal investment of farmers in their agricultural identity:

It's really complex. You have to be *super* open-minded in this whole thing to understand farmers and why they make the decisions they make and not to condemn them for what they're doing. 'Cause it's complex. And they may not necessarily want to be doing what they're doing but they're doing it to stay alive. Cause that's how they see it. I mean, in the end, my dad was like, you know – after he had been in it long enough, it's like, "I lose my farm, I die." You know, it's kind of like so much a part of you. And that's really hard for people to understand.

These grave concerns clearly shape the priorities that farmers set. Despite the value farmers may place on soil and water conservation, conservation has taken a back seat to production as farmers struggle to remain farmers. Given farming's razor thin margin for error, farmers have largely had to embrace the latest technologies to remain afloat.

It has been difficult for farmers to remain farmers because, in the last century, farming has undergone a dramatic contraction and polarization. Large farmers have gotten richer while small farmers have been forced out of agriculture altogether. As Bruce L. Gardner explains in his history of agricultural economics, *American Agriculture in the Twentieth Century: How It Flourished and What It Cost*, though farmers have gained income relative to the non-farm population over the last century and now produce seven times the output of 1920, the United States lost two-thirds of its farms in that same period (2). Simply put, in order to survive in agriculture today there is a pressure to decrease labor, increase productivity, increase efficiency, and increase output. Those

who don't do not survive. And while those who remain in agriculture are doing better, economically speaking, than they were throughout the early part of the century, they are under increasing pressure. And so, while Gardner claims that the story of American farming in the twentieth century is, on balance, a success story (though for whom, one might reasonably ask), he reminds us that this success has come at a cost. He describes "grinding rural poverty" and bankruptcy, the abandonment of rural communities, persistent economic instability and recurrent economic crises, and market-driven pressure as the result of shifts in American agriculture over the last half century (2-3). As Gardner details, economic survival, in contemporary American agriculture, is a daunting proposition, made all the more so by American agricultural policy.

American agriculture is largely a commodity driven system, and, though United States agricultural subsidy programs are notoriously difficult to follow, in essence, they reward farmers who own land that, in prior years, produced large amounts of the major U.S. crops – corn, soybeans, cotton, wheat, etc. produced thanks to Haber-Bosch's nitrogen and Borlaug's high-yield varieties. This system inordinately benefits "Big Ag" producers, effectively pricing out smaller producers. It is a system based not on efficiency but on volume, on the accumulation of property and, therefore, wealth; it is the system that prompted the famous adage during the 1980s farm crisis to "Get big or get out." These government handouts are not necessarily a blessing for United States farmers (or farmers outside of the United States, for that matter, a point to which I will return in a moment).

As R. Douglas Hurt chronicles in his *Problems of Plenty: The American Farmer in the Twentieth Century*, government aid over the past 100 years has failed to stabilize

agricultural markets, instead prompting the growth in farm size and decline in farm population that Gardner describes. Government intervention into food prices designed to protect American consumers during World War I left farmers asking for similar help when food prices dropped during the recession of the early 1920s. As Hurt explains, by 1941, more than a third of gross farm income in the United States came from payments for participating in federal programs (93). Over the years, as farm technology improved, farmers were essentially penalized for their efficiency, flooding the market with product grown with synthetic herbicide and genetically modified seed without any way to increase demand, and so the commodity system continues to intervene in years with low commodity prices.

Currently, agricultural subsidies are based on volume, which means that the largest producers get the lion's share of the subsidies. According to the 2007 USDA Census of Agriculture, a full 38% of the 2.2 million American farms received government payments (Table 1, Table 6) totaling almost \$8 billion dollars, up from \$6.5 billion in 2002 (Table 6), though these figures include payments for participation in government sponsored conservation programs. In terms of commodity payments alone, almost \$4 billion of the \$4.5 billion paid out through the Commodity Credit Corporation went to farms with receipts of \$50,000 or more, the highest gross income category (Table 6). The largest volume producers receive the lion's share of government payments, a self-perpetuating system. In light of this almost non-existent margin for error supported by global economic policy, it seems that the *hyper-steward* has done everything right: embracing technological advances in crop varieties, pesticides, fertilizers, and farm equipment in the name of productivity for the sake of the world's growing population.

But, as it did so, a concern with the long-term care of the local land had to take a back seat. This economic climate has helped to sustain a situation in which rhetorics of *hyper-stewardship* have become the dominant rhetorics of American agriculture. Further, because of their role in the rise and sustenance of the technological advances of the Green Revolution, these rhetorics have become allied with environmental damage.

This is the heart of the binary I propose: to identify with rhetorics of *hyper-stewardship* is to do environmental damage, and to do environmental good, one must identify with rhetorics of *grounded stewardship*. We saw above how Berry's agrarian criticism of industrial agriculture posited the embrace of rhetorics of *grounded stewardship* as the means to overturn the damage of the Green Revolution. Likewise, criticisms of the global economic policies that support contemporary agriculture betray this same binary between demonized rhetorics of *hyper-stewardship* and lionized rhetorics of *grounded stewardship*. And so, political economist and agricultural expert Harriet Friedmann positions the global against the local in her essay "Distance and Durability: Shaky Foundations of the World Food Economy." As she argues, what she terms the global "industrial food complex" has disconnected production and consumption and relinked them through exchange.¹¹ According to Friedmann, "capital has undermined the traditional integrity of agriculture and local diets everywhere" (274). For Friedmann, the only way out of this dire world food system, a system that undermines small producers throughout the world, but particularly in the "third world," is a renewed emphasis on regional autonomy and increased connections between rural and urban populations at the local scale.

In Friedmann's analysis, the United States and its industrial producers emerge as a hegemonic power, bullying "third world" nations and setting the terms for exploitative agricultural policies worldwide. There is certainly evidence for this view, and this criticism runs throughout a wide variety of the literature in development studies and transnational feminism. Ecologist and activist Vandana Shiva, for instance, has been one of the most outspoken critics of the force that the United States, the IMF, the World Bank, and a variety of multinational corporations exert on food systems worldwide, and, like Friedmann, she emphasizes care on the local scale over management on the global scale. In her book *Stolen Harvest: The Hijacking of the Global Food Supply*, Shiva describes the ways that structural adjustment policies promote the increased importation of food from the United States and Europe on the part of "developing" nations, as the World Bank encourages what Shiva dubs "export first" over "food first" policies (15). As she chronicles, free trade policies promote an increased disconnection between agricultural production and consumption, encouraging (and often demanding) that people in "developing" nations purchase imported food with the money gained from their own food exports.

As Shiva argues, then, the myth that the increased industrialization of agriculture has allowed multinational corporations like Cargill and Archer Daniels Midland to "feed the world" is simply that, a myth. Rather, increasingly monocultural production has created global food instability and localized scarcity. In Shiva's analysis, the contemporary experience of hunger is not the result of a lack of world food; rather, it is a problem of uneven distribution (supported by global economic policies). In other words, the cheap Wonder Bread and Fig Newtons that you purchase at the Jewel are cheap,

according to Shiva, precisely because of the support of United States agricultural subsidies and World Bank and IMF structural adjustment policies; their cheapness, she insists, is the direct result of the enforced poverty of rural populations worldwide. This exchange (of cheap Wonder Bread for persistent famine) embodies the global reality of the interconnectedness of the world's food system.¹²

The solution to this problem – to the dominance of rhetorics of *hyper-stewardship* and the environmental and economic abuse they inflict on farmers and consumers throughout the United States and the globe – posed by Friedmann, Shiva, and others is to relink production and consumption at the local scale: to focus on care, on the local scale, on long-term thinking, on connection to place, on the duty to land. In other words, the solution, as we saw in the work of Wendell Berry, emerges in the rhetorics and practices of what I refer to as *grounded stewardship*.

I am persuaded by Friedmann's and Shiva's criticisms of the global food system and the role of United States economic policy in perpetuating a wide variety of injustices throughout the world (but also on U.S. soil, a point that goes largely unnoticed). But I am concerned with Friedmann's, Shiva's, and Berry's arguments inasmuch as they work to sustain the false binary between *grounded stewardship* and *hyper-stewardship*. When Friedmann, Shiva, and Berry argue against the rhetorics and material logics of *hyper-stewardship*, they do so in *hyper-stewardship*'s own terms, proposing an alternative to *hyper-stewardship* by pointing to its opposite, to the other end of the binary. If global efficiency and productivity are linked to environmental damage worldwide, then a focus on small-scale concerns provides the remedy. But in posing small-scale interaction, the reintroduction of diversified crops, and so on, this academic, activist, and author play into

the same rhetorics that offer an either/or choice to America's farmers. Choose to identify with and act upon the rhetorics of *grounded stewardship* – of care, the local scale, long-term thinking, connection to place, and duty to land – in order to protect the environment or choose to identify with and act upon the rhetorics of *hyper-stewardship* – of management, efficiency, productivity, the global scale, short-term thinking, and duty to country and a common project – in order to cause environmental and economic harm worldwide. But choose you must.

I am concerned with this binary and the dichotomous choice it presents. These pervasive rhetorics of *grounded stewardship* and *hyper-stewardship* present farmers with the idea that they can make positive environmental choices for their farms and the wider landscape if and only if they are willing to give up a focus on efficiency, productivity, short-term gain, and, especially, participation in a national project. But, as I detailed above, there are very real economic pressures that make Iowa's corn and soy farmers feel that this is a difficult – if not impossible – choice to make at the present time. And for farmers who identify with these rhetorics of *hyper-stewardship* – and who wouldn't after a lifetime of indoctrination? – the choice to conserve puts them in a quandary: they must give up these strong identifications, especially their strong desire to inhabit the heroic role of “feeding the world.” Farmers are faced with a choice: they must refuse these strong identifications in order to conserve. They must oppose the dominant and pervasive rhetoric that has worked to define the heroic role in agriculture as steward of the global population.

E. Conclusion

This chapter identified and categorized rhetorics of agricultural stewardship, attending to the role that stewardship plays in the imagination and practice of agricultural conservation. In it, I argued that the ideology and practice of contemporary American agriculture relies upon at least two competing rhetorics of stewardship: rhetorics of *grounded stewardship* – which include concerns with care, husbandry and cultivation, the local scale, long-term thinking, connection to place, and duty to land and are allied with environmental good – and rhetorics of *hyper-stewardship* – which include concerns with management, efficiency and productivity, the global scale, short-term thinking, connection to an agricultural identity, and duty to nation-state and are allied with environmental harm. I argued that *hyper-stewardship* has become the dominant rhetoric in American agriculture, deeply intertwined as it is with the technological advances of the Green Revolution and American economic policy, defining and constricting the possibilities for heroism for America’s farmers.

But, as I have detailed, this binary between *hyper-stewardship* and *grounded stewardship* – a binary supported by agricultural chemical and seed companies on the one hand and sustainable agriculture advocates on the other – is a dangerous fiction. When environmental advocates adopt rhetorics of *grounded stewardship* to the exclusion of rhetorics of *hyper-stewardship*, they implicitly shore up the power of this binary, unnecessarily forcing agricultural operators and landowners to choose between their desire to care for their local landscape and their desire to manage their property for the sake of the world’s growing population, America’s economic health, and their own

financial benefit. And, as I will continue to discuss in the following chapters, in this zero sum equation, conservation will almost always lose.

Chapter three, “Confluence: Vernacular Voices of *Grounded Stewardship* and *Hyper-Stewardship*,” based on two years of ethnographic fieldwork with Clear Creek’s farmers, landowners, and conservation staff, seeks to address what happens when these rigid rhetorics of *grounded stewardship* and *hyper-stewardship* “enter the fray.” How do Clear Creek’s farmers and agricultural landowners identify with and act upon these public rhetorics of *grounded stewardship* and *hyper-stewardship*? Against the concerns and confines of a very particular physical and economic backdrop, how do Clear Creek’s farmers and landowners make decisions in the face of this forced binary? And how successful are conservation efforts – like the one in Clear Creek – that adopt rhetorics of *grounded stewardship* as the only option for conservation? I turn to those questions now.

Notes

1. I have claimed that agriculture and stewardship, as “the careful and responsible management of something entrusted to one’s care,” are intimately related. But there is no one static form of stewardship; the forms that stewardship takes in agriculture vary from place to place, people to people, and time to time, ranging from what John L. Paterson refers to as a “resource development and conservation” view, sometimes referred to as a shallow environmental ethic, to an “earthkeeping” view, sometimes referred to as a deep environmental ethic (51-54). Where the resource development and conservation view of agricultural stewardship emphasizes the management of resources primarily for economic gain, the earthkeeping view of agricultural stewardship emphasizes the needs of both human and non-human members of the landscape. Stewardship actions in the history of American agriculture can be placed along this continuum.

As R. Douglas Hurt chronicles in his text *American Agriculture: A Brief History*, American Indians began farming in the continental United States as early as 5000 B.C.E., creating a stable food supply, developing new plant varieties, creating irrigation systems, and utilizing burning techniques. But North American Indians did not fertilize their crops, instead clearing new lands for cultivation when existing soils became depleted (*American Agriculture* 3-5). And so, while many of their agricultural practices were sustainable, they still exhausted some lands. With the arrival of European settlers to North America, these Native American farming techniques, according to Hurt, were incorporated into a market-based agricultural economy (*American Agriculture* 32). With the introduction of a market economy, as Hurt details, “Profits, wealth, and the improvement of living standards became [colonists’] chief goals beyond meeting the

basic subsistence needs of their families” (*American Agriculture* 35). Some groups, like those in the middle colonies, regularly exhausted their fields, while others, like German settlers to Pennsylvania, took a longer term, more sustainable view of their interaction with the land (*American Agriculture* 35-36). Still, as Hurt decrees, “the majority of the early American farmers were careless, often mobile and profit-minded... Although carelessness would give way to conservation and the westering movement would end with the acquisition of arable public domain, American farmers were always governed by the potential for economic gain” (*American Agriculture* 37).

But I want to suggest that this emphasis on economic gain does not necessarily foreclose the possibility for stewardship. Successful agriculture – whether for subsistence or market-driven ends – depends upon consistent and continued access to its most precious input: productive soil. Thus, farmers with economic motives have a significant incentive to practice good stewardship.

2. At the present time in Iowa, the practice of good stewardship is handled by the Iowa Department of Agriculture and Land Stewardship, an agency whose mission is “to provide leadership for all aspects of agriculture in Iowa, ensure consumer protection and promote the responsible use of our natural resources.” This “responsible use” is a major facet of stewardship.

Many Iowa farmers participate in the Conservation Stewardship Program (CSP), a program administered by the Natural Resources Conservation Service (NRCS), a part of the United States Department of Agriculture. CSP provides financial and technical assistance to agricultural landowners and operators (like those in the Clear Creek watershed) to make conservation improvements on working lands. As NRCS explains on

the program web page, CSP “encourages land stewards to improve their conservation performance by installing and adopting additional activities, and improving, maintaining, and managing existing activities on agricultural land and nonindustrial private forest land.”

Interestingly, the Conservation Stewardship Program was called the “Conservation Security Program” until 2008 and, as the two programs are nearly identical, I suggest that the change is noteworthy in its rhetorical, rather than technical, significance. The Conservation Security Program still emphasized stewardship, describing itself in the program description from the 2002 Farm Bill as, “a voluntary conservation program that supports ongoing stewardship of private agricultural lands by providing payments for maintaining and enhancing natural resources” (“Program Description”). But, in promoting itself (or being promoted by the NRCS and the USDA) as a “security” program, I argue that the CSP attempted to get farmers to identify with a risk scenario whereby the loss of their fertile soil endangered the security of the nation (an especially effective scenario in a post 9/11 world).

The switch from “security” to “stewardship,” then, in 2008, marks a strategic change. The NRCS now attempts to get farmers and landowners to identify with a more personal project – embodying the role of steward of their particular land – rather than identifying with the more public project of securing the soil of a nation under threat. The language of “security” as it works in the CSP name offers an example of what I refer to here as a rhetoric of *hyper-stewardship*, while the language of “stewardship” offers an example of a rhetoric of *grounded stewardship*. It is interesting to see a case where a federal conservation agency attempted to prompt farmers into action with a rhetoric of

hyper-stewardship, but then changed their strategy, adopting a rhetoric of *grounded stewardship* in its place.

3. As John L. Paterson describes in his essay “Conceptualizing Stewardship in Agriculture Within the Christian Tradition,” “The Hebrew term *kabash*, translated as ‘subdue,’ means to tread down or to bring into bondage whereas the term *radah*, translated as ‘dominion’ or ‘rule,’ means to trample or prevail against. By themselves, these terms point to a very active and exploitative management of the natural creation” (46). But, as Paterson continues, “The Hebrew word *abad*, translated as ‘till,’ means to work in the sense of serving whereas the word *shamar*, translated as ‘keep,’ implies a watchful care and preserving of the Earth, even an active protection of it” (47). Thus, in Paterson’s estimation, as early as *Genesis*, we see two representations of stewardship in the Bible: one of dominion (or, as Paterson calls it, domination) and one of environmentalism (what Paterson refers to as earthkeeping).

Though this notion of stewardship is firmly established in the Old Testament, it is not until the New Testament when the explicit Greek words for steward, manager, or guardian (*epitropos* and *oikonomos*) enter the text with more frequency (Carlsen 118). As Kelly S. Johnson notes in *The Fear of Beggars: Stewardship and Poverty in Christian Ethics*, the widely read revised standard version of the Bible “translates *epitropos* and *oikonomos* as ‘steward’ in the gospels, and uses ‘steward’ for almost half the occurrences of *oikonomos* in the epistles” (80).

4. In his essay, “Having Dominion: Genesis and the Mastery of Nature,” Peter Harrison reviews the post-White debate, pointing to a variety of sources that represent the critical response to White’s piece, including Barbour, Gowan and Schumaker, Attfield,

Spring and Spring, Mitcham, and Grote, Cohen, and Whitney (17). But despite these critiques of White's central claim, Harrison argues that the White thesis has still had a profound effect on the public perception of the role the Bible has played as a foundation for environmental damage.

5. Interestingly, I would suggest that these notions of *hyper-stewardship* dovetail with Thomas Jefferson's agrarian vision – a vision based in the very language of Christianity. As Jefferson expresses in an oft quoted passage from his *Notes on the State of Virginia*:

Those who labor in the earth are the chosen people of God, if ever he had a chosen people, whose breasts he has made his peculiar deposit for substantial and genuine virtue. ...Corruption of morals in the mass of cultivators is a phaenomenon of which no age nor nation has furnished as example. (164-165)

For Jefferson, in the context of the agrarian nation that he envisioned, the farmer-cultivator becomes not only the steward of the land and its beings as emerges in the Bible, but the steward of the very nation itself: a “chosen people of God” whose very existence, it seems, could offer proof of the wisdom and righteousness of Manifest Destiny. As frontiersmen and women crossed the Mississippi River into Iowa and continued westward, they came as farmers, extensions of Jefferson's vision.

6. Nitrogen is essential to life, but though it makes up some 80% of the Earth's atmosphere, most organisms cannot use this nitrogen directly. Thus, nitrogen fixation, “the process of converting inorganic, molecular nitrogen in the atmosphere to ammonia or nitrate” (Keller and Botkin 50), plays a central role in supporting life on earth. But

there are relatively few processes that fix nitrogen, converting it to useful organic compounds. When Haber and Bosch developed a means of fixing nitrogen through industrial processes, they doubled the amount of nitrogen available for supporting plant life (Keller and Botkin 51). While this was no doubt a staggering achievement, the invention of the Haber-Bosch process is widely viewed as a mixed blessing. Haber and Bosch are often credited for both the 4.4 billion person increase in the world's population from 1900 to 2000, as well as increasing water and air pollution (from agricultural runoff and industrial combustion processes). Significantly, Haber and Bosch are also frequently blamed for the 70 million deaths of World Wars I and II, as the Haber-Bosch process made German munitions production possible throughout the 20th century.

7. I want to suggest, also, that Borlaug's success in spreading the gospel of world stewardship was helped by his particular *ethos*. Borlaug was, for lack of a better phrase, a man's man – not an effete university researcher. Even the Nobel Foundation has gone out of its way to describe Borlaug, in their official biography of him, in this way. They label Borlaug:

An eclectic, pragmatic, goal-oriented scientist, he accepts and discards methods or results in a constant search for more fruitful and effective ones, while at the same time avoiding the pursuit of what he calls "academic butterflies". [sic] A vigorous man who can perform prodigies of manual labor in the fields, he brings to his work the body and competitive spirit of the trained athlete, which indeed he was in his high school and college days. ("Biography")

How could the pragmatic, vigorous Borlaug, a man who eschewed academia and excelled at athletics, have failed to attract the pragmatic, vigorous farmers of America's heartland? Farmers united under Borlaug's banner: American farmers feed the world.

8. I have built this notion of the *hyper-steward* from the work on the Minutemen anti-illegal immigration activists that I completed with Ralph Cintron and David Bleeden in the wake of the May 1, 2006 Chicago immigrant rights mobilization. In our essay, "Minutemen and the Subject of Democracy," we argue that the anti-illegal immigration activists the Minutemen emerge as a sort of hyper-citizen, demanding and fully embodying claims for rights, freedom, citizenship, and the rule of law. In the case of the Minutemen, all sorts of allegedly unjust activities can then be justified in the name of the hyper-citizen; counterintuitively, their seemingly undemocratic activities are warranted by their very claims to democratic citizenship. Our complete essay appears in the anthology *¡Marcha!: Latino Chicago and the Immigrant Rights Movement*. Ed. Amalia Pallares and Nilda Flores-Gonzales. Champaign: University of Illinois Press, 2010.

9. The T value, or tolerable soil loss value, in Iowa is currently set at 5 tons per acre per year. This figure is thought to represent the amount of soil that can be regenerated per year, meaning that soil productivity will not be negatively impacted by soil loss of up to 5 tons per acre per year due to erosion. While the 2007 Natural Resources Inventory reported that erosion in Iowa averaged 5.2 tons per acre per year, just over the 5 ton T value, a 2011 report released by the Environmental Working Group (EWG) reported more nuanced and startling results. According to research compiled by the EWG:

In some places in Iowa, recent storms have triggered soil losses that were 12 times greater than the federal government's average for the state, stripping up to 64 tons of soil per acre from the land, according to researchers using the new techniques. In contrast to the reassuring statewide averages, the researchers' data indicate that farmland in 440 Iowa townships encompassing more than 10 million acres eroded faster in 2007 than the "sustainable" rate. In 220 townships totaling 6 million acres, the rate of soil loss was twice the "sustainable" level. (Cox et al)

In other words, Iowa's soil is much more vulnerable than previously thought.

Interestingly, in the 2007 National Resources Inventory, the USDA reports that soil loss has actually slowed between 1982 and 2003, though erosion rates are still well above T (tolerable soil loss) throughout the nation.

10. Despite emerging scientific evidence connecting farming practices in the Upper Mississippi River Basin with the decimation of fishing industries and aquatic life more generally in the Gulf, to date jurisdictional wrangling has prevented upstream states from being held accountable for downstream hypoxia.

11. For further reading, see Paul Streeten's *What Price Food? Agricultural Price Policies in Developing Countries*.

12. I should note that in suggesting that American agriculture in the late 20th and early 21st century has been dominated by the rhetorics and practices of intensification and industrialization, I do not wish to take sides in the ongoing argument about whether or not agriculture has become a fully industrial enterprise. Clearly, agriculture and capitalism have a fraught relationship. As Marx described in *Capital*, capitalism was

born out of the expulsion of subsistence producers from the soil, the rupture of the link between production and consumption. And so, as Marx so aw(e)fully describes, “Capital comes dripping from head to foot, from every pore, with blood and dirt” (712). But while Marx predicted the end of traditional forms of production, based on the superiority of large-scale production (and, indeed, Marx thought that rural life was too isolating and isolated to lead to the formation of a class consciousness), the rise of small-scale, diversified organics has shown that this did not quite prove to be the case.

Since Marx, theorists have not been able to agree on the relationship between agriculture and capitalism. Susan Archer Mann, for instance, in her *Agrarian Capitalism in Theory and Practice* (1990), contests the frequent tendency to consider agriculture on an industrial model, which frames the farm as a “factory in the field.” As Mann argues, capitalism thrives in enterprises with frequent turnovers of capital (more frequent chances to extract profit), but agriculture, with its spoilage, inefficient use of machinery, and seasonal labor, behaves differently from other types of capitalist industry.

While Mann raises an important issue, I do not think it is necessary to resolve this dilemma of whether or not agriculture is properly industrial in order to recognize the ways in which the logic of industrialization has permeated contemporary agriculture, which, in fact, is part of my larger point. More significantly, as I argue, these bundled logics of industrialization, mechanization, and management have caused material changes in the landscape of American Midwest.

III. CONFLUENCE: VERNACULAR VOICES OF *GROUND*ED STEWARDSHIP AND *HYPER*- STEWARDSHIP

con•flu•ence (*noun*)

1. a coming or flowing together, meeting, or gathering at one point
2. a: the flowing together of two or more streams
b: the place of meeting of two streams
c: the combined stream formed by a junction. (“Confluence” def.)

Chapter two, “Riverbed: Material Rhetorics of Agricultural Stewardship,” proposed that the ideology and practice of contemporary American agriculture relies upon and sustains a binary between rhetorics of *grounded stewardship* allied with environmental good and rhetorics of *hyper-stewardship* allied with environmental harm. In its pages, I argued that *hyper-stewardship* has become the dominant rhetoric in American agriculture, deeply intertwined as it is with the technological advances of the Green Revolution and American economic policy. I maintained that this binary defines and constricts the possibilities for heroism for America’s farmers, and I hinted at the idea that arguments for conservation based strictly on subordinate rhetorics of *grounded stewardship* would fail to have full persuasive appeal.

Where that chapter attended to rhetorics of stewardship on the macro scale, this chapter, “Confluence: Vernacular Voices of *Grounded Stewardship* and *Hyper-Stewardship*,” turns its attention to the micro: to the ways that these universal rhetorics engage at the level of the everyday. Based on two years of ethnographic fieldwork with Clear Creek’s farmers, landowners, and conservation staff, this chapter seeks to address what happens when these rigid, public rhetorics of *grounded stewardship* and *hyper-*

stewardship, in the words of anthropologist Anna Lowenhaupt Tsing, “enter the fray” (270).

This chapter asks the following questions. How do Clear Creek’s farmers and agricultural landowners identify with and act upon the public rhetorics of *grounded stewardship* and *hyper-stewardship*? Against the concerns and confines of a very particular physical and economic backdrop, how do Clear Creek’s farmers and landowners make decisions in the face of this forced binary? How does this engagement with public rhetorics at the vernacular level inform an understanding of agricultural stewardship?

In this chapter, I detail the ways in which these rhetorics of *grounded stewardship* and *hyper-stewardship* emerge in the vernacular rhetorics of Clear Creek’s farmers and landowners and play a crucial role in their decision-making about conservation and the resultant impact on the material landscape. Despite the seeming rigidity of these rhetorics on the macro scale, I suggest here that, on the vernacular level, these rhetorics play out in complex ways. Clear Creek’s farmers and landowners struggle to talk, think, and act amongst these conflicting rhetorics, and, ultimately, they incorporate these public rhetorics in intricate and even positive ways. While the rigid instantiations of rhetorics of *grounded stewardship* and *hyper-stewardship* work to create a false binary that forecloses the possibilities for action amongst the farmers of Clear Creek, I argue here that opportunities for invention and action emerge at the vernacular level: that even rhetorics of *hyper-stewardship* can be mobilized for the sake of positive environmental change.

A. Theorizing Vernacular Voices

In her ethnographic study of Indonesian forestry and environmentalism in the 1980s and 1990s, *Friction: An Ethnography of Global Connection*, Anna Lowenhaupt Tsing uses friction as a heuristic for understanding the ways that universals, as she puts it, “enter the fray” (270), engaging with and manifesting in everyday life. For Tsing, there is inevitable and productive tension between universalizing rhetorics and the ways that they are enacted on the ground, and so, as Tsing explains, the use of friction as a heuristic allows us to see the ways in which “heterogenous and unequal encounters can lead to new arrangements of culture and power” (5). Tsing attends to the material and social spaces in which seemingly hegemonic universals engage at the level of the everyday, suggesting that the friction produced by this engagement alters the material and symbolic terrain of both the everyday and the universal.

Tsing’s text is an attempt to elucidate the reciprocal forces of global and local, to highlight the ways in which global policies and local responses shape each other, and to argue for the need to situate oneself in a given place in order to get a better sense of how global policies and practices are resisted and adapted in local settings. As Tsing describes, “universal claims allow people to make history, but not under the conditions those claims might lead them to choose” (270). In other words, Tsing argues that there is messiness and muddiness when universals enter the fray and that local histories are written in the adapted language of these universals. Like my own interest, Tsing’s attention is focused on the messiness and muddiness of the human engagement with the natural world. And so, when Tsing suggests that her study of Indonesian forestry has demonstrated that, “we know and use nature through these engaged universals” (270), I

consider here how the public rhetorics of *grounded stewardship* and *hyper-stewardship* engage in Clear Creek and help to shape how farmers, landowners, and conservationists “know and use nature” in the watershed.

Tsing’s work gets at the heart of the research that I have undertaken in the Clear Creek watershed, with its emphasis on the friction between global food policies, hegemonic agricultural discourses, and everyday rhetorics. But Tsing’s text is not the only model for the work I have completed here. As I work to understand how the public rhetorics of *grounded stewardship* and *hyper-stewardship* engage with everyday life, I attend to the friction produced when these universals – what I have been referring to as public rhetorics – engage with the vernacular voices of Clear Creek’s farmers, landowners, and conservationists. (All the while, I keep in mind Tsing’s point that the friction produced by this engagement offers the possibility of altering the material and symbolic terrain of both the everyday and the universal. Indeed, in chapter five I return to this point as it relates to the possibilities for conservation outreach.)

I borrow the term “vernacular voices” from Gerard A. Hauser who, in his text *Vernacular Voices: The Rhetoric of Publics and Public Spheres*, adopts a “vernacular rhetoric model” – what he describes as “an empirical disposition toward the dialogue of informal discourse” – to ascertain a better understanding of public opinion than those provided by liberal democratic or objectivist theories (83); for Hauser, informal discourse offers the best window onto the public opinion that, as he proposes, serves to form a public. In his work, Hauser wants to reframe publics not as anonymous masses put forth by the media and public opinion polls; rather, he suggests that an understanding of

publics and public opinion can be gleaned through attention to rhetorical interaction: to “the ongoing dialogue on public issues among those who belong to a community” (6).

My own project can be understood as attending to the ongoing dialogue about agricultural conservation emerging in the informal discourse of the community formed by the farmers, landowners, board members, and conservation staff of the Clear Creek watershed. Like Hauser, I have adopted “an empirical disposition toward the dialogue of informal discourse” (83), interviewing farmers, landowners, and conservation staff, attending community meetings and field days, and spending time at the local conservation office, to better understand public opinion about agricultural stewardship. It is my sense that this informal discourse – the discourse that, for Hauser, serves to constitute a public – helps to inform and complicate our understanding of the public rhetorics of stewardship. By referring to the rhetorics of *grounded stewardship* and *hyper-stewardship* as public rhetorics, I am not suggesting that they trump the vernacular voices of Clear Creek’s farmers and landowners, constituting a public per se. Rather, I am referring to them as “public rhetorics” inasmuch as they circulate in public, across a variety of publics, who, in turn, create their own publics in the adapted language of these universal rhetorics. Further, it is my sense that these particularized publics ultimately tell us more about the rhetoric and practice of agricultural stewardship than the public rhetorics championed by public personalities like Wendell Berry and Vandana Shiva. Thus, like Hauser, I attend to vernacular voices: in this case, the vernacular voices of the Clear Creek watershed. Borrowing from Hauser, I use the term “vernacular rhetorics” to refer to the everyday, emplaced rhetorics that circulate within my field site – and within

any community of people – about themes like stewardship and conservation; like Hauser, I am deeply interested in the revelatory power of these vernacular instantiations.

Notably, Hauser builds his argument about the vernacular character of public opinion through his adoption of Mikhail Bakhtin’s notion of “dialogizing of the word” from *The Dialogic Imagination*, a process in which, as Hauser describes, “our use of language constantly enters into dialogue with the language used by our interlocutors” (Hauser 8). For Bakhtin and Hauser, these external discursive exchanges begin with an individual, internal discursive struggle between authoritative and internally persuasive discourse; as unsanctioned internally persuasive discourse tangles with authoritative, sanctioned discourse, an infinite possibility of meanings can emerge. Thus, Hauser is interested in the point at which authoritative and internally persuasive discourses collide: a collision that occurs, I suggest, between the public rhetorics of *hyper-stewardship* and *grounded stewardship* and vernacular rhetorics in this study and between the related concepts of intensive agriculture and sustainable agriculture that rural sociologist Michael Mayerfeld Bell attends to in his recent ethnographic study of Iowa farmers.

Like Hauser, Michael Mayerfeld Bell borrows Bakhtin’s lens of dialogism in order to theorize from vernacular voices in his study of Iowa’s farmers, *Farming for Us All: Practical Agriculture and the Cultivation of Sustainability*. In his text, the study most closely related to my own research in the Clear Creek watershed, Bell investigates the major sustainable agriculture advocacy group in Iowa, the Practical Farmers of Iowa (PFI), to examine the ways that knowledge and identity are intermingled; he suggests that farmers who have been willing to switch from conventional to sustainable agriculture – farmers who, I would suggest, identify with rhetorics of *hyper-stewardship* and *grounded*

stewardship respectively – have undergone a concomitant shift in their identities and knowledges of self. Ultimately, Bell argues that agriculture (which is to say industrial agriculture) has become a monologic enterprise and that PFI (with its field trials and university-community dissemination of farming knowledge) attempts to reframe agriculture in dialogic terms, a reframing that they hope will result in practical consequences.

As I detailed in the previous chapter, industrial agriculture builds from rhetorics of *hyper-stewardship* and sustainable agriculture builds from rhetorics of *grounded stewardship*. And so, in Bell's configuration, where arguments for sustainable agriculture help to dialogize agriculture proper, we might say that the subordinate rhetorics and practices of *grounded stewardship* challenge the dominant rhetorics and practices of *hyper-stewardship*. Per Bell, rhetorics of *grounded stewardship* dialogize rhetorics of *hyper-stewardship*, widening the conversation about agriculture and presenting new opportunities to Iowa's farmers. But, as I claimed in the previous chapter, rather than working to create a more nuanced version of agriculture, the collision between rhetorics of *hyper-stewardship* and *grounded stewardship* has seemed to result in a stalemate of sorts, where their collision only serves to further polarize them and reify their difference. And so, rather than look to the dialogic friction produced when rhetorics of *hyper-stewardship* and *grounded stewardship* collide with each other, I instead work from the point of view of Tsing: attending to the dialogic friction produced when the dominant and subordinate public rhetorics of *hyper-stewardship* and *grounded stewardship* engage with and emerge within vernacular rhetorics: when rhetorics of *hyper-stewardship* and *grounded stewardship* enter the fray.

But despite our differing approaches, Bell and I share the same research interest in the communicative conversion to more sustainable agricultural practices. Where my attention is more focused on the engagement between what I refer to as public and vernacular rhetorics than Bell's (and I have some concerns with Bell's argument that the expansion of a conversation is inherently democratic and thus laudable and desirable), I share Bell's interest in expanding the definition of agriculture, a point to which I will return in chapter five. And for Bell, this idea of *dialogism*, of opening up agriculture to the widest possible conversation and attending to how this expansive public conversation about agriculture can work to draw in individual farmers and prompt them to make practical changes, is key to his argument. Indeed, this notion is the basis of Bell's primary research question: how and why do farmers come to identify with and adopt sustainable agricultural methods?

But Bell concludes his inquiry by determining that he could not possibly guess (at least within the disciplinary confines of sociological inquiry) why some farmers choose to convert to sustainable agricultural practices and some do not. Bell offers only that certain farmers, in line with what he calls the "dialogic unpredictability" of human lives (162), happen to make the conversion to sustainability via a kind of "dialogic providence" that opens them up to a new type of knowledge (in this case, recognition of the value of sustainable agricultural practices) at just the right time (163). Echoing Bakhtin and in agreement with Hauser, Bell frames agricultural sustainability as an internally persuasive discourse for his interviewees, one that challenges and dialogizes the authoritative discourse of mainstream, intensive agriculture.

Following Bakhtin, every context is unique and, thus, creates a unique constellation of conditions: what Bakhtin describes as “an intense struggle within us for hegemony among various available verbal and ideological points of view, approaches, directions and values” (345). As Bakhtin continues, “The semantic structure of an internally persuasive discourse is *not finite*, it is *open*; in each of the new contexts that dialogize it, this discourse is available to reveal ever newer *ways to mean*” (345). But in Bell’s text, we recognize that the uniqueness and openness theorized by Bakhtin mark an impossibility of understanding and critique: the conditions cannot be understood; “unpredictability” and “providence” stand in the way.

In light of this perceived impossibility, Bell attends to the descriptions of unpredictability and providence that emerge from the vernacular voices of PFI’s farmers. Bell includes the story of Dale, for instance, a conventional farmer who explains to Bell how, after failing to make money by selling his grain at market prices, he finally turns to sustainable agriculture. Bell explains that more than half of the farmers he spoke with described a similar “conversion,” often in the language of theology, “as a sudden conversion through a personal encounter with a higher authority” (157). Indeed, Bell includes PFI founder Dick Thompson’s own conversion story, as told by Dick and his wife, Sharon. As they describe, “a word came to us in a supernatural way, through the gifts of the Holy Spirit, the word being that God was going to teach us how to farm” (Bell 158). While Bell admits that he does not share the Thompsons’ religious beliefs, he does go on to theorize the prevalence of these conversion narratives as evidence of each farmer’s connection to a “natural conscience – that they regard as apart from the social and its dark interests and power plays” (158). In Bell’s interpretation of these vernacular

rhetorics, PFI farmers see themselves as converting to sustainable agricultural practices through radically individual – and *not* dialogic – experiences, despite Bell’s sense that dialogism is actually at work in these conversions. And so, rather than critique these rich and pertinent instances of dialogism, Bell points to providence, halting his analysis at the level of PFI farmers’ own accounts of their experiences.

I appreciate that Bell takes these farmers at their word; he is refreshingly unwilling to put his own views into his interviewees’ mouths, to discern motives where there may be none; and, of course, his contribution to our understanding of the discourses of contemporary Iowa agriculture is one of the best to date. But I want to suggest here that there might be another way to theorize these farmers’ conversions to sustainable agriculture. Yes, these farmers may see this conversion as a turning toward a natural, non-social conscience, and, of course, this belief is worthy of exploration, but it may be interesting to more deeply explore the rhetoricity of these providential conversions.

Even if, as Bakhtin asserts, every instance is unique, there may be commonalities – particular combinations of material and rhetorical conditions – that make certain discourses and arguments more appealing, which is to say more persuasive, at given times and in given places. And so, while I value Bell’s analysis and the window he provides onto the vernacular voices of Iowa’s farmers, I want to suggest that the shifting rhetorical and material backdrop might help to form the conditions that make Bell’s dialogical providence possible, a point that becomes increasingly important in this discussion of the rhetorics and associated practices of *grounded stewardship* and *hyper-stewardship*.

Furthermore, given my intention to make this work useful to the practice of agricultural conservation, it becomes necessary to question whether it is possible to push beyond unpredictability and providence, to consider that discursive possibilities may well, as Bakhtin argues, be utterly open, but to interrogate how and why individuals align and, in fact, identify with these discursive possibilities – and how this process of identification is connected to material conditions. I want to suggest that, in addition to Bakhtin’s work on authoritative and internally persuasive discourses, Kenneth Burke’s work on identification might help to explain how Bell’s farmers come to identify with the rhetorics and practices of sustainable agriculture and that, in the context of this study, it might explain how the farmers and landowners of Clear Creek come to identify with various rhetorics and practices of *grounded stewardship* and *hyper-stewardship* in the beginning of the 21st century.

Kenneth Burke’s *A Rhetoric of Motives* is concerned with the process of identification, the process through which a person, through language, comes to identify with another. As Burke explains in the opening pages of that text, “A is not identical with his colleague, B. But insofar as their interests are joined, A is *identified* with B. Or he may *identify himself* with B even when their interests are not joined, if he assumes that they are, or is persuaded to believe so” (20). For Burke, this process of identification, in which A “may *identify himself* with B,” is the territory of rhetoric; rhetoric is the means by which A comes to identify with B, the means by which a farmer in the Clear Creek watershed comes to identify with the other farmers in the watershed and with the watershed itself, a process that I consider in detail in the following chapter. (In Bell’s

case, rhetoric is the means through which Dale, Dick, and Sharon come to identify with other sustainable farmers and with sustainable agriculture itself.)

For Burke, rhetoric is the means by which we negotiate identification and its constant companion, division. Humans are always and inevitably divided; rhetoric brings us, however fleetingly, together. And so, where Bakhtin suggests that “the intense struggle within us” results in new discursive meanings (345), Burke posits discourse itself as the means through which individuals negotiate that struggle and align themselves with one another in ways that make new meanings possible. As Burke describes in a key passage of *A Rhetoric of Motives*:

The *Rhetoric* must lead us through the Scramble, the Wrangle of the Market Place, the flurries and flare-ups of the Human Barnyard, the Give and Take, the wavering line of pressure and counterpressure, the Logomachy, the onus of ownership, the War of Nerves, the War. It too has its peaceful moments: at times its endless competition can add up to the transcending of itself. In ways of its own, it can move from the factional to the universal. But its ideal culminations are more often beset by strife as the condition of their organized expression, or material embodiment. Their very universality becomes transformed into a partisan weapon. For one need not scrutinize the concept of “identification” very sharply to see, implied in it at every turn, its ironic counterpart: division.

Rhetoric is concerned with the state of Babel after the Fall. (23)

In Burke’s analysis, his text, “The Rhetoric,” and its object of study, rhetoric itself, leads, connects, transcends; it conquers division – even if only for fleeting moments. It is the

means through which we create, negotiate, and even briefly transcend our own particular Babels.

For Burke, rhetoric is a necessary means of connecting individuals because we are, by nature, apart. As Burke suggests, “If men were wholly and truly of one substance, absolute communication would be of man’s very essence. It would not be an ideal, as it now is, partly embodied in material conditions and partly frustrated by these same conditions” (*Rhetoric* 22). Rhetoric is this non-ideal communication, the means through which we navigate the Scramble, the Wrangle of the Market Place, the flurries and flare-ups of the Human Barnyard. It is the means through which we navigate particular, emplaced scrambles; it is “partly embodied in material conditions and partly frustrated by these same conditions.” In other words, the social, material, and economic landscape of the Clear Creek watershed specifically and Iowa agriculture more generally help to make rhetorics of *grounded stewardship* and *hyper-stewardship* more and less possible – more or less persuasive and embraceable – at particular times. These material conditions allow for the possibility of identification between divided people and landscapes and frustrate these very attempts. The material world forms the suasive backdrop for these rhetorical conversions.

This interaction between the rhetorical and the material, and the identification that it both engenders and frustrates with rhetorics of *grounded stewardship* and *hyper-stewardship*, emerges in the vernacular voices of Clear Creek’s farmers and landowners and plays a crucial role throughout this text. My interest in this interaction between the rhetorical and the material serves as the reason why this text attends to the theoretical lenses offered by Tsing and Burke and to the ways in which their work self-consciously

adds a material component to the work of Hauser, Bakhtin, and Bell. I appreciate that Hauser points our attention to informal dialogue and suggests that informal dialogue offers a primary means through which to understand a public. Hauser's work sets the stage for my attention to vernacular voices in this text and suggests that the way to understand agriculture is through the vernacular voices that constitute the agricultural public, rather than through the monologic public rhetorics I pointed to in the previous chapter. And, indeed, it is Bakhtin who points our attention to the ways that these monologic public rhetorics are dialogized at the vernacular level and to the communicative possibilities that emerge from that process. The struggle that Bakhtin frames between authoritative and internally persuasive discourses helps to frame the process through which my interviewees in the Clear Creek watershed challenge the binary between rhetorics of *hyper-stewardship* and *grounded stewardship* and these rhetorics' presumed alliances with environmental harm and environmental good. My interviewees challenge both of these authoritative discourses in various and varying ways (especially the authoritative discourse of *hyper-stewardship*), and the challenges that my interviewees offer on the vernacular level serve to open up communicative possibilities for conservation practice, as we will see throughout this text. Likewise, Bell, who builds from Bakhtin, reminds us to attend to the fact that the rigid, monologic public rhetorics of *hyper-stewardship* and *grounded stewardship* may not be as rigid as they seem.

The connected points that Hauser, Bakhtin, and Bell make about the value of informal, vernacular discourse and the creative possibilities that emerge when these informal discourses run up against and challenge rigid, monologic, authoritative rhetorics is related to Tsing's argument about the productive friction that emerges when universals

enter the fray. But where Bakhtin's interest in the friction produced between authoritative and internally persuasive discourse exists primarily on the level of the symbolic, Tsing seems interested in the engagement of universals at the vernacular level because, for Tsing, the vernacular level is the level at which the material becomes visible. And so, as Tsing explains, her text explores "practical, engaged universality," a universality "enacted in the sticky materiality of practical encounters" (1). Likewise, the text before you attends to "the sticky materiality of practical encounters," suggesting that the friction between what I have referred to as public rhetorics and vernacular voices is productive inasmuch as these are frictive encounters in which the collision of the symbolic and the material is rendered visible. When the vernacular voices of my interviewees are framed against the particular material backdrop of the Clear Creek watershed, we begin to see how the public rhetorics of *hyper-stewardship* can actually be identified with and mobilized for the sake of conservation. This is a point that emerges when we view these vernacular voices against Burke's suggestions that rhetoric is the means through which we navigate the scramble and that identification is partly enabled and partly stymied by material conditions. As we will see in the following section, and as Burke suggests, my interviewees' identifications with rhetorics of *grounded stewardship* and *hyper-stewardship* enable them to navigate the possibilities for conservation in the particular material agricultural world of the Clear Creek watershed. But, significantly, material factors like the environmental impacts and economic realities of intensive agriculture by turns foster and inhibit identification with rhetorics of *grounded stewardship* and *hyper-stewardship*.

I turn to these vernacular voices now.

B. Learning from Vernacular Voices: Public Rhetorics of *Hyper-Stewardship* and *Grounded Stewardship* Enter the Fray

As I got to know the farmers, landowners, and conservation staff of the Clear Creek watershed throughout 2008, 2009, 2010, and now 2011, I wanted to know how public rhetorics of *hyper-stewardship* and *grounded stewardship* were activated and acted upon in their daily lives. And I wondered if, at the vernacular level, the binary between rhetorics of *hyper-stewardship* and *grounded stewardship* – and their presumed connection to environmental harm and environmental good respectively – persisted.

I wanted to know what happens when, as Tsing asks, these public rhetorics of *hyper-stewardship* and *grounded stewardship* enter the fray. And if rhetoric, as Burke suggests, is “partly embodied in material conditions and partly frustrated by these same conditions,” I wanted to know how these public rhetorics enter the fray in light of the particular material circumstances – both the economics and ecology – of the Clear Creek watershed. What kind of productive friction occurs when public rhetorics of *hyper-stewardship* and *grounded stewardship* are engaged by Clear Creek’s farmers and landowners? What consequences might this productive friction offer for future conservation practice? I approached my interviews with Clear Creek’s farmers and landowners with these questions in mind.

The interviewees that I discuss here – Harlan, Betty, Russell, Mariann, Gary, and Gene – all own land in the Clear Creek watershed and several of them farm that land. All of them have made the choice to join the Clear Creek Watershed Enhancement Project, adopting a variety of conservation measures on their property as part of a number of cost-share programs available through the project. When I spoke with each of them during the

spring of 2010 about their participation in the project and their attitudes toward stewardship and conservation, they all betrayed various identifications with the rhetorics of *hyper-stewardship* and *grounded stewardship* that I identified in the previous chapter, identifications that seemed to prompt or thwart their actions for conservation.

But instead of demonstrating an identification with rhetorics of *grounded stewardship* that prompted action for conservation and an identification with rhetorics of *hyper-stewardship* that thwarted action for conservation (a scenario that the public rhetorics of *hyper-stewardship* and *grounded stewardship* would lead us to expect), the vernacular rhetorics of Clear Creek's farmers and landowners demonstrated something different. In fact, two surprising and significant points emerge from my analysis of our conversations.

First, Harlan, Betty, Russell, Mariann, Gary, and Gene took action based on a variety of differing allegiances and identifications influenced by their varying perspectives on material factors like economic incentives, consumer demand, and environmental degradation. In other words, material factors play a significant role in the affiliations and decisions of the landowners and farmers of Clear Creek, contributing to the complexity that emerges when public rhetorics of stewardship are incorporated at the vernacular level.

Second, all of my interviewees found ways to engage rhetorics of *hyper-stewardship* for the sake of soil and water conservation. In short, at the vernacular level, the strict binary of public rhetorics of agricultural stewardship falls apart. *Hyper-stewardship*, it seems, can be mobilized for environmental good. And, as I will discuss in detail in chapter five, this muddiness – the productive friction that occurs when public

rhetorics of *grounded stewardship* and *hyper-stewardship* enter the fray – offers a currently untapped opportunity for conservation outreach.

That was a preview of the lessons to be learned from Harlan, Betty, Russell, Mariann, Gary, and Gene. Here is what they had to say.

1. Harlan and Betty: “I like owning some land that you’re feeding the world.”

Harlan is in his early 80s and lives with his 70-something-year-old wife, Betty, at the outskirts of a mid-sized town just outside the Clear Creek watershed. They live in the last house before a cornfield in a subdivision of sorts where they moved when they retired from farming in the early 1990s and left the house in the Clear Creek watershed that Harlan had lived in his whole life. When I arrived at their house on a warm spring day, Harlan and Betty both greeted me at the door and invited me into their neat, floral home. We settled down at the kitchen table for our interview, and I distributed the informed consent forms, which they impressed me by actually reading.

It turned out that their attention to the details of the consent forms was a sign of things to come. While Betty remained largely silent throughout the interview – not for a lack of effort on the part of Harlan to get her involved¹ – Harlan demonstrated an encyclopedic knowledge of the conservation practices he has installed on their farmland and of the myriad (and incredibly confusing) government programs that fund various practices. When I asked Harlan about the conservation work done on his farm, he left the table and returned with a small notebook; he proceeded to catalog the variety of practices installed on his farmland – buffer strips along the creek, terraces, basins, a standpipe, grassed waterways – an impressive amount of work on ~200 acres.

Harlan's attention to the details of these improvements is almost über-local; he betrays a familiarity with every terrace, basin, and waterway on his land. He has been persuaded to adopt a variety of conservation practices thanks to his identification with rhetorics of care on the local scale, with his connection to a specific place: with rhetorics of *grounded stewardship*. As Harlan explained:

We do take a really big interest in farming yet, even though we just rent it. [...] Some renters [...] live, you know, in different states, and they buy the land because it pays off better than interest now [...] but they don't know what's going on [...] if the renter does, you know, something that he shouldn't be doin' or not taking care of it, like conservation.

It matters to Harlan that he is present on his farm: he takes "a really big interest"; he wants to "know what's going on." He stays in close contact with his renter – a life-long Clear Creek resident – who, Harlan explains, he chose to take over the farm because:

I knew what kind of a farmer he was. [...] He does things right. We have good communication. And, uh, he just does everything according to the conservation programs that we're in, and just overall does a good job.

For Harlan, it matters that his renter practice good conservation and carry out the long-term vision that he has for his ~200 acres: that "he does things right." Though Harlan no longer farms the land himself, he takes an active interest in its care, and, in turn, he expects his renter to do the same; he feels a responsibility to the land he inherited from his father and wants to carry out that legacy for the long-term: to "save the soil for future generations."

But in his attention to minute detail on his farm despite the fact he no longer farms it himself, Harlan also engages with and seems motivated by a rhetoric of *hyper-stewardship*: the intense emphasis on the management of the landscape. Harlan is focused on specific practices, dollar amounts, acres, and contracts relating to the conservation practices on his farm; his notebook is a tidy ledger chronicling the improvements on his property, one that he is proud to refer to in his conversation with me. Indeed, part of the pride Harlan displays over his participation in a variety of conservation programs on his farm seems to stem from the satisfaction he takes from the cautious management of his property. In his retirement, Harlan has transferred the traits that made him a successful corn and soy farmer – a concern with management, productivity, and efficiency – over into his interest in conservation. In so doing, Harlan demonstrates how his identification with a rhetoric of *hyper-stewardship* actually prompts him to make changes to the landscape with (at least somewhat) positive environmental results. Harlan’s actions for stewardship emerge in part because he wants to take care of a particular, localized erosion problem on his land (“Because,” as he describes, “we’ve had awful heavy rains the last couple years that have really washed things out”), but he also acts because of his impulse to properly manage his land: as he puts it, to “do[] things right.” Harlan is concerned with and adopts rhetorics of *grounded stewardship* – of the health of the local landscape, the duty to land, and the connection to place – when describing his participation in the Clear Creek project. But, for Harlan, these concerns are related to his concern with and adoption of rhetorics of *hyper-stewardship* – of the management of that landscape, of the efficiency of his conservation practices, and, as we will see, of his connection to an agricultural identity. Harlan has put

a significant amount of time, effort, and money into installing conservation practices on his farm thanks to his identification with both of these public rhetorics.

Indeed, Harlan's concern with rhetorics of both *grounded stewardship* and *hyper-stewardship* also emerged in his discussion of the scalar impacts of intensive agriculture and of the remediation offered by conservation practices on his farm. Harlan articulated the connection he makes between the conservation practices on his own land and their effects more widely. As he described, his buffer strips:

Help [...] for the runoff of the soil, chemicals, and just make the crick a lot cleaner.

And explaining his motivation to adopt so many conservation practices as part of the Clear Creek project, he offered this interpretation:

We wanted to get involved and help clean up the water that goes down the crick to the bigger rivers.

In describing his sense of stewardship – what he (and many other Clear Creek residents) describes as “care of your land” – his view extends beyond small-scale, farm-specific concerns. He is concerned with the health of the crick and the impact the crick's health will have downstream. He attends to the consequences of his decisions about stewardship and conservation on a wider scale.

And while Harlan's concern extends from the small-scale (his on-farm conservation practices) to the mid-scale (“down the crick to the bigger rivers”), it also extends to a much wider, global scale. When I asked Harlan what he was most proud of about his land, he paused for a moment and then replied with a rhetoric of *hyper-stewardship*; he answered:

I like owning some land that you're feeding the world.

As I described in chapter two, this language of “feeding the world” is plucked directly from Norman Borlaug, the Green Revolution, and Monsanto. It has appeared for the last half century in advertisements for a variety of engineered crop varieties and synthetic fertilizers, and Harlan’s adoption of it betrays a sympathy with the global scale, with a national project, with an agricultural identity that should, according to my analysis, be complicit with environmental damage. Indeed, given the saturation of these rhetorics, and their current dominance, it would be easy to demonize Monsanto and assume that farmers like Harlan are patsies: bombarded with these public rhetorics and inculcated by them. But Harlan does not seem to adopt this rhetoric of “feeding the world” as an empty slogan. He is proud of the lifelong role that he has taken in the global food economy. After all, after proudly detailing the specific practices that he has spent a great deal of time and money installing on his local land, Harlan points to “feeding the world” as the accomplishment he is most proud of.

Indeed, I want to suggest that the national agricultural project of “feeding the world” – a project supported by American agricultural policy, by multinational corporations, by special interest groups like the Farm Bureau – has served to define the role of heroism for American farmers for over a half century. It has offered farmers a tangible project with which to identify. While American agriculture underwent drastic changes throughout the twentieth century – the contraction and polarization described by Gardner; the Green Revolution; the farm crisis of the 1980s – this national project of feeding a hungry and growing world offered farmers a measure of stability unavailable elsewhere. It offered a project they could get behind and believe in. It offered a

validation of not only their jobs, but, as Frances described in the previous chapter, their very selves. In short, it is a highly persuasive rhetoric.²

But even while Harlan identifies with and acts upon this strong rhetoric of *hyper-stewardship*, of assuming responsibility for alleviating global hunger, this rhetoric has not simply elided the concern for local, emplaced soil and water conservation (as the arguments of Berry and Shiva, for example, might lead us to believe); this adoption of rhetorics of both *hyper-stewardship* and *grounded stewardship* is prompted, in large part, by material concerns. We saw that Harlan adopted rhetorics of *grounded stewardship* for the sake of agricultural conservation, pointing to his concerns with the care of his local landscape thanks to the sense of connection and duty he feels to his farmland. And Harlan also betrays a sensitivity to the interconnected relationship between post-Green Revolution global production and local soil and water conservation, between the on-farm practices he has installed and “feeding the world.” In other words, the materiality of farming in the Clear Creek watershed – of both its economics and environmental impact – shapes his rhetoric. He explains, for instance, that an increased demand for conservation practices (the use of no-till methods, the installation of waterways, buffers, and basins, and so on) emerges from the embrace of intensive row crop production in the wake of the Green Revolution (a move that effectively wiped out small-scale livestock husbandry in Iowa). And so, when Harlan explained his decision to switch over from plowing to no-till in the course of his farming life, he cited his motivation as residing in a concern with:

Losing the soil. We used to, years ago, have livestock, and you rotated crops. You had corn, uh, oats, hay, and pasture. And now, you know,

livestock is pretty much out of the picture anymore. Except a few. You have to be really *big* in it in order to... And we just decided to get out of the cattle and hog business, so then you have to do conservation and so you hold your soil because you're using the land, you know, every year, taking something off of it.

As Harlan describes, intensive row crop agriculture damages the health of the soil – every year you are “taking something off of it.” As he puts it, you’re “losing the soil” because “you’re using the land, you know, every year”; but intensive row crop agriculture is essential, in Harlan’s view, to “feeding the world.” As Harlan identifies with the perceived demand to step up production to meet the needs of a growing global population, he simultaneously considers the local needs of his soil and water based on the increased stress that this global demand places on the local land.

Counterintuitively perhaps, instead of ignoring the needs of the local landscape, Harlan seems to pay attention to the need for local soil and water conservation precisely because of (and not despite) the material effects of his identification with rhetorics of *hyper-stewardship*. For Harlan, and several of my other interviewees, conservation becomes all the more necessary in light of the post-Green Revolution increase in production. He is sympathetic to rhetorics of *grounded stewardship* that drive arguments for conservation in the Clear Creek watershed because of the material conditions prompted by the dominance of rhetorics of *hyper-stewardship*. Rhetorics of *grounded stewardship*, for Harlan, do not seem to be persuasive in and of themselves; rather, Harlan identifies with rhetorics of *grounded stewardship* – of care, of cultivation, of the local scale, of long-term thinking, of connection to place, of duty to land – because of the

material results of his powerful identification with rhetorics of *hyper-stewardship* – of management, of efficiency, of the global scale, of short-term thinking, of connection to an agricultural identity, of duty to the nation-state. For Harlan, *hyper-stewardship* and *grounded stewardship* fit together; they are not as opposed as proponents of them both would suggest.

But Harlan recognizes that this relationship could be construed as a tense symbiosis between the rhetorics and practices of *grounded stewardship* – the demand to care for his own 200 acres – and *hyper-stewardship* – the demand to care for the world’s population through increased row-crop production – but more deeply identifies with rhetorics of *hyper-stewardship* nonetheless. As Harlan pointed out:

I think people, some people, think we’re cropping too much, but with the increase in population, we’re going to have to raise more out of every acre to feed the world.

Despite the concern that he’s “cropping too much,” for Harlan, embodying the role of *hyper-steward* – “rais[ing] more out of every acre to feed the world” – trumps that of *grounded steward*. Harlan identifies more deeply with rhetorics of *hyper-stewardship*. He finds the rhetorics of *grounded stewardship* – arguments for care of and connection to the local landscape – persuasive, but only inasmuch as they dovetail with the dominant rhetorics of *hyper-stewardship*. Harlan’s identification with the project of “feeding the world” – the accomplishment he is most proud of in his life in agriculture – takes precedence over the long-term needs of his local land. Harlan’s conservation actions are a palliative, relieving the short-term pain inflicted on his land (and, I would suggest, his psyche) without a long-term solution to the underlying problems posed by intensive

production. But Harlan is able to live with this prioritization. He has fully adopted the mantle of the Green Revolution: increased production for the sake of feeding the world's growing population. He identifies with this mantle and with his role in meeting this demand by fully inhabiting the role of *hyper-steward*. (And for Harlan, born in the 1930s and raised during the Green Revolution, the embrace of the project of "feeding the world" is not only the dominant rhetoric, it also offers the primary means of fulfilling a heroic role. To matter as a farmer in the late 20th century was to embrace this project: to inhabit this role.)

It is significant, then, that Harlan identifies more strongly with rhetorics of *hyper-stewardship* than rhetorics of *grounded stewardship*, but still chooses to participate in the conservation program in Clear Creek. While the prevailing logic suggests that arguments for *grounded stewardship* are those that prompt action for conservation (they are allied, as I described with the previous chapter, with environmental good), Harlan's example seems to complicate that logic. It seems that Harlan is not adopting soil and water conservation measures *despite* his sympathy with rhetorics of *hyper-stewardship*. He seems to be acting, at least to some extent, *because of* his sympathy with rhetorics of *hyper-stewardship* (with his strong identification with rhetorics of management and his concern with a wider spatial scale), and certainly because of the material effects of that sympathy.

Still, Harlan does identify – at least to some extent – with rhetorics of *grounded stewardship*. We heard above about his interest in the local landscape. And, when I asked Harlan about how he initially got involved with the Clear Creek project, he explained that he got in touch with conservation staff when:

We got, uh, some letters in the mail from the office about the Clear Creek project, the watershed project, and, uh, we wanted to get involved and help clean up the water that goes down the crick to bigger rivers, you know [...] Just, uh, I guess we wanted to do conservation. Save the soil for future generations.

He explains his affinity with rhetorics of *grounded stewardship*: he wanted to “get involved,” “help clean up the water that goes down the crick to bigger rivers,” and “save the soil for future generation.” And I do not doubt that these desires played a prominent role in Harlan’s decision to spend the money on terraces, basins, and waterways as he entered his ninth decade of life. It is clear that Harlan does identify, at least to some extent, with these rhetorics of *grounded stewardship*.

But while Harlan now adopts rhetorics of *grounded stewardship* to explain the pride he takes in the conservation improvements on his land – and rightly so – it seems that there may have been multiple factors at work in his decision to join the Clear Creek Watershed Enhancement Project. Rhetorics of *grounded stewardship* may not have motivated him to act; rather, after acting he refers back to the rhetorics as justification for his decision. For it seems that Harlan also had some help making the decision from his “great renter,” Russell. As Russell described a few days after I talked with Harlan and Betty (and conservation agency staff confirmed in a later interview):

[Harlan] over here, where I rent, you know, I asked him if it would be alright [to participate in the Clear Creek project]. You know, “We may need some tiling in there, you know, but if you do the tiling it’s gonna cost you, but the way the program works, if we can tie some terracing into, or

some kinda structures on there, they'll help pay for that, too, and you'll get two benefits out of it." [...] So I asked him and he said, "Sure, you know, we'll do that."

Russell wanted Harlan to tile his farmland and explained to Harlan that he could get part of the tiling paid for by adding conservation measures like terracing at the same time. And Harlan agreed. Despite Harlan's current interest in conservation practices on his farm, it seems likely that he would not have installed terraces, basins, and waterways without prompting from his renter, Russell; after all, Russell is the person who put the wheels of these specific conservation improvements in motion. Left to his own devices, it seems quite possible that Harlan would not have opted into the Clear Creek Project. But interestingly, after joining the project at Russell's prompting, Harlan is able to tap into his existing identifications with various rhetorics of both *grounded stewardship* and *hyper-stewardship* to support that choice (as he pointed to in our interview). Though Harlan may not have adopted the role of steward on his own, he is able to make a smooth transition: his existing identifications make it easy for him to embrace this role.

In the case of Harlan, then, he does not seem to see a tension between rhetorics of *grounded stewardship* and *hyper-stewardship*. These rhetorics fit together inasmuch as the material effects of intensive agriculture prompt him to be open to conservation practices that allow him to embrace and engage with – to identify with – rhetorics of *grounded stewardship*. But, significantly, Harlan also engages rhetorics of *hyper-stewardship* for the sake of conservation – attending to his impulse towards management and the connection he draws between the impacts of agriculture and conservation on multiple spatial scales. He seems to be persuaded to act for conservation primarily

because of material factors – the erosion he sees on his own land and the incentive payments offered by the Clear Creek project – but in making the decision to act, Harlan can easily adopt the mantle of steward. He can tap into his existing identifications with rhetorics of both *grounded stewardship* and *hyper-stewardship* to embody that role.

2. Russell: “But if we’re gonna feed everybody we gotta do some stuff that we probably shouldn’t do all the time.”

As is the case with Harlan, material factors – both economic and environmental – play a clear role in prompting Russell to act for the sake of conservation on his land. After all, it was Russell who helped to persuade Harlan to join the Clear Creek project based on available cost-share funds. It is also Russell who, as Harlan’s renter, sees Harlan’s land on a day-to-day basis and witnessed the deepening erosion problems on the property, alerting Harlan to their existence. But where Harlan seems comfortable with the juxtaposition of rhetorics of *grounded stewardship* and *hyper-stewardship* (recall that Harlan points to others’ sense that farmers are “cropping too much” but doesn’t seem to share that view; he views conservation practices as an available palliative for the results of intensive agriculture; and he is invested in the precise management of the conservation practices on his farm), Russell identified friction in our conversation between the rhetorics and practices of *grounded stewardship* and *hyper-stewardship* and their material constraints and consequences.

I arrived at Russell’s homestead in the Clear Creek watershed after a treacherous trip down some exceptionally wet and rutted spring roads. When I got there, the place looked somewhat deserted – not abandoned or poorly kept, just perfectly quiet. I stepped over a severed pig leg on my walk through the yard to the side door of the house. The air

was thick with hogs. This was clearly no retirement acreage. As I stood on the side porch, a semi trailer rumbled into view. A young man hopped out and asked if he could help me. When I explained that I was looking for Russell, he made a call on his cell phone and a man – Russell – emerged from the machine shed, looking an awful lot like shorter, farmier version of George Clooney. He apologized for keeping me waiting and led me into his family’s very comfortable, nicely decorated, and newly renovated farmhouse. He apologized for the hog smell, offered me something to drink, told me about his sons – one of whom is still in elementary school; the other, in his early twenties, was the young man I met outside – and we got started. Russell mentioned that the neighbors had been talking about me and offered up a friendly laugh. News travels fast in the Clear Creek watershed.

Russell is the fourth generation on his family farm, and, between his own land and the land he rents from others, he farms a total of ~1500 acres in the area. Conservation runs in Russell’s family; as he describes, his father:

Was pretty much in conservation too, there. He did it and after we had bought it, we did.

But Russell’s engagement with conservation is born at least partially of necessity. Like all of the land in the watershed, Russell’s land was hit hard by the heavy rains of 2008 and 2009. As he explained:

When it comes to rains like we’ve had the last two years – we have enormous ruts, you know, two and three foot deep ruts in our fields along waterways that we’ve had there and it just, the water just drained and ran

and ran and ran all through the summer and so, these last two years have been challenging, trying to keep [the functioning waterways].

Russell became a believer in the power of terraces for controlling this kind of erosion after farming a terraced field that he rents from a neighbor. As he described:

I didn't think I'd care for [terracing] that well until I got the opportunity to rent it there, and I thought it was going to be a nightmare with all those many terraces in there, and [...] it's made a believer out of me. It's just how it holds the ground. And it's not that hard to farm either.

As Russell describes his conservation ethic and his adoption of conservation practices like terracing, he grounds his beliefs and actions in both the conservation ethic that he shares with his father and grandfather and his concern with the damage inflicted on his land by changing climatic conditions. Like Harlan, Russell's motivations for conservation span rhetorics of both *hyper-stewardship* – his desire to appropriately manage his productive farmland – and *grounded stewardship* – his desire to care for the local land that his father entrusted to him and that he will, in turn, entrust to his two sons by responding to changing material conditions.

But, like Harlan, Russell's thinking about stewardship and conservation extends beyond this local scale. At first, it seemed that, unlike Harlan, Russell did not draw an explicit connection between the practices and activities on his own farmland and their repercussions for those downstream. (Recall Harlan saying, “We wanted to get involved [in the Clear Creek project] and help clean up the water that goes down the crick to the bigger rivers.”) But as our conversation progressed, Russell did demonstrate an awareness of the connections between his on-farm decisions and their effects on those

around him. For Russell, this connectivity was expressed through his concern for the people he refers to as his “neighbors,” the other residents of his sub-watershed. When I asked Russell what makes someone a “good farmer,” for instance, he answered:

Just being a good neighbor, I guess. That’s kinda hard. People aren’t like they used to be, I guess. A good farmer. [...] Just being a good neighbor, I guess.

As Russell went on to describe, a good neighbor is someone who offers help to their neighbors when needed and who attends to the effects of their actions on those around them. This active concern for his neighbors’ well-being emerges in his reasoning for getting out of the hog business, a move he made in 2010. Russell decided to abandon hog farming in part because of the expense of updating his buildings and a concern with increased regulations, but he is also concerned, as he explained, with:

Cricks. We have a crick close by, and just everything. And this area is populated pretty heavily here and to keep away from other farmers and it’s just, it’d be plenty close ‘cause I don’t want one right next to my front door, and I don’t want neighbors to feel the same way.

Russell does not want to have a negative impact on the crick that connects his property to his neighbors’ property, a crick that can easily carry mismanaged manure downstream. He does not want to have a negative impact on the air quality in his sub-watershed. And so, he has decided to act according to these concerns. In offering this explanation of what makes someone a good farmer and why he is trying to act as such, Russell demonstrates that his decision-making is influenced by concerns on multiple scales; he integrates both the immediate, small-scale of his own farmland and the wider scale of his neighbors’

land. In so doing, he identifies with and enacts rhetorics of *grounded stewardship* but also, in his attention to this wider horizon, Russell engages with rhetorics of *hyper-stewardship*.

This identification with the connection between his local land and the wider watershed impacts his decision-making. While Russell clearly articulates that the current availability of a generous amount of cost-share money and the threat of increased regulation were motivating factors for his participation in the Clear Creek project (and this view, by extension, influenced Harlan's decision to adopt conservation measures on his land), he also seems to enjoy being a part of a wider project that brings his corner of the watershed together. As he expressed:

I pretty much know the neighbors for the next about five or ten miles either way. Well, Clear Creek just starts up [...] just a mile and a half east here. [...] My uncle used to farm that farm so we actually knew the tile that started it there. [...] They're doin' kinda the same thing we are. They're puttin' buffer strips along [...] the crick. Most of 'em are, not all of 'em. [...] And so, I mean it's starting here, and it's kind of workin' its way down. And I think they're all – *most* of 'em are [...] tryin' to do a good job.

For Russell, this watershed project has seemed to unite his corner of the watershed for the sake of the creek. The conservation effort in Clear Creek has offered an opportunity for Clear Creek residents, as Burke explains, to overcome division and identify with this common project and with their common land: to connect with and act upon spatialized rhetorics of both *grounded stewardship* and *hyper-stewardship* by identifying with the

watershed and with each other (a point to which I will return in detail in the following chapter). They come to see that their actions have benefits at both the immediate and wider scales.

And beyond this issue of spatial scale, rhetorics and practices of *grounded stewardship* and *hyper-stewardship* continue to fit together for Russell because of material factors. Like Harlan, Russell seems willing to embrace the rhetorics of *grounded stewardship* propounded by conservation staff in Clear Creek because of the material consequences of the rhetorics of *hyper-stewardship* that drove the Green Revolution. Also like Harlan, Russell frames on-farm conservation practices as a palliative for the damaging effects of increased production in the wake of the Green Revolution. As Russell describes:

[The farm] is more continuous crop from what it was when my dad had it. [...] We had more cattle then, too, so we needed hay ground, so it was more, uh, crop rotation with hay than what it is right now. But then [...] we went out of cattle about, oh, it was the early '70s, so then we could concentrate more on just crops. So then we had it just straight crop farming. And then, you know, that was harder on the ground, and then we started contouring more, no-tilling a little bit.

Russell, like Harlan, expresses an interest in conservation practices like contouring and no-tilling because of what he sees as their symbiotic relationship with intensive row-crop production. While Russell's dad was committed to conservation even when the family was still working with hay rotations, the era of intensive row-crop production demanded an increase in conservation practices because, as Harlan explained, "You have to do

conservation and so you hold your soil because you're using the land, you know, every year, taking something off of it.”

But where Harlan seems to betray a certain level of comfort with the relationship between intensive row-crop production and conservation measures inasmuch as the conservation measures on his farm enable him, by partially assuaging his guilt, to fully identify with the global project of *hyper-stewardship*, Russell – the person who, after all, convinced Harlan to adopt conservation measures in the first place – does not seem as comfortable with this fraught relationship. There is friction for Russell when the rhetorics of *grounded stewardship* and *hyper-stewardship* enter the materialized fray.

This friction between production and conservation came to the fore when Russell talked about how farming has changed since he was a boy and since he started farming on his own in 1980. After describing improvements in hybrid crop varieties and chemicals, Russell checked himself. As he explained:

Chemicals are still chemicals. I mean, they're not hundred percent good, but they're not as bad as what they used to be. They're bad, but not as bad. You know, I wish we didn't have to use 'em at all. But if we're gonna feed everybody we gotta do some stuff that we probably shouldn't do all the time.

As Russell so clearly articulates, there are moments when his identification with rhetorics of *grounded stewardship* and *hyper-stewardship* come into conflict. Russell wants to care for his local land; he feels a sense of connection and duty to the land he inherited from his father, grandfather, and great-grandfather. But he also feels compelled to manage that land for maximum efficiency and profit. He feels a duty to his role as an

American farmer who is expected to produce for a growing national and global population (and to support his family while doing it). And his identification with these various rhetorics is complicated even further by material factors: by agricultural subsidies; by the availability of chemical fertilizer; by consumer demand for cheap food; by widespread flooding; by a growing global population. Like Harlan, Russell clearly wants to participate in the project of “feed[-ing] everybody.” Indeed, this is a noble goal. Russell sees his work on the ~1500 acres he farms as having a positive effect on the wider world. But, unlike Harlan, Russell seems to recognize that this positive effect comes at a cost: that his basins and waterways will not fully ameliorate the effects of the widespread chemical application that intensive row crop agriculture demands. His identification with a rhetoric of *hyper-stewardship* – with the national project of feeding the world’s growing population – and his enactment of this rhetoric come at a recognized cost: Russell has to “do some stuff that we probably shouldn’t do all the time”; stuff that Russell seems to recognize cannot necessarily be fully ameliorated by existing conservation practices supported by government programs.

In his embrace of the project to feed the world, Russell identifies with and inhabits the role of *hyper-steward*; Russell participates in his work on the ~1500 acres he farms in part because he sees beyond the small- and mid-scales and sees his work as having a positive effect on a global scale, despite its negative consequences on the small and mid-scales. In his desire to meet the perceived needs of this global population, Russell makes decisions – about chemical use in this instance – that he recognizes are not necessarily in the best interests of the small- and mid-scale landscape; as Russell explained, “But if we’re gonna feed everybody we gotta do some stuff that we probably

shouldn't do all the time." In highlighting this tension, Russell recounts the ways in which his identification with the role of *hyper-steward* can put his role as *grounded steward* in jeopardy. He appreciates that, in the wake of the Green Revolution, there have been improvements in fertilizer and pesticides (as he explains, "the chemicals we use to spray with aren't as toxic"), but he still "wish[es] we didn't have to use 'em at all." Russell recognizes that their use comes at an environmental cost.

In Russell's case, the role of *hyper-steward* largely usurps the role of *grounded steward* because of Russell's identification with the project of *hyper-stewardship* and with his concern with simple consumer demand. As Russell articulated:

If we want cheap food, we have to do this. I mean, that's kinda frustrating [*sic*] for other people to hear that. [...] But we have to if we wanna have cheap food. That's what people want.

Russell seems to feel the acute pressure placed on him by the global economy. As he sees it, the world demands that he produce cheap food, and he delivers, no matter the cost to his farmland and his watershed, because that is what it means to be an Iowa farmer in the year 2010. This is the world that monologues of *hyper-stewardship* and federal agricultural policy have created and continue to sustain.

And yet, despite this strong identification with rhetorics of *hyper-stewardship*, Russell has still made the decision to take action for conservation. Unlike the logic of the public rhetorics of *hyper-stewardship* and *grounded stewardship*, where the former prompts environmental damage and the latter prompts environmental protection, Russell adopts both rhetorics in varying ways. Rhetorics of *grounded stewardship* alone don't prompt Russell to join the Clear Creek project. Russell does identify with rhetorics of

grounded stewardship – after all, he takes pride in the tradition of conservation in his family, he cares for the local landscape, he feels a sense of duty and connection to the land he will turn over to his sons someday – but these rhetorics don't seem to have been persuasive enough to trump the pull of rhetorics of *hyper-stewardship* and the force of economic pressure. So what prompted Russell to act?

Again, like Harlan, the changing landscape offered a persuasive argument for action. As Russell watched his productive topsoil erode into the crick, he felt compelled to act. And he was driven in this action by his concern with the proper management of his land, with his concern for its productivity, with available incentive payments, and with his connection to an agricultural identity (his desire to represent farming in the best possible way). After all, as he explained,

It's just what people perceive what we do. It's, it doesn't help. We gotta show that where we care about it. The ground. And that it stays here.

And promote our product.

Russell knows that conservation practices make good p.r. for farmers. And so, despite the fact that Russell seems more conflicted than Harlan about the friction between rhetorics of *hyper-stewardship* and *grounded stewardship*, like Harlan he seems to mobilize rhetorics of *hyper-stewardship* for the sake of conservation. He finds a way to allow rhetorics of *hyper-stewardship* to prompt him to act. And the way that these rhetorics, practices, and consequences of *hyper-stewardship* dovetail with the rhetorics, practices, and consequences of *grounded stewardship* sustains his commitment to the project. And, all the while, material factors push and pull these identifications: on the one hand prompting Russell (and Harlan) to act due to incentive payments and

environmental degradation and, on the other, inhibiting that action in the face of consumer demand and record high commodity prices.

Unlike Harlan, though, Russell seems to recognize that, within current ideological and economic restraints, his conservation actions are a palliative at best. He successfully integrates multiple scales of thinking into his decision-making, but his desire to fulfill the role of *hyper-steward* confounds his attempts at *grounded stewardship*, and he seems troubled by this friction. Faced with this demand to identify with and act upon rhetorics of *hyper-stewardship*, Russell can only work to have the largest impact possible on his sub-watershed given the larger economic and ideological constraints he is acting within. Though Russell seems to recognize that conservation practices cannot erase the environmental damage caused by intensive row-crop production, he also realizes that the widespread adoption of conservation practices throughout his sub-watershed *will* have a positive (even if not net positive) impact on Clear Creek. And so, Russell has worked diligently to convince his neighbors – including Harlan – to adopt current conservation practices on their property.

Russell seems caught in a difficult situation. Material factors in the form of consumer demand prompt him to produce, while material factors in the form of worsening erosion prompt him to conserve. Meanwhile, Russell makes use of rhetorics of *hyper-stewardship* for both production and conservation, while his identification with rhetorics of *grounded stewardship* prompts him to take positive environmental steps at the local scale, knowing that his small-scale efforts are tentative at best, trumped by the power of the rhetorics, practices, and material conditions that support and sustain rhetorics of *hyper-stewardship*. Put simply, there is friction between the material

conditions that help shape Russell's world – both the economics and the environment – and the rhetorics of both *grounded stewardship* and *hyper-stewardship* with which he identifies (and the shaping effect they have, in turn, on the material landscape). But despite this friction, Russell has still made the decision to act and to persuade others to do so.

But where Russell and Harlan's status as farmers puts them in a particular position in relation to the materiality of farming – forcing them to acutely feel the pressure to produce, while deeply identifying with an agricultural identity and with the national project to which they can contribute – other non-farmer members of the Clear Creek project, like Mariann and Gary, would seem to have a somewhat different perspective.

3. Mariann, Gary, and Gene: “You can't replace it, so you need to take care of it.”

Mariann and her husband, Gary, live in a brand new house in a brand new subdivision on the outskirts of a major urban center adjoining the watershed; theirs is the last finished house on the block. When I arrived for our afternoon interview, they welcomed me into their home: modernish and sparsely decorated, the complete opposite of the country-modern style of the other homes I had visited throughout the watershed. We sat down at the dining table to begin the interview and, while Mariann and Gary were both extremely polite, they kept suggesting that they were not good candidates for an interview about their agricultural land and that I should instead talk with Mariann's brother, Gene, who is the operator on their farmland. It was clear that Mariann and Gary

did not, as non-operators, feel qualified to have an opinion about the conservation practices on their farmland.

It also became apparent early in the interview that Mariann and Gary do not view themselves as having a strong orientation towards stewardship. They own ~100 acres of farmland that were left to Mariann by her father. Though Mariann grew up on that land while her father farmed it, she and Gary are not farm operators and never have been. When I asked Mariann what she is most proud of about the farmland she now owns, she took a long pause and then answered:

I'm not proud of anything I've done. [Laughs] 'Cause we haven't done anything. I'm just proud of my dad being able to buy the land. [...] I'm proud of what he did with it. What we have done is basically just rent it out.

Gary then chimed in:

Yeah, others farmed it all the time.

As they went on to explain, the idea to participate in the Clear Creek Watershed Enhancement Project came from Gene, Mariann's brother and the operator on their land. They seemed to insist, in the initial minutes of our conversation, that they had not made any positive steps for their land of their own accord.

But as Mariann and Gary kept talking, it became clear that they do care about the land that they own, even if they feel physically and practically disconnected from it. (They explained that they rarely visit the property, trusting Gene to let them know when anything needs to be dealt with.) While Gene may have brought the Clear Creek Watershed Project – and the cost-share money that it provides – to their attention,

Mariann and Gary made the final decision to invest in a number of costly conservation structures on their property to prevent erosion. As Mariann described:

[Gene] was going to do it for his [portion of the land], and I thought we should, too, especially after the rain we've had the last few years, and all the washing. And I thought it was time to do something to preserve some of it.

Mariann's decision emerged from changing material conditions (the washing that results from heavy rains) and from her desire to act as a good landowner; someone whose priority, as she went on to explain:

Should be taking care of the land. And not trying to get as much as you can out of it without putting anything into it. I mean, you can't replace it, so you need to take care of it.

In her comments, Mariann models an identification with *grounded stewardship*: of caring for the land that cannot be replaced, land that has been entrusted to her despite her trepidation. The role of steward-manager does not seem to come naturally to Mariann and Gary – they are not proud of the decisions they have made; they rarely visit the property – but still they feel a duty to tend to the land that has been placed in their care via Mariann's father's will. Mariann recognizes that she lacks a certain amount of knowledge about farming and farmland and yet she takes her role as a steward of the land she has been entrusted with very seriously. She wants to make the best decisions she can to, as she puts it, “tak[e] care of the land.” Mariann feels a demand to, as she put it, “preserve” the eroding soil and to preserve the family property itself.

Mariann and Gary are good *grounded stewards*, despite their initial protests to the contrary. They are pleased that Mariann's brother, Gene, rents their farmland from them because, as Gary described:

[Gene] is conscientious of [protecting the soil]. And I think some of the people renting the land are not. You know, they're – I guess they rent that land, and it's not theirs, and all they want to do is get the most crop that they possibly can out of it [...] and I think that's gonna come back to haunt [bumping his fist on the table] the owner of that land down the road on their end.

For Gary, "bad" farmers are those farmers who don't care for the long-term benefit of the land they are farming. Their vision is more about short-term profit, than long-term management; bad farmers do not subscribe to a view of *grounded stewardship* – they want to get the most crop they possibly can out of the land. They are concerned with short-term profit, not long-term benefit. In short, they identify with rhetorics of *hyper-stewardship*.

Interestingly, Mariann and Gary seem invested in the binary that I detailed in the previous chapter. Mariann and Gary point to rhetorics of *grounded stewardship* as motivation for their adoption of various conservation practices. To hear them tell it, identifying with rhetorics of *grounded stewardship* – feeling a connection to the land, thinking about its long-term care – is essential to conservation and to doing environmental good for the land. Rhetorics of *hyper-stewardship*, on the other hand, (those rhetorics adopted by some of the "bad renters" that Mariann and Gary describe and avoid) contribute to the environmental damage in their view. And, in fact, it may be

easier for them to choose firm sides in this debate because of the fact that they are not owner-operators like Harlan, Russell, and Gene. Indeed, the Clear Creek owner non-operators who I spoke with throughout the course of my research seemed to ally themselves much more fully with rhetorics of *grounded stewardship* and to point to their connection to environmental good. The owner-operators, on the other hand, with their immediate connection to the economic and environmental realities of commodity agriculture seemed much more conflicted in their allegiances to rhetorics of both *hyper-stewardship* and *grounded stewardship*.

And yet, even for Mariann and Gary – who, as we have seen, seem to identify rather fully with rhetorics of *grounded stewardship* – defer to Gene’s opinion when it comes to making decisions about their land. This deferral seems owed in part to the fact that Gene is Mariann’s brother and to the gendered power relations that entails. But the decision to defer to Gene’s opinion seems to have more to do with the fact that Mariann and Gary respect Gene’s success as a farmer, a success that is largely predicated upon his identification with and successful embodiment of rhetorics of *hyper-stewardship*. Gene is a successful farmer in the watershed because he attends to the proper management of his farmland, he is concerned with efficiency and productivity, he feels a connection to the role of an American farmer, and he attends to short-term profit. He has adopted a variety of conservation practices on his farmland and encouraged his sister and brother-in-law to do the same, but at least part of Gene’s motivation for participating in the Clear Creek project (as we will see) has to do with the available financial incentives and with his need to maintain a certain level of productivity that is impossible with the current erosion problems on his land. Gene’s embodiment of these rhetorics of *hyper-*

stewardship (in addition to his identification with rhetorics of *grounded stewardship*), for Mariann and Gary, adds to his *ethos*. It makes Mariann and Gary trust his opinion and, in fact, defer to it. And so, while Mariann and Gary express an identification with rhetorics of *grounded stewardship* and a disdain for rhetorics of *hyper-stewardship*, they seem to trust Gene for the very fact that he engages with both of these rhetorics as he engages with the material realities of farming the Clear Creek watershed in the beginning of the 21st century. It is as though Mariann and Gary seem to believe that the reality that Gene is facing is much more fraught than the situation they face from their modern home in a nearby city. For them, the farm exists on paper, in the form of a deed, a balance sheet, and now a conservation plan. But it is Gene who quite literally engages with the material landscape on a daily basis.

Still, Gene shares some of the same perspectives about stewardship as his non-farming sister and brother-in-law. As Gene explained when I went to talk with him just a few days after speaking with Mariann and Gary, in his opinion what makes someone a good farmer is:

Being conscious about conservation and not just going out and farming the land to get what you can out of it and then just leaving it with nothing left in it for someone else.

For Gene, farmers and landowners who do not practice soil conservation through practices like contour farming and no-till:

Just don't have much of a conscience about the fact that what they're doing to other people either.

Farmers and landowners, according to Gene, need to think about the effects of their actions on other people. They should act according to how they would like to be treated. They should have “a conscience” and leave their land with something “left in it for someone else.” Indeed, Gene sounds very much like Mariann and Gary in this respect. In proposing that a good farmer is someone who takes a long-term view, someone who attends to the needs of the local land rather than privileging efficiency and productivity in the short-term, Gene adopts rhetorics of *grounded stewardship*. Also like Mariann and Gary, Gene places emphasis on his desire to leave some productivity in the land “for someone else.” Even though Gene, Gary, and Mariann’s children are not interested in farming any of the family land, they are still concerned with the future needs of the land and its future owners.

In expressing these concerns for the landscape, Gene, Mariann, and Gary also articulate the integration of small- and mid-scale spatial thinking that Harlan and Russell exhibit. Gene’s concern, for instance, with the well-being of his neighbors and the effects of his decisions on them means that he has to take a view of stewardship and conservation that integrates a concern for his own soil quality and the soil and water quality of his downstream neighbors. As Gene explains, in his opinion, the most important elements of stewardship are:

Preserving the land. Uh not... sending chemicals and fertilizer and so forth down the rivers and so forth to where other people are gonna be harmed by them.

Gene wants to have a positive effect on his land and on the land of his neighbors. Like Harlan and Russell, he connects multiple spatial scales; these small- and mid-scale concerns impact his decision-making about his farm.

Also like Harlan and Russell, Gene was partially motivated to join the conservation effort in Clear Creek because of the impact of post-Green Revolution intensive agriculture. As Gene explained, over the course of his career in agriculture, he switched over from a diverse crop rotation that included livestock to raising just corn and soybeans due to market pressure, and he understands the increasing strain this intense rotation places on his soil. The changing materiality of farming – both economically and environmentally – has influenced his decision to adopt conservation measures due to the negative environmental effect on his land that demands conservation measures.

But unlike Harlan and Russell, Gene seems more self-conscious about the role that rhetorics of *hyper-stewardship* played in shaping those material conditions and the force that they exerted on his decision-making. As we talked about the breakthroughs of the Green Revolution, Gene recounted:

You know, years ago, when we first started using fertilizer, and, uh, chemicals, spray and so forth that, you just didn't think too much about it because it was all new and I guess we didn't realize that there could be a damage to it.

Gene was persuaded by the rhetoric of Norman Borlaug et al and acted accordingly. Indeed, given the force of particular rhetorics of *hyper-stewardship* and the economic policies that helped to support them, as I detailed in the previous chapter, it does not seem surprising that Gene would have been persuaded to adopt the rhetorics and practices of

the Green Revolution. And while Gene no longer thinks that the technological advances of the Green Revolution came without a cost, he feels that conservation measures will combat the negative material impacts of these rhetorics of *hyper-stewardship*. In so doing, Gene identifies with another rhetoric of *hyper-stewardship* – that of management – and identifies that rhetoric as the solution to the environmental damage inflicted by the Green Revolution. And Gene practices good management by taking a more cautious approach to chemical use, an approach he feels will eliminate the problem. As he continued:

As time has gone by, well, you learn more and more and, uh, that there are some problems and that a good share of it can be alleviated or minimized at least if you do proper practices.

Like Harlan, Gene is pleased that his “proper practices” like waterways and stream buffers can “alleviate” or “minimize” the effects of chemical fertilizer, and, unlike Russell, Gene seems relatively unconcerned that these practices will not entirely alleviate any potential damage; it is enough, for Gene, that “a good share of it can be alleviated.” Gene can still profit from the technological advances of the Green Revolution so long as his identification with rhetorics of management – of the adoption of “proper practices” – helps to keep the negative environmental impacts of his farming practices in check.

In light of this ability to adapt, to be a good steward-manager, Gene sees himself as better off than some other farmers in the watershed, who he describes as the:

Older farmers – like my age [laughs] – who don’t want to change their ways.

Gene is not set in his ways; Gene's wife, Kay, describes him and his farming as:

Very up to date, as far as he's always learning about what are the newest ways to do things.

(Indeed, despite Gene's cautious nature, this may be why he started using fertilizers, chemicals, and spray in the first place.) In Kay's estimation:

He's conservative, but he's progressive.

He is calculating and efficient. Gene seems to say – with good reason, compared with many other individuals – that he is doing enough given the field of possible actions. He still subscribes to the demands of *hyper-stewardship* – he embraces technological advances, he purchases the latest equipment, he continues to produce corn and soy at the exclusion of grass, hay, or livestock, and he continues to apply chemical fertilizer. But for all intents and purposes, Gene is also, undoubtedly, a good *grounded steward* in his attention to the local landscape, his concern with the future of his land, and his emphasis on care. He identifies with the rhetorics and projects of both *grounded stewardship* and *hyper-stewardship*, and he makes decisions about his land and his farming operation accordingly.

Like Harlan and Russell, Gene and his sister and brother-in-law, Mariann and Gary, identify with rhetorics of both *grounded stewardship* and *hyper-stewardship*. These rhetorics prompt a variety of actions for and against conservation. And, crucially, those rhetorics are set against, informed by, and inform a particular material backdrop.

C. Conclusion

This chapter asked how Clear Creek’s farmers and agricultural landowners identify with and act upon the public rhetorics of *grounded stewardship* and *hyper-stewardship* presented in the previous chapter. In it, I wondered if, at the vernacular level, the binary between rhetorics of *hyper-stewardship* and *grounded stewardship* – and their presumed connection to environmental harm and environmental good respectively – persisted. I wanted to know what happens when, as Tsing asks, these public rhetorics of *hyper-stewardship* and *grounded stewardship* enter the fray, and I wanted to know how these public rhetorics enter the fray in light of the particular material circumstances – both the economics and ecology – of the Clear Creek watershed. Are rhetorics of stewardship in the Clear Creek watershed “partly embodied in material conditions and partly frustrated by these same conditions” (*Rhetoric* 22), as Burke suggests?

What I discovered, thanks to Harlan, Betty, Russell, Mariann, Gary, and Gene, is that there is, in fact, friction when the public rhetorics of *grounded stewardship* and *hyper-stewardship* enter the fray. Not only do the rhetorics of *hyper-stewardship* and *grounded stewardship* run up against one another, but these rhetorics also run up against the particular material reality of the Clear Creek watershed. Thus, rhetorics of stewardship in the watershed are, in fact, “partly embodied in material conditions and partly frustrated by these same conditions” (*Rhetoric* 22). Harlan, Russell, and Gene all articulate how the material impacts of post-Green Revolution agricultural practices have prompted them to embrace the conservation practices and many of the rhetorics of *grounded stewardship* that help to support those practices. But Russell and Harlan also explained how their perception of the consumer demand for agricultural commodities

encourages them to embrace the rhetorics and related practices of *hyper-stewardship* in a way that often frustrates – especially in the case of Russell – his identification with rhetorics of *grounded stewardship*.

Significantly, though, my interviewees' allegiances with rhetorics of *grounded stewardship* and *hyper-stewardship* did not divide as cleanly for environmental good and environmental damage as the public rhetorics of the likes of Berry, Shiva, and Monsanto would suggest. Rather, we heard in this chapter how Clear Creek's farmers identify with and act upon rhetorics of both *grounded stewardship* and *hyper-stewardship* for the sake of environmental improvements on their land. In particular, rhetorics of management, of the global scale, and of the connection to an agricultural identity – rhetorics I have identified as rhetorics of *hyper-stewardship* – are mobilized for the sake of conservation by my interviewees. Indeed, this unexpected identification offers an opportunity for conservation practice that I will explore in chapter five.

In sum, two major points emerged from my interviews with Clear Creek's farmers and landowners. First, Harlan, Betty, Russell, Mariann, Gary, and Gene took action based on a variety of differing allegiances and identifications influenced by their varying perspectives on material factors like economic incentives, consumer demand, and environmental degradation. In other words, material factors play a significant role in the affiliations and decisions of the landowners and farmers of Clear Creek, contributing to the complexity that emerges when public rhetorics of stewardship are incorporated at the vernacular level. And second, all of my interviewees found ways to engage rhetorics of *hyper-stewardship* for the sake of soil and water conservation. In short, at the vernacular level, the strict binary of public rhetorics of agricultural stewardship falls apart. *Hyper-*

stewardship, it seems, can be mobilized for environmental good. And, as I will discuss in detail in chapter five, this muddiness – the productive friction that occurs when public rhetorics of *grounded stewardship* and *hyper-stewardship* enter the fray – offers a currently untapped opportunity for conservation outreach.

But before exploring that possible opportunity for conservation outreach in chapter five, the next chapter, “Watershed: A *Topos* Becomes A Common-Place,” attends to the existing form of conservation outreach in the Clear Creek watershed: the means by which local, state, and federal conservation staff attempts to engage farmers’ identifications with stewardship at both the material and symbolic levels. That form is the watershed.

Notes

1. Betty's obstinate silence during our interview was notable but perhaps not surprising. If American agriculture has a recognized gender, it is almost certainly male. Its history and folklore are dotted with tales of anonymous, hard-working men plowing their way west from ocean to ocean – the men on whose backs and ideals Thomas Jefferson helped found his agrarian nation. With the exception of a very few notable (though dated) texts like Carolyn E. Sachs' *Gendered Fields: Rural Women, Agriculture, and Environment* (1996), Joan M. Jensen's *With These Hands: Women Working the Land* (1981), and Wava G. Haney and Jane B. Knowles' *Women and Farming: Changing Roles, Changing Structures* (1988), the vast majority of historical and sociological texts about American agriculture tell us that the actual work of farming in the United States is – and always has been – the provenance of men. (For examples of this trend, see Jerry DeWitt and Charles A. Francis's study of university-community collaboration "Transformation in the Heartland: Emergence of Sustainable Agriculture in Iowa" [2006] or histories of American farming like R. Douglas Hurt's *Problems of Plenty: The American Farmer in the Twentieth Century* [2002] and Ronald Jager's *The Fate of Family Farming: Variations on an American Idea* [2004].) The women who do exist in accounts of American agricultural life tend to drift into the background; women farmers occur with any frequency only in discussions of farming outside of the United States' borders (some of Vandana Shiva's work comes to mind here – texts like *Staying Alive: Women, Ecology, and Development* [1989], *Stolen Harvest: The Hijacking of the Global Food Supply* [2000], and *Earth Democracy: Justice, Sustainability, and Peace* [2005] – as well as a variety of policy documents like the United Nations Development

Programme's *Urban Agriculture: Food Jobs, and Sustainable Cities* [1996], which seem to say that food, jobs, and sustainable cities are problems that plague only "third world" cities.)

But the 2002 United States Agriculture Census reports that women compose 11.2% of principle farm operators and 27.2% of all farm operators. They own 47% of the nations' farmland and 54% of the rented farmland in Iowa; 25% of Iowa's farmland is owned by women over the age of 65 (Johnson). What these statistics tell us is that women *are* heavily involved in agriculture and farming throughout the United States, generally, and Iowa, specifically, but that much of this involvement comes mainly from land ownership and not from production.

Then again, the situation is likely a bit muddier than that. Theorists of farm life (and of gender, for that matter) warn us against the slippery divide between farm and home life. While many farms in Iowa follow dominant gender patterns of men working primarily in the fields and women working primarily in the house, farm life and home life are often so intertwined that it is difficult to make distinctions between gendered contributions to the actual productive work of the farm. The hesitance of women to refer to themselves as "farmers" is also enforced by legal structures that uphold strict tax laws for farming, discouraging women from casually referring to themselves as "farmers" without – potentially at least – incurring heavy tax penalties. (Michael Bell covers this topic briefly in *Farming For Us All* and my survey data from Clear Creek seems, preliminarily at least, to support it).

But maybe this exclusion may actually work as an advantage where conservation is concerned. The ethnographic research I conducted related to organic agriculture

outside of the Clear Creek watershed leads me to believe that women's background status in the history of American farming might play a significant role in their current ability to embrace conservation initiatives in ways that men conditioned in the "get big or get out" political economy of American farming cannot.

With that hunch in mind, when I began my research in Clear Creek proper, I had hoped to focus more explicitly on the role of gender in decision-making for conservation. Indeed, one of my first tasks as an intern with the Iowa Department of Agriculture and Land Stewardship was to organize a women landowner's meeting in the watershed. There the Clear Creek watershed coordinator gave a presentation on conservation practices and available cost-share programs to the gathered crowd: six women who inherited land in the watershed. But as my research in Clear Creek continued, it became apparent that the vast majority of farmers in the watershed are men and the vast majority of owner-operators involved in the Clear Creek project are men. And though it would have been fascinating to speak with women in the watershed to question their lack of recognized involvement in farming, my primary means of accessing interviewees was through the Clear Creek watershed coordinator who was working strictly with male owner-operators.

In short, then, the story of stewardship and conservation in Clear Creek as it relates to the Clear Creek Watershed Enhancement Project is a gendered one; it is largely a male story. And while I was able to talk with a few female landowners, the two wives of owner-operators who I spoke with all but refused to register an opinion about conservation initiatives on their land, deferring instead to the views of their husbands (whether their husbands seemed to want them to or not).

Thankfully, there are people doing good work about gender and conservation in Iowa, most notably Laura Krouse with the Women Caring for the Land initiative through the Women, Food & Agriculture Network and Jean Eells out of Iowa State University. I also plan to pursue some of my research questions about gender and conservation by conducting analyses of my survey data. I hope that research will result in a journal article in the next year.

2. This point about heroism is one to which I will return in chapter five, “Delta.” But to briefly preview that argument here, I suggest that conservation will continue to be a difficult sell until it works to create new opportunities for heroism for America’s farmers. For now, the primary heroic role for farmers is one that is complicit with environmental damage. In their desire to act heroically, American farmers identify with the existing heroic role – that of *hyper-steward* and global producer – and this role is supported by existing material conditions. Therefore, conservation staff must create and propagate new rhetorics: new opportunities for heroism among America’s farmers.

IV. WATERSHED: A *TOPOS* BECOMES A COMMON-PLACE

wa•ter•shed (*noun*)

1a: divide.

1b: a region or area bounded peripherally by a divide and draining ultimately to a particular watercourse or body of water.

2: a crucial dividing point, line, or factor: turning point. (“Watershed” def.)

Chapters two and three worked to describe the rhetorics of stewardship in American agriculture through the specific lens of the Clear Creek watershed’s farmers, landowners, and conservation staff. I identified rhetorics of *grounded* and *hyper-stewardship* that are circulating in American agriculture; traced these rhetorics to their roots in the Green Revolution, agricultural corporations, and the Bible; determined the effects of these rhetorics on the material landscape; and suggested that Clear Creek’s farmers and landowners identify with the rhetorics of both *grounded* and *hyper-stewardship* for the sake of conservation. I argued that Clear Creek’s farmers and landowners construct and apprehend their worlds through the rhetorics of *grounded* and *hyper-stewardship*, but that rhetorics of *grounded stewardship* and *hyper-stewardship* “enter the fray” (270), in the words of Anna Lowenhaupt Tsing, in complex ways.

Where those chapters described and analyzed the discourses of American agriculture that form the backdrop for rhetorical interaction in Clear Creek, this chapter, “Watershed: A *Topos* Becomes a Common-Place,” turns to contemporary efforts on the part of conservation staff to alter that backdrop through the implementation of watershed-based conservation initiatives. In so doing, this chapter, highlighting qualitative data

collected from Clear Creek's farmers and landowners, offers a situated analysis of the relationship between rhetorical change and landscape change.

After chronicling the rise of the watershed *topos* in contemporary government-sponsored conservation efforts, I adopt Kenneth Burke's framing of rhetoric as identification to argue that the watershed *topos*, as it is mobilized in contemporary conservation efforts, serves as a potent material and symbolic site for identification.¹ Offering my ethnographic research in the Clear Creek watershed in eastern Iowa as a test case, I consider how farmers' and landowners' identification with the watershed has prompted changes to the landscape for the sake of soil and water conservation. I then consider the implications of this argument for extending Gregory Clark's theorization of the rhetorical landscape, suggesting that rhetorical landscapes contain elements of both the symbolic, as Clark suggests, *and* the material.

In these pages, I offer a theoretically informed rhetorical analysis of interview data from local stakeholders to investigate the process through which farmers and landowners come to identify with the watershed *topos* for the sake of soil and water conservation. By engaging with this qualitative data, this chapter considers whether – and how – the commonplace of the watershed succeeds in its rhetorical work to prompt farmers and landowners to embrace conservation efforts based on their identification with the watershed. In other words, I consider whether this commonplace prompts watershed farmers and landowners to consider themselves responsible members of a *common-place*: a shared material and symbolic site that mobilizes those who identify with it to make substantive changes on its behalf.

To answer that question, throughout 2009, I attended Clear Creek board meetings, met with conservation agency staff and watershed farmers, and hosted a field day for women landowners in an effort to get to know the rhetorical and material life of the watershed. In 2010, I turned my attention to more explicit data collection and began interviewing watershed farmers and landowners as well as conservation staff. What I discovered is that the increasing emphasis on the watershed in contemporary conservation efforts is well placed. Farmers and landowners relate to the watershed as a unit of organization that represents both a material place and a symbolic connection to the land and to each other. In Kenneth Burke's terms, the watershed *topos*, based on its ability to serve as both a material and symbolic appeal, succeeds in transforming the scientific language of the watershed into rhetorical language: language that prompts action for the sake of soil and water conservation.²

A. The Watershed: Then and Now

It is important to note that an emphasis on the watershed – and on watershed-based conservation – is not unique to Clear Creek. Over the last two decades, a focus on the watershed has emerged as official government policy at all levels. Local, state, and federal conservation agencies in the United States now insist on a watershed-based approach to conservation, funneling money to polluted watersheds and the watershed councils that represent them based on the assumption that this watershed-based approach is the most effective way of tackling water quality problems. But the watershed has actually been championed before. In the late 19th century, famed explorer, scientist, and Director of the United States Geological Survey John Wesley Powell attempted to

introduce the watershed as the primary form of land division in the American West. This section considers the evolution of watershed-based thinking from Powell onwards, suggesting that contemporary watershed-based conservation efforts carry with them the watershed *topos*'s history as both material and symbolic site but that the concept of the watershed has found a previously unavailable *kairotic* opportunity in the American Midwest at the turn of the 21st century.³

John Wesley Powell was the first American advocate of the watershed, proposing a watershed-based approach to conservation in the late 1800s. Powell championed the watershed, what he commonly referred to as a "hydrographic basin," because of its explicit ability to illuminate the physical processes of hydrology and its implicit ability to recommend a form of communal social organization based on those physical processes.⁴ As Powell explained in a prominent national magazine, *The Century*:

In a group of mountains a small river has its source. A dozen or a score of creeks unite to form the trunk. The creeks higher up divide into brooks. All these streams combined form the drainage system of a hydrographic basin, a unit of country well defined in nature, for it is bounded above and on each side by heights of land that rise as crests to part the waters... Such a district of country is a commonwealth by itself. The people who live therein are interdependent in their industries. Every man is interested in the conservation and management of the water supply, for all the waters are needed within the district. (113-114)

For Powell, the watershed named both material and symbolic aspects of the landscape. The watershed marked the boundaries of a hydrographic basin, but it also, in Powell's

estimation, represented a communitarian social order based on the physical landscape: an imagined community of interdependent people working for the sake of conservation of the water supply. In making this argument, Powell transformed the scientific language of the watershed into rhetorical language, making an argument for a social order based on the physical landscape. And Powell took this novel argument to the top of the United States government during his tenure as the head of the United States Geographical Survey.

As Wallace Stegner, historian of the American West and author of the definitive biography of Powell, put it, in making an argument for a watershed-based approach to land division and use, “Major Powell was proposing a revolution in the land laws and in the nature of the General Land Office surveys” (227). Even more revolutionary, Stegner notes, was the extension of Powell’s argument, based on Powell’s experience with the Mormons in the western lands. “From them,” Stegner describes, “he had also got a notion of how salutary co-operation could be as a way of life, how much less wasteful than competition unlimited, how much more susceptible to planning and intelligence, how much less destructive of human and natural resources” (227). For Powell, then, the watershed could serve as both a “hydrographic basin” – a way to name an aspect of the material landscape – and a “commonwealth” – a symbol for a cooperative social life that would temper its negative impact on human and natural resources.

As Stegner describes, because of Powell’s high-ranking position in the United States government, Powell’s formal proposal that “the division of these lands should be controlled by topographic features to give water fronts” (*Report 40*), not by government imposed rectangles, amounted to heresy. It:

Embodied official encouragement of a social organization thoroughly revolutionary in 1878. It was so far beyond the social and economic thinking of the period that popularized the pork barrel as a national symbol and began the systematic gutting of the continent's resources and developed to its highest and most ruthless stage the competitive ruthlessness of American business, that it seems like the product of another land and another people. (Stegner 228)

Given the revolutionary nature of his proposal, the prevailing social and economic climate, and, as I would suggest, America's belief in the inexhaustible abundance of the continent in the late 19th century, Powell's idea was dismissed. After much public and political animosity and debate, on February 18, 1879, the United States House of Representatives gutted the measure containing Powell's proposal for watershed-based property division, eliminating the changes proposed by Powell to the land laws and the surveying system (Stegner 239). The social, material, and economic conditions of the late 1800s simply did not provide a window for this dramatic shift in rhetoric and subsequent practice.

While the idea of the watershed, at least in its material and symbolic instantiation, laid largely dormant for the next century, it was revived by writer and environmentalist Gary Snyder in the late 20th century. Snyder explicitly mentions Powell in his collection *The Practice of the Wild*, and Powell's influence seems woven through Snyder's wider work. In Snyder's essay "Coming into the Watershed," for instance, from *A Place in Space: Ethics, Aesthetics, and Watersheds*, he insists, in a seeming nod to Powell, "The political boundaries of the western states were established in haste and ignorance.

Landscapes have their own shapes and structures, centers and edges, which must be respected” (222). For Snyder, like Powell, the watershed is a more natural and, thus, more desirable structure of organization with profound implications for community life. Like Powell, Snyder connects the concept of the watershed to the basis of community, explaining, “The watershed is beyond the dichotomies of orderly/disorderly, for its forms are free, but somehow inevitable. The life that comes to flourish within it constitutes the first kind of community” (230). For Snyder, like Powell, community is the naturalized *telos* of the watershed.⁵

Again we see how the watershed becomes a means of focusing on both the material and symbolic aspects of the landscape. As Snyder explains, “landscapes have their own shapes and structures, centers and edges” and these shapes and structures, for Snyder, inevitably constitute “the first kind of community.” Based on the topography of a given area, a scientific notion, the watershed takes on a rhetorical force; in Burke’s terms, it goes from scientific language – “shapes and structures” – to rhetorical language – an argument for a type of social organization. And its rhetorical force, as I argue throughout this chapter, is based upon its ability to collapse its material and symbolic features: its ability to couple an experienced place with a common project and, subsequently, a common responsibility.

Snyder’s insistence on the implications of the watershed for social organization leads him to suggest that his readers adopt what he refers to as a bioregionalist approach to conservation that includes the creation of local watershed councils (like the Clear Creek Watershed Enhancement Project). Indeed, Snyder himself was deeply involved in the creation of the Yuba Watershed Institute, a local, grassroots watershed council

working in collaboration with local, state, and federal agencies in the foothills of the Sierra Nevadas, where he has resided for decades. And the Yuba Watershed Institute, in its ability to blend grassroots action with government funding and administration, is now a model for government-funded watershed-based conservation efforts like the Clear Creek Watershed Enhancement Project.

So what changed from Powell's time to Snyder's? Why did Snyder's argument find an ally in federal policymaking when Powell's did not? Like Powell's report to the federal government, Snyder's work is meant to be revolutionary – to interrupt prevailing American rhetorics of individualism, private property, self-interest, and bureaucratization – in favor of a naturalized communitarianism for the sake of resolving, as Snyder puts it, the tension between the natural and social worlds. But if Powell's argument for the watershed failed to be adopted on a broad scale because the social, material, and economic conditions of the late 19th century did not warrant it, the climate had changed considerably by the late 20th century. The visibility of environmental crises in Snyder's time opened a *kairotic* moment for a new paradigm, and this time the United States government responded. Significantly, while the federal embrace of the watershed that began in the 1980s and 1990s marked a new turn, I suggest that the watershed *topos* retained Powell's dual emphasis on both the material and symbolic, the same dual emphasis that emerges in Snyder's writing. Further, I argue that this baggage works in favor of contemporary government watershed efforts, prompting identification with symbolic and material aspects of the watershed and subsequent action for the sake of water and soil quality.

In the late 20th century, with worries about water and soil quality reaching a crescendo in the United States, the federal government responded to these concerns by introducing two major watershed-based conservation initiatives: the Conservation Reserve Program, which, as part of the 1985 Farm Bill, paid farmers to take marginal cropland out of production, and the Water Quality Act of 1987, which, among other things, funded a series of demonstration grants to address nonpoint source pollution like agricultural runoff by supporting initiatives similar to Snyder's Yuba Watershed Institute and the Clear Creek Watershed Enhancement Project. In the wake of these federal initiatives, the Environmental Protection Agency and the Natural Resources Conservation Service adopted the watershed as a primary means of implementing water and soil quality improvement efforts.

In 1991, senior managers from the United States Environmental Protection Agency (EPA) endorsed the EPA Office of Water's *Watershed Protection Approach Framework* and built on that document in their 1996 *Watershed Approach Framework*, responding to the reality that, "as of 1994, nearly 40 percent of surveyed waters in the US remain too polluted for fishing, swimming and other uses" ("Introduction"). As the EPA explains:

Many public and private organizations are joining forces and creating multidisciplinary and multijurisdictional partnerships to focus on these problems, community by community and watershed by watershed. These *watershed approaches* are likely to result in significant restoration, maintenance and protection of water resources in the United States.

Supporting them is a high priority for EPA's national water program.

("Introduction")

In the EPA's estimation, "Through such active and broad involvement, the watershed approach can build a sense of community, reduce conflicts, increase commitment to the actions necessary to meet societal goals and, ultimately, improve the likelihood of sustaining long-term environmental improvements" ("Benefits"). Like Powell and Snyder, the EPA links a renewed focus on the watershed to the creation of a community that will act on behalf of the watershed. Just as in Powell's and Snyder's work, again we witness the collapse of the topographical boundaries of the watershed and the symbolic notion of the watershed community. The EPA relies upon the material and symbolic appeals of the watershed to make conservation happen. As they fund a variety of watershed-based improvement projects through Section 319 of the Clean Water Act, including conservation efforts in the Clear Creek watershed, the EPA bets on the ability of the watershed to shift from scientific language to rhetorical language in order to transform the watershed from a commonplace into a common-place.

But the federal government is not alone in their emphasis on watershed-based conservation efforts. The Iowa Department of Natural Resources (Iowa DNR) now features a Watershed Improvement Program that works collaboratively with state partners like the Iowa Department of Agriculture and Land Stewardship, the Natural Resources Conservation Service, and local soil and water conservation districts, with funding from the EPA's Section 319 Nonpoint Source Management Program. As the Iowa DNR reminds Iowans in the introduction to its glossy, full-color, 23-page booklet *Working for Clean Water: 2008 Watershed Improvement Successes in Iowa*, "We all live in

watershed, an area of land that drains to a lake or stream. What we do on that land – whether a backyard, farm or factory site – affects the health of our lakes, streams and rivers” (3). As the Iowa DNR tells its readers, we are all in this together; we all play a role in contributing to the health of our watersheds.

The former Director of the Iowa DNR himself, Richard Leopold, regularly emphasized this point during his tenure, directing attention to the power of the watershed approach for aiding local, community-based problem solving. As he describes in *Working for Clean Water*, “Coming together with their neighbors, [Iowans]’re forming local groups devoted to locating problem areas and finding solutions... Because river, stream and lake basins – or watersheds – don’t follow fences, Iowans are coming together across farm fields and county lines to make a difference” (5). Leopold’s language seems ripped from the pages of Powell’s *Report on the Arid Lands of the United States*, as he persuades his reader to think beyond the fence posts that mark the forced boundaries of the rectangular survey system in favor of the topographical boundaries of the natural landscape. Further, while refocusing his reader on the naturalized material landscape, Leopold offers up the symbolic image of the watershed: of a community of people working together “to make a difference.”

The Iowa DNR and the EPA are direct financial supporters of watershed-based conservation in Clear Creek, and the Clear Creek Watershed Enhancement Project, like the Iowa DNR and the EPA, has adopted this dual emphasis on material and symbolic aspects of the watershed in its hope of offering up the watershed as a common-place. In so doing, it hopes that Clear Creek’s farmers and landowners will come to identify with

the watershed, thereby making improvements on their own property that will aid the creek and the watershed as a whole.

Indeed, in my conversations with Robert and Bruce, conservation staff involved in the Clear Creek Project, they talked explicitly about the potential of the watershed to serve as a unifying force, recognizing the pragmatic and conceptual advantages of working at the watershed scale. For instance, the Clear Creek watershed is comprised of two counties: Iowa County and Johnson County. And while the primarily rural Iowa County and increasingly urban Johnson County have a history of cool relations due to their distinct personalities and priorities, the Clear Creek watershed, according to Robert and Bruce, offers the possibility of easing this tension by bridging these two constituencies. As Robert explained:

We wanted to have each county involved, since the watershed crosses the political divide and there's always kinda been a feeling of, you know, urban and rural and some friction there.

This friction is a key obstacle to conservation practice, but, as Robert sees it, the bi-county watershed project may help to smooth over some of this tension.

Like Robert, Bruce feels this obstacle is one that the watershed approach is uniquely poised to address. For Bruce, urban-rural coalition building is of central importance for the health of the Clear Creek watershed and watersheds throughout Iowa. As Bruce described from his current position as a state-wide conservationist:

Most of our landmass in most of our watersheds is agricultural but most of our people are down here in an urban setting. So how do we get these people to somehow bond with those farmers out there? How do we get

those urban people to support and invest in conservation out there? [...]

That's a challenge... That's gonna be a challenge.

In the face of this challenge, the watershed offers a unique hope; for Bruce, it offers the only hope. As he explained:

It's probably the only hope is to get people to feel like they're a member of a community – a watershed as a community. So that the city limit isn't the end of their community. That watershed boundary is their community. [...] But I do think it's the only hope. [...] That watershed as a community, that is an advantage of approaching or working on the watershed scale – is the opportunity to create that sense of community as a stakeholder and resident of this watershed. I really think it's the only hope. But to me the key is gettin' people educated or motivated enough to make that investment outside of what they think is their jurisdictional area.

The watershed, for both Bruce and Robert (as well as for the EPA and the Iowa DNR), offers the chance for people to see past jurisdictional boundaries. Relying on the persuasive appeal of its naturalness and inevitability, these conservation practitioners recognize that the watershed has the potential to trump political boundaries and the tensions they create, allowing conservation staff and the farmers and landowners with whom they work to create the “sense of community” to which Bruce and the EPA refer.

What seems implicit in the arguments for watershed-based conservation forwarded by Robert, Bruce, the Clear Creek Watershed Enhancement Project Board, the EPA, and the Iowa DNR is that this emergent “sense of community” will serve as a motivator for farm operators and landowners (what Kenneth Burke refers to as “an

inducement to action” (*A Rhetoric of Motives* 42]). Once watershed residents begin to see themselves as part of a common community, they will be prompted to act. They will come to see themselves as collectively responsible for conservation of the watershed’s resources. They will become good stewards.

But how do these practitioners think this will happen? When I pressed Robert on the subject, he described the process this way:

Well, naturally, I think people identify to their neighborhood, their township, uh, whatever, kind of smaller geography. That people have their mental map, and I think that kind of allows us to take the creek – whatever the creek name – in our case Clear Creek or Deer Creek. And, um, gives a little bit of a sense of ownership in the concern that we have for that creek. And I think out of that produces a lot of memories that people might have about the creek. Family-type connections. Uh, a whole bunch of things kinda develop out of focusing on a smaller area. [...] Yeah, [you] can produce a critical mass. But I think that’s just the biggest thing is the manageability and the identification of the local people to that small water body.

Robert, a graduate of the Department of Geography at the University of Iowa, is especially attuned to the distinct power of place in people’s lives. For Robert, it seems obvious that the farmers and landowners that he hopes to reach will “identify to” “smaller geography.” They will identify with their “mental maps,” and, in Robert’s description, Clear Creek’s farmers and landowners will imbue these “mental maps” with positive associations: “memories” and “family-type connections.” Through a process of

accretion, these mental maps – these memories and emotions – will layer onto individuals’ geographic, physical maps of the watershed. In Robert’s estimation, if the Clear Creek Watershed Enhancement Project hopes to have an impact on the physical landscape of Clear Creek, it needs to position Clear Creek’s farmers and landowners to undergo this cognitive process – to collapse the physical and mental watershed. This process holds the key to prompting a “sense of ownership” for the watershed that will, in turn, prompt action for conservation.⁶ This is a point to which I will return in the pages that follow.

But it is not only this type of conceptual work that allows for the watershed’s persuasiveness, it is the fact that this conceptual work grafts onto the physical, material landscape. And so, while the Clear Creek Watershed Enhancement Project has adopted the strategy of attempting to prompt identification with the watershed for the last decade, their measureable successes have primarily come within the last two years, aided in no uncertain terms by changing material conditions in the watershed. In 2007, 2008, and 2009, changes to the physical landscape of Clear Creek caused by extensive flooding offered a *kairotic* opportunity for the watershed *topos* to make a significant impact on Clear Creek’s farmers and landowners.

In June of 2008, rapid snowmelt and heavy rains combined to cause 500-year flooding in the Des Moines, Cedar, and Iowa River Valleys, submerging the cities of Des Moines, Cedar Falls, Cedar Rapids, and Iowa City and smaller towns and farming communities throughout the floodplains. Beyond the widespread urban devastation experienced by the flooded cities – whole neighborhoods of Cedar Rapids and its city government complex were evacuated, as were the University of Iowa’s Museum of Art,

Main Library, Memorial Union, and Hancher Auditorium, among other Iowa landmarks – the flooding had short- and long-term effects on farms throughout the state. Spring planting was interrupted by the flooding, and, in some areas, the entire planting season was abandoned.

The flooding also had a wider landscape effect as slowly developing erosion problems on privately owned farmland became, in the course of a single week of intense flooding, major crises demanding attention. As the Clear Creek Watershed Coordinator explained:

Often the farmers are cautious to have too much “unnecessary” work done in fear of having rents raised. Then the storms and floods of 2007 and 2008 happened. Two hard years that made the need for conservation work evident to everyone. It was July of 2008 when the phone started ringing. People would bring in maps and mailings that I sent them years before and absentee landowners suddenly decided they better take a walk on the farm they hadn’t seen for years, and sons were talking conservation with their moms at the nursing homes.

In short, as bad as the 2008 flood was, it was good for CCWEP’s business; the flooding forced (at least some) farmers to attend to conservation practices on their farms. And, as I suggest here, the material conditions prompted by the floods created a window of opportunity for a revival of the watershed *topos*. The shifting material landscape allowed for a change in the conceptual landscape.

I have proposed that shifting material conditions, particularly in the form of the instability caused by environmental damage, allow for the introduction and adoption of

new rhetorics. At the same time, I want to suggest that new rhetorics can, in turn, prompt shifts in the material landscape, like the adoption of terraces, grassed waterways, and buffer strips that slow the processes of erosion, sedimentation, and nutrient runoff on Clear Creek's farms. It is these precise shifts that groups like the Clear Creek Watershed Enhancement Project attempt to prompt by offering the watershed as a site for identification. And so, in the following section, I offer a theoretical consideration of how the watershed functions as an especially potent *topos* due to the ways in which it connects the symbolic with the material, creating a commonplace that is, quite literally, a commonplace.

B. Identifying with the Watershed: Symbolicity and Materiality in Theory and Practice

The Clear Creek Watershed Enhancement Project's main instrument in their war against sedimentation and contamination in Clear Creek is the appeal of the watershed itself. The group continues to spearhead a public relations campaign in hopes of garnering attention for soil and water quality efforts in the watershed. Members of the Clear Creek Watershed Enhancement Project (CCWEP) regularly attend county fairs, post watershed awareness signage, and distribute magnets featuring their watershed logo (a cute, anthropomorphized droplet of water) all in an effort to persuade people to identify with the watershed. They attempt, in my analysis, to offer the watershed – both its physical instantiation and the “community” that they feel it represents, a community that harkens back to Powell's and Snyder's visions – as a material and symbolic site for identification. In so doing, they hope that the watershed *topos* will shift from rhetorical to scientific language inasmuch as it will prompt an identification with the watershed that

will serve as what Kenneth Burke in *A Rhetoric of Motives* calls “an inducement to action” (42). In making this argument, CCWEP calls upon a potent linguistic commonplace and sites that commonplace in a particular, material common-place, imbuing that commonplace with the symbolic meaning of a “community.” And the slipperiness presented by the watershed – its ambiguity as symbol and material – marks it as a significant point of analysis.

I am interested in the watershed – a word that, in its various instantiations, oscillates between a geographic space, a method of community organizing, a community itself, a hydrological basin – precisely because, as Burke explains in *A Grammar of Motives*, “what we want is *not terms that avoid ambiguity*, but *terms that clearly reveal the strategic spots at which ambiguities necessarily arise*” (xviii). I suggest that the collapse of the symbolic and the material contained in the term watershed is precisely such a strategic spot. As Burke continues:

Instead of considering it our task to “dispose of” any ambiguity, we rather consider it our task to study and clarify the *resources* of ambiguity. For in the course of this work, we shall deal with many kinds of *transformation* – and it is in the areas of ambiguity that transformation takes place; in fact, without such areas, transformation would be impossible. (*A Grammar of Motives* xix)

For Burke, ambiguity is connected to transformation, a transformation of the individual and collective self and, by extension, a transformation of the material landscape.

The watershed offers one such point of transformation – a transformation demanded by the ecological quandaries facing the Clear Creek watershed. By offering

itself as an ambiguous symbolic and material site for identification, the watershed offers the possibility for the individual and collective transformation of the farmers who come to identify with their individual watershed and with the rhetorics of watershed (of “community” and “downstream-ness”) presented by federal, state, and local agencies. And this transformation of the self’s identification, I argue, offers the possibility for the transformation of the material landscape through the conservation practices and subsequent ecological improvements championed by watershed groups like CCWEP. As I suggest here, the watershed’s slipperiness (its ability to slip between abstract community and particular place) marks it with the capacity to change rhetorics, selves, and, ultimately, landscapes.

Though I am not suggesting that local, state, and federal conservation agencies had Kenneth Burke in mind when they chose to adopt the framework of the watershed as their *modus operandi* for water quality efforts, I would argue that the process of identification and subsequent inducement to action described by Burke aptly reflects the sort of transformation that the EPA, the Iowa DNR, and CCWEP hope watershed efforts will occasion. Recall that the EPA insists, “the watershed approach can build a sense of community, reduce conflicts, increase commitment to the actions necessary to meet societal goals and, ultimately, improve the likelihood of sustaining long-term environmental improvements” (“Benefits”). For the EPA, a change in attitude – in what they label “sense” and “commitment” – will help to secure future, material benefits – what they call a “commitment to the actions necessary,” if not securing the actions themselves. It is as though the EPA understands that, as Burke describes, “Insofar as a choice of *action* is restricted, rhetoric seeks to have a formative effect upon *attitude*” (*A*

Rhetoric of Motives 50). As watershed-based conservation projects offer the watershed as a material and symbolic site for identification, they hope to induce a change in attitude among watershed farmers and landowners that will, at last, prompt a change in behavior for the sake of conservation.⁷

For Burke, “Rhetorical language is inducement to action (or to attitude, attitude being an incipient act)” (*A Rhetoric of Motives* 42), and the watershed has become an example of rhetorical language, language that the EPA, the DNR, and CCWEP hope will serve as an inducement to attitude and action. But does it succeed? After talking with the Clear Creek watershed’s farmers, landowners, and conservation staff, I would suggest that this rhetorical language is, indeed, a success: the watershed *does* accomplish some of the identificatory work that it sets out to do. And it does so precisely in the way that it offers appeals to both material and symbolic aspects of the watershed.

Many of my interviewees, farmers and landowners who are participating in the Clear Creek conservation effort by making changes to their farming practices and their property for the sake of soil and water quality, spoke thoughtfully about their specific concerns for the material landscape on their farms and throughout the watershed, while also expressing a concern for the more symbolic aspects of the watershed, for the sense of “community” that it represented for Powell and Snyder. They were motivated to join the conservation effort in Clear Creek because of the material erosion and sedimentation problems they witnessed on their farms, as well as by their desire to be good community members: to prevent the effects of agricultural runoff on their neighbors downstream.

Gene, for instance, a 65-year-old farmer and lifelong resident of the watershed, explained that he approached conservation staff about becoming involved in the Clear Creek watershed project because of:

Wet spots that would get too wet to farm. And erosion.

These immediate material concerns (the movement of water and soil on his property) concerned Gene because of his larger desire to protect his land. As Gene explained:

I wanna see the land preserved as much as possible. So we don't farm it to death or farm it in a way that it washes away or whatever.

In light of these immediate, material concerns, Gene has installed grassed waterways to filter the runoff on his property. He installed terraces in his fields and practices contour farming (planting his crops across rather than up and down a slope) and no till farming (as an alternative to clean plowing) in order to prevent erosion.

But while these immediate, material concerns played a crucial role in Gene's decision to join the watershed effort in Clear Creek, his concerns link the material and the symbolic. Gene spends time thinking about the watershed as a whole and the community it represents. As Gene explains, he identifies with the watershed inasmuch as he feels a sense of communal responsibility to protect the creek for other watershed residents. As he described:

You know, I see where people that are along the creek're putting everything in grass there and so forth so the basin's there to catch things. And, I think that's good and needs to be done. And, like I said, people like me that are in the upper part of it, even though the creek isn't going to

affect me, I feel a responsibility to do what I can to not put excess chemicals or pollutants or dirt or whatever into the creek.

Gene feels a general sense of responsibility toward the watershed; he demonstrates the change in sense and commitment called for by the EPA. Gene wants to count himself among the number of farmers and landowners making a difference in the watershed. As he reported:

Like most everybody in this neighborhood now, we're in this Clear Creek watershed [project], and most of 'em are doing something.

The Clear Creek watershed is Gene's neighborhood, and he is making decisions on his property to benefit the larger community. Gene identifies with both the material watershed – its physical boundaries, its hills, its creeks, its soil – and the symbolic watershed – the community of concrete and abstract neighbors that it represents. And Gene seems to have joined the conservation effort in Clear Creek on both accounts. The watershed *topos*, for Gene, has become rhetorical language, serving as an inducement to act for the sake of soil and water conservation in his common-place.

Like Gene, Mary, a 70-year-old retired farmer and current landowner in the watershed who participates in the conservation effort Clear Creek, identifies with both material and symbolic aspects of the watershed. For Mary, her adoption of specific conservation practices on her property (like no till farming, grassed waterways, and stream buffers) is a means to act as a responsible citizen of the watershed. As Mary described:

A lot of the reasons that we've done the conservation projects that we've done is to avoid washing all our soil into Clear Creek, which is, you know,

all of this – well, this whole farm and then the two pieces up there all drain into Clear Creek. [...] So even though we might not have said at the time: “We’ve gotta do this because we’ve gotta keep the mud out of Clear Creek,” it still had that effect.

Mary continued, reflecting on a watershed approach to conservation:

And, uh, the more regionally you can work with it the better because each individual farmer by himself isn’t going to do a whole lot of good, but if you can get many farmers cooperating then – and a lot of times you cross from one farmer’s property onto another onto another before it gets to the creek and so all those need to cooperate. So I think working regionally is much more wiser than, you know, on just a county-wide basis.

In her insistence that watershed-based conservation allows individual farmers and landowners to “cooperate” and “work regionally” for the sake of the watershed, Mary ends up echoing Powell’s cooperative vision: what Stegner describes as “a notion of how salutary co-operation could be as a way of life, how much less wasteful than competition unlimited, how much more susceptible to planning and intelligence, how much less destructive of human and natural resources” (227). One farmer, Mary tells us, can only do so much in Clear Creek, but by joining a watershed-wide cooperative effort, real change can occur.

Likewise, Russell, a 45-year-old farmer in the watershed and lifelong watershed resident, links specific material concerns and improvements on his farm with symbolic aspects of the watershed community. Russell’s sense of the watershed has to do with both the symbolic and the material. The watershed, for Russell, consists of “the

neighbors for the next about five or ten miles either way” (the community represented by the watershed), as well as the river basin itself. The headwaters of Clear Creek emerge on a piece of property that Russell’s uncle once farmed. As a result, the material and the symbolic exist in close quarters for Russell. His knowledge of the hydrology of the creek is wrapped up in his memories of his uncle and his neighbors, and, crucially, Russell’s participation in the Clear Creek conservation effort is a means for him to act as what he calls “a good neighbor.” The conservation effort, as Russell explained:

Is starting here, and it’s kind of workin’ it’s way down. And I think most of [my neighbors] are tryin’ to do a good job. We gotta show that we care about it: the ground.

Russell feels a connection to Clear Creek given his family history in the watershed, his status in the community, his concern with water quality, and his desire to show the wider community that farmers care about their land (and, specifically, that Clear Creek farmers care about their creek and their watershed). For Russell, as in the cases of Gene and Mary, the Clear Creek watershed is both a material place – a topographical boundary that demarcates specific soils and drainage basins – and a symbolic space – an agricultural community coming together for the sake of positive environmental change.

Gene, Mary, and Russell all seem to draw connections between the materiality of the watershed (in the form of the creek, the basin, the river, and the farmer’s property) and the symbolicity of watershed thinking as described by the EPA and the Iowa DNR (in terms of a sense of community, connection, responsibility, and communal problem-solving). I want to suggest that this collapse of the material and the symbolic have, in turn, served as “an inducement to action,” prompting Gene, Mary, and Russell (and a host

of other watershed landowners) to make changes to the physical landscape in the form of terraces, stream buffers, and waterways based on their sense of identification with the watershed.

In Burke's description, "scientific action is a preparation for action, rhetorical language is an inducement to action (or to attitude, attitude being an incipient act)" (*A Rhetoric of Motives* 42). As we are seeing in Clear Creek, the watershed is moving from the realm of the scientific, or preparation for action, to the realm of the rhetorical, an inducement to action. The watershed is becoming an inducement to a kind of action that emerges from the transformation of identification and becomes the transformation of the landscape itself. In other words, this rhetorical language – in both its symbolic and material forms – helps to make things happen on the ground.

C. Implications for Understanding the Rhetorical Landscape

My hope is that this argument about the material and symbolic aspects of the watershed *topos* has both practical and theoretical implications, working to enhance communication about conservation in the Clear Creek watershed, as well as contributing to an evolving understanding of rhetorical identification and, subsequently, to a developing understanding of the rhetorical landscape, a subject most recently and thoroughly examined by Gregory Clark.

Insofar as his text is concerned with the rhetorical dimensions of the public experience of landscape and connects Kenneth Burke's work to that experience, Gregory Clark's *Rhetorical Landscapes in America: Variations on a Theme from Kenneth Burke* clearly shares common ground with this text. Where this project adopts Burke's work on

identification to provide insight into ethnographic and historical data about the evolution of a specific landscape-based *topos*, Clark uses Burke to guide the reader through a series of early American tourist landscapes in order to demonstrate the ways in which the shared experience (either first-hand or mediated) of national tourist destinations offered a means through which early Americans came to identify with the growing nation.

To explain this process, Clark adopts Burke's redefinition of rhetoric as identification, suggesting, "Anything that prompts social cooperation by presenting people to symbols of collectivity with which they can each identify themselves is rhetorical" (Clark 5). As such, experience, for Clark, can be rhetorical, and the symbolic experience of tourist landscapes offers an example of "the rhetorical power of a national culture" (4); Clark locates that rhetorical power in the experience of the symbolic. Building on Burke's suggestion that the simplest example of symbolicity is each instance of "communication made possible by the sharing of a tribal idiom in common, as in poetry, narrative, oratory, etc." ("Rhetorical Situation" 267), Clark insists, "The most powerful common idiom that Americans share may well be the American landscape that they collectively inhabit" (162). For Clark, the American landscape makes communication about the nation possible, and, in so doing, the landscape wields immense symbolic power. Clark's analyses of particular landscapes and of the ways that they function as points of identification in the project of national identity offers an excellent model for this consideration of how the watershed *topos* functions as a site for identification in the project of agricultural conservation.

But I want to suggest that this chapter, based as it is in ethnographic fieldwork, has offered reason for expanding Clark's emphasis on the symbolic as the sole territory of

the rhetorical, as well as his related emphasis on the landscape as strictly symbolic terrain. For Clark, “*Landscape* is not the same as *land*. *Land* is material, a particular object, while *landscape* is conceptual. When people act as tourists, they leave the *land* where they make their home to encounter *landscapes*. *Land* becomes *landscape* when it is assigned the role of symbol, and as symbol it functions rhetorically” (9). Clark’s text, as he explains, is a study of landscape, not land. It is a study of the conceptual, symbolic dimension, not of material, particular land. In Clark’s reading, the rhetoricity of a given landscape exists only in its symbolic content; the material land drops away once that land is imbued with symbolicity. For Clark, land is the object of rhetorical study only inasmuch as it is suffused with symbol and, Clark’s analysis, transforms from land into landscape.

While I appreciate Clark’s text for its ability to focus the lens of rhetorical theory onto the significance of landscape, I want to suggest that there might be something valuable to be gained from retaining an emphasis on the physical, material land in the development of that theory. When Clark insists, “*Landscape* is not the same as *land*,” I would agree. But I think that in the case of a grounded study like this one, there is reason to consider the ways in which the landscape, as Clark suggests, has been assigned the role of symbol and yet, unlike Clark’s view, retains its materiality, its existence as a particular object. And so, where Clark insists, “When people act as tourists, they leave the *land* where they make their home to encounter *landscapes*” (9), I would suggest that this is not a zero sum game. Clark’s tourists and Clear Creek’s farmers need not leave the land to appreciate its symbolic dimensions. Where Clark posits that, “*Land* becomes *landscape* when it is assigned the role of symbol, and as symbol it functions rhetorically” (9), I want

to argue that the landscape functions rhetorically – or functions so well rhetorically – because it marks a material object – the land – with symbolic content.

In my estimation, the landscape's rhetorical force comes not from its transubstantiation from material into symbol; rather, its rhetorical force emerges from the amalgamation of material and symbol. In the case of Clear Creek, as I have demonstrated above, retaining a focus on the material aspects of the landscape – its creeks, rivers, and soils – along with its symbolic content – its existence as a concept – is critical to understanding the rhetorical import of the watershed *topos*. This *topos* is persuasive, which is to say that it functions rhetorically, precisely because of its ability to collapse the material and the symbolic: its ability to offer itself as a symbolic *and material* landscape.

And so, where Clark defines the landscape as, “not the same as *land*,” “conceptual,” what land becomes “when it is assigned the role of symbol, and as a symbol it functions rhetorically” (9), I would offer the following redefinition. The rhetorical landscape is experienced land: the amalgamation of material and symbolic features that comes about through the sentient experience of land. The rhetorical landscape, then, does not offer itself simply as a metaphor, a reference to a solely symbolic backdrop, to a strictly discursive universe that frames our daily lives. Rather, to refer to the rhetorical landscape is to refer to the material and symbolic constellation that informs and is informed by human experience.

Indeed, my re-interpretation of the rhetorical landscape (a landscape that includes both symbolic and material dimensions) is not incompatible with work in the interdisciplinary field of landscape studies, where a multiplicity of perspectives has long

been honored. Geographer D.W Meinig makes this point about the expansiveness of landscape studies in his introduction to the 1979 volume *The Interpretation of Ordinary Landscapes*. There Meinig focuses on the diversity of perspectives offered by the authors represented in the collection and encourages the reader to explore the myriad research possibilities inherent to landscape studies. As Meinig maintains:

Any landscape is so dense with evidence and so complex and cryptic that we can never be assured that we have read it all or read it aright. The landscape lies all around us, ever accessible and inexhaustible. Anyone can look, but we all need help to see that it is at once a panorama, a composition, a palimpsest, a microcosm; that in every prospect there can be more and more than meets the eye. (6)

In light of Meinig's suggestion, I assert that a focus on the material adds a significant dimension to this panorama, this palimpsest, this accretion. Rather than negating the importance of Clark's study, I hope here to add another layer of complication, a layer of complication that adds to the understanding of the materiality of rhetoric.

I assert that rhetoric, as a critical and constructive discipline (comprising, as Burke reminds us, both *rhetorica docens* and *rhetorica utens* [*A Rhetoric of Motives* 36]) benefits from this attention to the conditions of its existence and to the force it exerts in and on the physical world.⁸ My sense is that the material world has an important place in academic study: that our discipline remains vital only inasmuch as it continues to engage with the lived world of both symbol and materiality and that this attention to materiality has particular relevance in a study like this one that attends to the lived landscape. Indeed, this belief – that the attention to the material has relevance for landscape studies

like this one – finds echoes in the highly regarded writing of J.B. Jackson, founding editor of the journal *Landscape* and, in Clark’s words, renowned “student of the American landscape” (35).

In the preface to his 1984 text *Discovering the Vernacular Landscape*, Jackson pauses for a moment to take the temperature of contemporary landscape studies and offers his criticism of what he sees as increasing emphasis on literature over landscape. As Jackson describes:

The emphasis on the use of primary sources in landscape studies would in theory at least mean that the primary source was the landscape itself, and research would entail the development of a disciplined way of looking at the physical world. But that is not what has happened. Instead, the library stacks have become the scene of action, the vicarious literary experience is substituted for the experience of reality, and the product, more often than not, is an historical tidbit, impeccably researched, dealing with some remote personage, some remote event, someone’s *perception* of the landscape, of interest chiefly to other historians. Only very rarely is there a glimpse of the history of the landscape itself, how it was formed, how it has changed, and who it was who changed it, and even more rarely does landscape research produce any speculation about the *nature* of the American landscape. [...] If the academic community thinks this is an important contribution, this is where I depart from the academic community. (xi)

Jackson is critical of this preoccupation with “the library stacks,” with “vicarious literary experience,” with the “*perception* of the landscape.” It strikes me that this emphasis on the perception of the landscape is the realm of the symbolic: the realm in which, for Clark, “*land* becomes *landscape*,” when land is “assigned the role of symbol” and, thus, “functions rhetorically.” Indeed, this is an important realm and one that is appropriate for rhetorical study. Clearly, I am interested in the perception of the landscape; that interest drives much of my ethnographic fieldwork in the Clear Creek watershed. But the work before you takes Jackson’s admonition to heart, taking an interest in both the realm of the symbolic *and* the material. It attends to “someone’s *perception* of the landscape” and to the landscape itself: “how it was formed, how it has changed, and who it was who changed it.” in order to speculate about the *nature* (in its meaning as both environment and essence) of the American agricultural landscape.⁹

In large part, this emphasis on the symbolic and the material is a pragmatic move. I want to understand why the watershed has persuasive force: why it works to *move* people, to induce them to act. And my experience in Clear Creek tells me that the watershed functions persuasively because of its ability to collapse the symbolic and the material. Thus, to attend only to the realm of the symbolic would be to miss the complete mechanism by which this *topos* wields rhetorical force.¹⁰

As I hope this chapter has demonstrated, in the case of the watershed, the symbolic content of the landscape – its rhetorical import – is deeply entwined with the watershed’s material aspects. For Clear Creek’s farmers and landowners, the scientific language of the watershed has become rhetorical language – an inducement to action – precisely because of the ambiguity the watershed presents as both symbolic and material

object. Clear Creek's farmers and landowners engage with symbolic and material aspects of the landscape, and, in so doing, they mark the land of the Clear Creek watershed as a *landscape*. This very ambiguity marks the watershed *topos* as rhetorical – and rhetorically effective at that.

D. Conclusion

This chapter traced the history of the watershed *topos* through historical sources, and then explored its persuasive appeal in a contemporary watershed-based conservation effort in the Clear Creek watershed. I have argued that watershed-based conservation succeeds insofar as it prompts identification with symbolic and material aspects of the watershed that include physical features of the landscape and the promise of a cooperative community. In so doing, I have offered a situated analysis of the relationship between rhetorical change and landscape change. The material and the symbolic, as I have demonstrated here, collapse in the words, attitudes, and actions of Clear Creek's farmers and landowners, allowing the watershed, in the terminology of Kenneth Burke, to shift from scientific to rhetorical language, thereby prompting a change in attitude that becomes an inducement to action. I argue that the watershed succeeds in shifting from a rhetorical commonplace to a common-place, a shared material and symbolic site that mobilizes farmers and landowners to make substantive changes on its behalf, and that this shift offers a means for us to consider both the symbolic and material aspects of the rhetorical landscape.

Notes

1. I use the terms *topos* and commonplace interchangeably in this text, employing them to mark a word, phrase, or statement that circulates through communal beliefs, evoking the places – both material and symbolic – where persuasive arguments occur. This framing of a *topos* as a commonplace collapses the work of Sharon Crowley and Debra Hawhee and Ralph Cintron, all of whom break from Aristotle’s framing of the special topics (*eide*), those belonging to a specific field, and the common topics (*koina*), literally “common places,” those useful for any argument at all (Aristotle 46; I ii 21). Unlike Aristotle, Crowley and Hawhee use the term commonplace to refer to the special topics (not common topics), defining commonplaces as “statements that circulate within ideologies” (96), where “ideologies are bodies of beliefs, doctrines, familiar ways of thinking that are characteristic of a group or a culture” (106). Cintron, also breaking from Aristotle, prefers the term *topoi* to Crowley and Hawhee’s commonplaces for the special topics. In recent work, he offers his own definition of *topoi* as “storehouses of social energy” (Cintron 28), highlighting the social force, or *energeia*, inherent in every *topos*. The work before you builds from both Crowley and Hawhee’s and Cintron’s framing, employing the term *topos* in its now accepted use, but retaining the term commonplace in its ability to remind the reader of its reference to a *common-place*.

2. Recall the distinction that Burke draws between scientific and rhetorical language. As he describes, “Scientific knowledge is thus presented as a terminology that gives an accurate and critically tested description of reality” (*A Rhetoric of Motives* 41). In Burke’s analysis, science has come to refer to “a ‘semantic’ or ‘descriptive’ terminology for charting the conditions of nature from an ‘impersonal’ point of view,

regardless of one's wishes or preferences" (*A Rhetoric of Motives* 41). While science is not necessarily an "accurate" "description of reality," Burke points out that it is presented and comprehended as such. When this passive language becomes active, for Burke, it becomes rhetorical.

3. As Sharon Crowley and Debra Hawhee describe in their text *Ancient Rhetorics for Contemporary Students*, the ancient Greeks used the term *kairos* to indicate a notion of time that referred not to chronological time (*chronos*), but to opportunistic time and space (*kairos*): "the right time, opportunity, occasion, or season" (37) for a given argument or public conversation. In light of that tradition, rhetoricians are sensitive to the particular windows of discursive opportunity that emerge in given spaces and times.

4. As I researched this chapter, I found myriad references to John Wesley Powell's definition of the watershed: "that area of land, a bounded hydrologic system, within which all living things are inextricably linked by their common water course and where, as humans settled, simple logic demanded that they become part of a community" ("What is a Watershed?"). The EPA features this quote at the top of their "What is a Watershed?" web page, and it has been repeated on the web sites of an astonishing number of watershed councils and environmental groups. (A Google search of the quote yields over 2500 results, all of which, so far as I can tell, attribute the quote to either Powell himself or the EPA web page featuring the Powell quote.) But the quote's amazing prominence is matched only by its utter lack of lineage. Site after site feature the quote but none refer to a source text.

I became suspicious of the origin of the quote as I became more well acquainted with Powell's writing. I never noticed Powell use the term "watershed" in and of itself,

and he seems to prefer the term “hydrographic” to “hydrologic.” Finally, I realized that Timothy O. Randhir includes the Powell quote in his text *Watershed Management: Issues and Approaches* and cites Powell’s 1890 essay in *The Century*, “Institutions for arid lands,” as its source. Hooray! A source! But when I read that essay, I realized that the definition attributed to Powell does not appear in its pages. (I contacted Dr. Randhir about the quote and never received a reply.)

After much digging, I discovered that the source of the quote is a man named Christopher N. Brown. In the late 1990s, Brown was serving as acting chief of rivers and watersheds for the National Park Service’s National Center for Recreation and Conservation, and he wrote about Powell in the Winter 1997 issue of *River Voices*, a publication of the non-profit River Network. As Brown explains in that essay, “Powell understood in the 1870s not only the geological, but also the political and social significance of a watershed: that area of land, a bounded hydrologic system, within which all living things are inextricably linked by their common water course and where, as humans settled, simple logic demanded that they become part of the ‘community.’” But while Powell may have understood the watershed’s significance – indeed, as I argue in this chapter, he did – the definition of the watershed provided by Brown is *Brown’s* definition. A reader of the essay must have mistaken Brown’s definition of the watershed as Powell’s own, published the mistake, and the mistake snowballed. Given Brown’s intimacy with the National Park service and watershed groups across the nation, it surprises me that Brown himself hasn’t corrected the mistake. To date, I haven’t been able to find Brown’s contact info to discuss the error with him directly.

5. I want to suggest here that Snyder's and Powell's framing of community as the naturalized *telos* of the watershed offers an especially potent measure of rhetorical force. When Powell asserts, "All these streams combined form the drainage system of a hydrographic basin, a unit of country well defined in nature... Such a district of country is a commonwealth by itself" (113-114) and Snyder claims, "The watershed is beyond the dichotomies of orderly/disorderly, for its forms are free, but somehow inevitable. The life that comes to flourish within it constitutes the first kind of community" (230), they rely on a common set of premises – that the watershed is natural; that it offers a particular kind of community – to arrive at a common set of conclusions – that this community is, thus, natural; because it is natural it is, thus, inevitable and desirable. Their argument relies upon a commonly held assumption about the value of naturalness and uses that assumption to forward their common agenda. In its ability to piggyback on an unquestioned belief in the value of the natural, I suggest that this argument has incredible force. [In this example, the *topos* of the "natural" functions much the same way as the *topos* of "democracy": as an unquestioned good. See Ralph Cintron's body of work, as well as Candice S. Rai's "Rhetorics of Democracy in Contested Urban Space" and Caroline Gottschalk-Druschke, Nadya Pittendrigh, and Diane Chin's "Community-Based Critique: No Walk in the Park," for more on the democracy *topos* as a trump argument.]

6. Interestingly, cultivating a "sense of ownership" for the watershed is frequently cited as the key to prompting action for the sake of conservation. But while Robert works to prompt a "sense of ownership" for the watershed among Clear Creek's farmers and landowners, he must simultaneously work against the fierce allegiance to private property and foreclosed responsibility enacted by Clear Creek's residents.

The rise of American agriculture is deeply implicated with the rise of private property, and farmers, as a whole, are fiercely proud of their long-standing tradition of independence from government intervention (despite the longstanding role of government subsidies in American agriculture). Evidence of this pro-private property and anti-government sentiment emerged in the open comments section from the 2010 Clear Creek Agricultural Land Survey.* As one respondent explained:

I'd like to see any decisions be made at the local level between the land owners and knowledgeable people about conservation. Do not manage from the state or federal level.

Other respondents let themselves be a bit more emotional in their comments, like this respondent who explained:

I am not interested at all in planting switchgrass, its [sic] a total waste [sic] of land. Its hard enough to make a living off the farm now. This is just another stupid way of government screwing up good farm practices!! The government waisted [sic] more time + effort in not letting farmers farm they want now [sic]. Its [sic] stupid.

A third respondent put it most succinctly:

Keep government out of personal business and private property.

Clearly, these sentiments put local, state, and federal conservation staff members like Robert and Bruce in a difficult position. In order to be successful in their jobs, Robert, Bruce, and their colleagues must convince farmers who believe that the government is “screwing up good farming practices” and who think that government should stay out of “personal business and private property” to change those farming

practices on their private property. And, in order to do that, they must convince these landowners to understand that the decisions they make on their own property have dramatic impacts on their neighbors downstream, and, further, they must convince landowners to care about these impacts. In order to do that, they must convince landowners to expand their myopic view beyond their own fence posts, cultivating a sense of ownership that is symbolic at best and represents the ultimate sin in American agriculture: *getting involved in someone else's business*. Taking responsibility for *someone else's land*.

*As part of my internship with the Iowa Department of Agriculture and Land Stewardship, I worked with James Martin, the watershed coordinator for Clear Creek, Silvia Secchi, an agricultural economist from Southern Illinois University Carbondale and David Bennett, a geographer from the University of Iowa, to create and distribute a 16 page survey about land use, conservation attitudes, and biofuel knowledge to all of the agricultural landowners and operators in the Clear Creek watershed. Distributed in summer 2010 to ~1000 landowners and operators, the survey netted us a 40% response rate. The quotes featured above were culled from handwritten comments on the surveys. The results of the survey will be included in a future journal article.

7. In offering the watershed as a material and symbolic site for identification, I cannot say with any certainty whether representatives from the EPA, the Iowa DNR, and CCWEP mobilize the watershed *topos* because they feel that it stands for a literal community or because they see the watershed simply as a persuasive and evocative term. My sense is that the increasing use of the concept in conservation practice probably depends upon a little bit of both. As Silvia Secchi noted in a recent discussion about two

current watershed-based programs, Rapid Watershed Assessments (RWA) and watershed-based studies for the Conservation Effectiveness Assessment Project (CEAP) (both conducted by USDA NRCS), the watershed approach has been adopted for multiple ends through the USDA NRCS. As she explained, “Note that the drivers behind these two types of watershed-based work are different. RWAs are primarily done for planning purposes and to coalesce people around issues (soft science), while the CEAP project is watershed based mostly because that is how the hydrology works (hard science)” (S. Secchi, personal communication, March 30, 2011). It seems, then, that the watershed has use in its designation of an actual biological community and its connection to biogeochemical processes, as well as in its ability to move people as it stands for a symbolic association. Local, state, and federal conservation agencies seem to harness, build upon, and collapse both of these uses.

But as Secchi has also pointed out, the watershed project in Clear Creek is, in certain ways, somewhat of a special case. I pay close attention to the rhetoric of the EPA in this chapter because conservation efforts in Clear Creek are funded through EPA 319 money (so named because of Section 319 of the Clean Water Act, the Nonpoint Source Management Program). But, in general, the EPA does not play a very significant role in conservation policy, and even in the case of EPA 319 waterways, the EPA itself is not dealing with impaired watersheds; they focus only on impaired sections of particular waterways. It was the Clear Creek Watershed Project (and the Johnson County and Iowa County Soil and Water Conservation Districts, the Iowa DNR, and IDALS) who chose to use that money on a watershed-based project. As Secchi insists, the USDA plays a much

more significant role in conservation than does the EPA, and the USDA is only slowly becoming more watershed-based (S. Secchi, personal communication, March 30, 2011).

8. In *A Rhetoric of Motives*, Kenneth Burke distinguishes between *rhetorica utens*, “the use of persuasive resources” and *rhetorica docens*, “the study of them” (36). I mention the distinction here because I do not want us, as a discipline, to lose sight of rhetoric’s dual status as a critical and constructive art: one concerned with both the study of persuasive resources and their use. I appreciate the wide variety of work in rhetorical studies that offers sensitive and illuminative rhetorical analyses of various discourses, politics, policies, and trends, but I fear that all too often the contemporary rhetorician remains in the comfortable territory of critique. Might there also be an equally compelling demand to create and construct? To use our rhetorical skills to advocate for realities that we believe in? My ongoing involvement with the Clear Creek Watershed Enhancement Project and a variety of community-based writing initiatives at the University of Illinois at Chicago and soon at the University of Rhode Island emerges from my sense that rhetoricians ought to construct as well as critique. My sense is that rhetoric will lose its singular and compelling identity if we forget half of the mission upon which our field was founded.

9. In the chapter entitled, “The Word Itself,” that opens the text, Jackson insists that we need a new definition of “landscape,” a definition that currently remains rooted in the painterly, artistic meaning in use for over three centuries, and he objects, in part, to the metaphorical use of the word “landscape” that gained favor in the late 20th century. (His examples of this type of metaphorical usage include the “landscape of a poet’s images,” “the landscape of dreams,” and “the landscape of thought” [Jackson 4]. I would

add another to Jackson's list: the rhetorical landscape.) Jackson speaks out against this metaphorical usage inasmuch as it serves to describe "our private world," when, according to Jackson, the landscape is not private; rather, "a landscape is a concrete, three-dimensional shared reality" (5). As Jackson insists, the landscape is collective. It is shared. It is communally lived and experienced. In light of this orientation, Jackson comes to define landscape as "a composition of man-made or man-modified spaces to serve as infrastructure or background for our collective existence" (8). Certainly American agriculture, the avatar of man-modified space, fits the bill, serving as the symbolic and material background for collective existence in Clear Creek and beyond: a landscape that emerges in this study as a more robust and rooted rendering of the *rhetorical landscape*.

10. Henri Lefebvre offers another way of theorizing the power of the watershed *topos*. Key to Lefebvre's argument in *The Production of Space* is the assertion that every experience is composed of three aspects of space: spaces of representation (lived space); representations of space (conceived space); and spatial practices (perceived space). Spaces of representation are lived spaces, while representations of space are the realm of the symbolic, the abstract. Spatial practices are connected with particular locations and the spatial characteristics of social relations. Lefebvre's introduction of this spatial triad – with its emphasis on lived, conceived, and perceived space – is meant to call attention to these interrelated versions of space, as well as calling attention to the central importance of space in mediating and comprehending lived experience. In short, for Lefebvre, we are spatial beings who are constantly thinking and living through these three levels of space.*

In the case of the watershed, I suggest that this is such a potent *topos* because it fuses all three of Lefebvre's notions of space. The watershed functions on the level of representational space – lived space – through the vision that it offers. As a space of representation, the watershed works at the level of invention, offering a theoretical vision of space. But while the watershed works as an imagined space, a space of representation, it also maps onto an existing physical space and thus functions at the level of a representation of space, a conceived space. In the way that it maps onto an existing space, the watershed becomes the space at which interventions can occur. Finally, the watershed functions at the level of spatial practices, of perceived space. This is the space of the daily routine, a daily routine that the conservation practices offered by watershed improvement projects work to change.

Notably, Lefebvre connects this spatial analysis with language. For Lefebvre, “Every language is located in space. Every discourse says something about space (place or sets of places); and every discourse is emitted from a space” (132). Thus, our discourses are deeply embedded in particular and abstract spaces, and, significantly, if language is located in space, says something about space, and is emitted from space, changing discourses about agricultural conservation have an impact on lived space. In the case of the watershed, this means that language *about* the watershed is deeply imbricated with the actual and imagined space of the watershed. Thus, to change a way of talking about the natural landscape is to change that landscape. But Lefebvre continues, “Distinctions must be drawn between discourse *in* space, discourse *about* space and the discourse *of* space” (132). The discourse of the watershed, I suggest, offers such potential because it is all three: in space; about space; and of space.

*Carl G. Herndl offered an excellent analysis of Iowa agriculture framed by Lefebvre's spatial triad at the National Communication Association conference in November 2009. Herndl's presentation prompted my consideration of Lefebvre here.

V. DELTA: CONCLUSION

del•ta (*noun*)

the more or less triangular tract of alluvial land formed at the mouth of a river, and enclosed or traversed by its diverging branches. (“Delta” def.)

Communication for conservation remains a particularly difficult challenge. As the Clear Creek Watershed Enhancement Board and local, state, and federal conservation staff work to persuade landowners to adopt conservation measures on their agricultural land, they work, as we have seen, within a conflicting field of material and symbolic forces. Conservation staff adopt the tools at their disposal – monetary incentives and, increasingly, the power of the watershed *topos* – to make conservation an appealing alternative for agricultural landowners and operators. But despite the relative successes in the Clear Creek watershed, I think that Clear Creek Watershed Coordinator, James Martin, and the members of the Clear Creek Watershed Enhancement Project Board would readily admit that they are more than occasionally disappointed with and daunted by the overwhelming task of improving the water quality in Clear Creek by changing the practices and attitudes of Clear Creek’s farmers and agricultural landowners.

But, like Martin and the members of the Clear Creek Board, I wouldn’t be interested in conservation outreach in Clear Creek if I didn’t see this challenge as a window of opportunity for research and action: a *kairotic* moment. And I contend that what follows from the apprehension of this kairotic opportunity is the demand for involvement and intervention. As Crowley and Hawhee describe in their work on *kairos* in *Ancient Rhetorics for Contemporary Students*, for ancient rhetoricians like Isocrates,

“the urgency and currency of a situation demands action” (40). And where this call to action emerges from the earliest rhetoricians, it also emerges in contemporary work in environmental communication. As renowned scholar Robert Cox argues in his flagship essay in the journal *Environmental Communication*, environmental communication, following Michael Soulé’s framing of conservation biology, is a “crisis discipline” (6), and, as such, contains an ethical demand for involvement and action; as Cox suggests, within emerging work in environmental communication “lies the potential for environmental communication scholars and practitioners to provide the recommendations and/or ‘tools’ for many of the communication challenges that our field is called upon to address” (17). Cox concludes with a call to arms for environmental communication researchers, suggesting that the recognition of environmental communication’s status as a crisis discipline would mean:

Our task would become two-fold. It would include identification and analysis of the failures, distortions, and/or corruption in human communication about environmental concerns. But, it would also include the willingness to recommend alternatives, to enable ‘policy decision makers, communities, businesses, educators, and citizen groups’ to respond to signals of environmental stress in ways that are appropriate to human and biological well-being. (18)

I am not as worried as Cox with the idea that some forms of human communication about environmental concerns are failed, distorted, or corrupt: in other words, that certain forms of human communication fail to represent or convey some essential truth about particular environmental concerns. I am more interested in the muddy and complicated field of

rhetorical interaction: in the motives and motivations, the desires and disappointments that enable and thwart rhetorics and practices related to environmental conservation. But I am invigorated by Cox's insistence that our task is two-fold. In both Cox's contemporary view and in the tradition of Isocrates, rhetoricians and communication scholars must both criticize and construct; we must be willing to identify the problem *and* work to recommend a solution.

As a rhetorician sympathetic to this view, I have engaged with the Clear Creek Watershed Enhancement Project over the past several years in an attempt to both criticize and construct. I have tried to attend to the instances in which the Clear Creek Board's overt message of conservation fails to reach its audience because of apparent distortions or corruption, while paying closest attention to the more subtle material and symbolic realities that make the rhetorics and practices of conservation more or less possible in the watershed at any given time. I have engaged in that work with CCWEP in hopes that together we could create a strategy, as Cox suggests, "to respond to signals of environmental stress in ways that are appropriate to human and biological well-being." This dissertation is a tentative step in that direction.

Undoubtedly, I learned more from Martin, the members of the Clear Creek Board, and my interviewees than they learned from me. During the three years I spent actively researching this project, I learned about the engaged rhetorics of agricultural stewardship, about the pitfalls and triumphs of conservation practice, about the economic and personal challenges faced by Iowa's farmers, about budgetary constraints and community passion, about enthusiasm and exhaustion. Most of all, I learned that nothing is ever as simple as it seems. I learned that it was incredibly easy for me to criticize the actions of Iowa's

corn and soy farmers from my university office on Chicago's near west side. And it was perhaps even easier to criticize them from my cozy home on the southeast side of Iowa City, a bastion of university-tinged liberalism in a sea of conventional agriculture, or from my cushy bicycle seat as I rode to and from Iowa City's renowned farmers' market. It was much more difficult to criticize what I took to be corn and soy farmers' blatant disregard for the health and future of their land once I went to their farms and listened to their multi-generational stories and heard their very real concerns. I learned a humbling lesson: they cared much more than I ever gave them credit for and they are in a more fraught situation than I ever realized.

So yes, my argument in this text is one about the connection between rhetorical change and landscape change. I have argued that the ideology and practice of contemporary American agriculture relies upon competing rhetorics of *grounded stewardship* and *hyper-stewardship* (allied with environmental good and environmental harm respectively); that Clear Creek's farmers and landowners incorporate and act upon these public rhetorics of *grounded* and *hyper-stewardship* in intricate, creative, and even positive ways; and that the watershed-based conservation effort in Clear Creek succeeds inasmuch as it prompts identification with symbolic and material aspects of the watershed, shifting the rhetorical commonplace of the watershed into a common-place.

But this is equally an argument about engagement and communication and respect and care. About asking questions. About opening yourself to finding answers. About exposing yourself to being thought foolish and ridiculous and, above all, ignorant. About placing yourself in situations where you are most decidedly not the expert, no matter what your business card or your most recent diploma says. About putting on a pair of

knee-high waterproof boots and quite literally engaging with the landscape and seeing what it has to offer: not just watching but noticing as it changes from day to day, week to week, and year to year. Attempting to awaken in a little cosmos. Attending to shiftings, migrations, moods, and machinations. Watching. Listening. And drawing connections between what you see and hear.

And this is an argument for collaboration: across multiple disciplines and methodologies and beyond the classroom's and university's walls. It is an argument about putting academic knowledge to work in the world, about learning from practitioners, about attempting to find ways to make oneself and one's knowledge useful.

I am not sure that I have succeeded in these endeavors. I can say that I have learned enough to realize how little I know. But I do have a certain measure of expertise in rhetoric and, in the spirit of Cox's call to arms, I think that I have spent enough time watching and listening and engaging and collaborating to offer a few suggestions about the future of conservation practice in Clear Creek. These suggestions are fourfold: 1) presenting agriculture as a spectrum; 2) meeting farmers where they are – communicatively; 3) creating new opportunities for heroism; and 4) reaching out to women.

A. Presenting Agriculture as a Spectrum

Too often, in my experiences in both Chicago and eastern Iowa, I have heard producers and consumers draw a distinct dividing line between “conventional ag” – the large-scale production of corn and soy – and “sustainable ag” – the small-scale production of diversified crops. The label “conventional ag” (like *hyper-stewardship*)

conjures up images of erosion, money, synthetic fertilizers and pesticides, and so on, while “sustainable ag” conjures up pastoral landscapes, family farms, happy cows, and tasty vegetables. Many of the “sustainable” growers who I know are quick to distinguish themselves from the “conventional” growers, and, likewise, the “conventional” growers don’t want to speak of these small-scale “hobby farmers” as actual farmers. But what happens in this mini-turf war (again, like what happens in the distinction between *hyper-stewardship* and *grounded stewardship*) is that “sustainable agriculture” corners the market on conservation, while “conventional agriculture” has to cede some ideological ground to the hippie hobby farmers in any demonstration of sympathy for conservation.

This has to stop.

First off, those who consider themselves sustainable growers hurt themselves by distinguishing themselves from mainstream agriculture. In my view, to position sustainable agriculture outside of agriculture per se seems like a dangerous and self-defeating move. Indeed, some of the most persuasive, to my mind, arguments for sustainable agricultural practices are those based in thousands of years of agricultural experience. Agriculture has an enormous, successful history: through the lens of that history, contemporary “Big Ag” looks like the anomaly and sustainable practices look like the norm. This sentiment emerged in an interview I conducted with a small-scale, diversified farmer just south of Iowa City. As he explained to me:

I see my neighbors farming bigger and bigger farms and I’m not interested in that. I’m from the old school. I like the small farms. And I want to be able to make a living from that.

This farmer is not only cultivating new knowledge, he is connecting back to an earlier time. He is suggesting that his refusal to adopt the “get big or get out” mentality places him firmly within, rather than outside of, the agricultural tradition.

Secondly (and more germane to my point here and my work with the folks in Clear Creek), this dividing line hurts those large-scale corn and soy farmers who want to adopt various conservation measures on their land. This divide frames conservation as the territory of small-scale hobby farmers, rather than an integral part of agriculture proper. And given the increasingly difficult climate conditions in which Iowa’s farmers find themselves, conservation practices will continue to be increasingly essential to large-scale production.

If conservation staff can work to frame agriculture – and its related conservation practices in all their many forms – along a spectrum, I believe that would go a long way toward persuading large-scale corn and soy farmers to adopt a variety of conservation measures. If conservation staff can remove the stigma of conservation adoption – the feeling that the choice to conserve is somehow comparable to giving up a certain measure of contemporary agricultural identity – my sense is that conservation will be an easier sell.

B. Meeting Farmers Where They Are – Communicatively

Conservation staff and members of conservation boards like CCWEP need to do a better job of meeting landowners and operators where they are: of speaking in their own terms. Currently, the conservation effort in Clear Creek primarily appeals to farmers and landowners in economic terms, advertising the available cost-share money for

conservation practices in project sub-watersheds. This may be effective to some extent – clearly, the farmers and landowners that I talked with are interested in the bottom line – and yet the available cost-share money isn’t significant enough to make money for Clear Creek’s farmers and landowners. More often than not, project participants are taking a financial hit to adopt conservation practices on their land. I want to suggest that conservation staff get out of the habit of speaking with landowners strictly on financial terms and consider, instead, what sorts of motivations are driving the decisions that farmers and landowners are making about their agricultural land. One way to do that would be to consider the rhetorics of *grounded stewardship* and *hyper-stewardship* that I detailed in this text and to consider how a wide variety of rhetorics could actually be mobilized for the sake of action for conservation. Another is to continue to find ways to mobilize the watershed as a symbolic and material site for identification.

C. Creating New Opportunities for Heroism

Conservation staff needs to consider the reality that farmers – at least the farmers who I spoke with in the watershed – want to do the right thing. (Indeed, I am certain that Watershed Coordinator, James Martin, would agree with this statement.) But the question comes down to defining what that “right thing” is or could be. The farmers and landowners in Clear Creek were born and bred into the Green Revolution. They came to define themselves as farmers and agricultural landowners through the language of Norman Borlaug and Monsanto. They changed their farming operations in light of the new technologies of the 1960s and suffered through the economic turmoil of the 1980s Farm Crisis. They have taken seriously Thomas Jefferson’s mandate to prove themselves

as God's chosen people: taking responsibility for the health and security of their households and nation and now their increasingly global worlds. The Green Revolution helped to establish a very particular heroic opportunity for American farmers, one that the residents of the Clear Creek watershed have spent their lives working to embody. But in working to fulfill that role by producing as much as possible on their land, concerns with soil and water quality have taken a back seat. And so, even when highly respected conservation staff like Martin approaches a Clear Creek farmer and asks him (almost always "him") to adopt conservation measures on his property for the sake of the creek, Martin is working against a lifetime of rhetorical and ideological baggage that has defined the agricultural hero not as someone who installs a terrace to help prevent erosion, but as someone who farms every available inch of his land for the sake of high yields for a growing global population.

This has to change.

In order to make conservation a viable option for America's farmers, conservation staff needs to work to create new opportunities for heroism that are consistent with the goals of soil and water quality. Conservation staff needs to reframe conservation as the noble choice.

D. Reaching Out to Women

I am almost embarrassed to have left this mention of gender to the closing pages of this text. After all, it was my original intention to place women at the very center of my research into agricultural conservation. But when I started my collaborative work in Clear Creek, I realized that women were largely absent from this particular story. There

are few, if any, female primary operators in Clear Creek and those women who I was able to get in touch with often felt they had little to say about conservation in the watershed. I am certain that there are women in Clear Creek who have been farming for decades and who know the intricacies of the watershed better than I could ever hope to. I suspect that my failure to connect with them has much to do with the fact that I was put in touch with my interviewees through government conservation staff and that government conservation staff has a less than stellar track record of reaching farm women, as Jean Eells' fabulous and ongoing research in Iowa can attest.

And so, while this document is radically insufficient in its attempt to parse out the tricky role of gender in agricultural conservation efforts, I can say without a doubt that its insufficiency is the best possible evidence that conservation staff needs to consider how to change its modes and messages to reach the increasing number of women who own agricultural land in the state. The women landowners meeting that I organized as part of my internship was a good first step, as is the ongoing work of Laura Krouse and the Women, Food & Agriculture Network on the "Women Caring For the Land" series. But those are first steps.

My hope is that I can contribute to the effort of creating next steps by continuing my collaboration with Martin and the Clear Creek Board. Our plan is to continue to analyze the data from our watershed survey as a way to unearth the particular concerns and motivations of the agricultural women of Clear Creek, a constituency that is so often, like Harlan's wife Betty, obstinately silent. I hope that someday soon, I will be able to do Clear Creek's women justice.

E. Delta

So there you have it. The river that is this text flows out in four distinct streams, each of which might, at some point, turn into its very own river.

And so, by way of closing:

I was raised Catholic. Every Sunday of my life, at the end of mass, I listened to the priest say to the assembled crowd: “Let us go in peace to love and serve the Lord.” If I can leave readers with only one mandate, it is this: Let us go out and collaborate to love and serve the landscape. It is my firm contention that language shapes landscape and landscape shapes language. At this moment, when so many of our landscapes are under increasing pressure from anthropogenic causes, there has been no better time to find ways to make use of our various and varying knowledges for the sake of our common goals. If nothing else, I hope this text has inspired at least one of its readers to do just that.

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APPENDIX

UNIVERSITY OF ILLINOIS AT CHICAGO

Office for the Protection of Research Subjects (OPRS)
Office of the Vice Chancellor for Research (MC 672)
203 Administrative Office Building
1737 West Polk Street
Chicago, Illinois 60612-7227

Approval Notice Continuing Review

August 2, 2010

Caroline Gottschalk-Druschke, B.S.W., M.A.
English
601 S. Morgan
Phone: (319) 512-8614 / Fax: (312) 413-1005

RE: Protocol # 2008-0606
“Agriculture and Conservation in the Midwest”

Dear Ms. Gottschalk-Druschke:

Your Continuing Review was reviewed and approved by the Expedited review process on July 26, 2010. You may now continue your research.

Please note the following information about your approved research protocol:

<u>Protocol Approval Period:</u>	July 26, 2010 - July 25, 2011
<u>Approved Subject Enrollment #:</u>	30 (21 subjects enrolled)
<u>Additional Determinations for Research Involving Minors:</u>	These determinations have not been made for this study since it has not been approved for enrollment of minors.
<u>Performance Sites:</u>	UIC
<u>Sponsor:</u>	None
<u>PAF#:</u>	Not Applicable
<u>Research Protocol(s):</u>	-

- a) Local Food, Food Security, and Sustainable Agriculture in the Midwest, Version 1, 07/01/2008

Recruitment Material(s):

- a) "Agriculture and Conservation" Recruitment Script; Version 4; 12/08/2009

Informed Consent(s):

- a) "Agriculture and Conservation" Consent Document; Version 5; 12/08/2009
- b) "Agriculture and Conservation" Information Sheet; Version 1; 12/08/2009

APPENDIX (continued)

- c) Waiver of Informed Consent granted under 45 CFR 46.116(d) for eligibility screening

Your research meets the criteria for expedited review as defined in 45 CFR 46.110(b)(1) under the following specific categories:

(6) Collection of data from voice, video, digital, or image recordings made for research purposes.

(7) Research on individual or group characteristics or behavior (including but not limited to research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Please note the Review History of this submission:

Receipt Date	Submission Type	Review Process	Review Date	Review Action
07/20/2010	Continuing Review	Expedited	07/26/2010	Approved

Please remember to:

→ Use your **research protocol number** (2008-0606) on any documents or correspondence with the IRB concerning your research protocol.

→ Review and comply with all requirements on the enclosure, **"UIC Investigator Responsibilities, Protection of Human Research Subjects"**

Please note that the UIC IRB has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Please be aware that if the scope of work in the grant/project changes, the protocol must be amended and approved by the UIC IRB before the initiation of the change.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact OPRS at (312) 996-1711 or me at (312) 996-9299. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

APPENDIX (continued)

Sincerely,

Marissa Benni-Weis, M.S.
IRB Coordinator, IRB # 2
Office for the Protection of Research Subjects

Enclosure(s):

- 1. UIC Investigator Responsibilities, Protection of Human Research Subjects**
- 2. Informed Consent Document(s):**
 - a) "Agriculture and Conservation" Consent Document; Version 5;
12/08/2009
 - b) "Agriculture and Conservation" Information Sheet; Version 1;
12/08/2009
- 3. Recruiting Material(s):**
 - a) "Agriculture and Conservation" Recruitment Script; Version 4;
12/08/2009

cc: Mark Canuel, English, M/C 162
Ralph Cintron, English, M/C 162

VITA

Caroline Gottschalk Druschke

education

PhD	2011	English Studies (Rhetoric), Department of English, University of Illinois at Chicago
LEAP Concentration	2010	Landscape, Ecological and Anthropogenic Processes Program, University of Illinois at Chicago
GWS Concentration	2007	Gender and Women's Studies Program, University of Illinois at Chicago
MA	2005	English Studies, Department of English, University of Illinois at Chicago (MA coursework completed at Northwestern University, 2002-2004)
BA	1999	Social Work (with a concentration in English), University of Iowa

academic employment

teaching assistant	2006-2008	Chicago Civic Leadership Certificate Program, University of Illinois at Chicago
administrator	2006-2008	Chicago Civic Leadership Certificate Program, University of Illinois at Chicago
instructor	2005-2008	Summer Enrichment Writing Workshop, University of Illinois at Chicago
teaching assistant	2004-2008	Department of English, University of Illinois at Chicago

awards and honors

- American Dissertation Fellowship, AAUW (formerly the American Association for University Women), 2010-2011.
- Dean's Scholar Award, University of Illinois at Chicago, 2010-2011.
- Chancellor's Supplemental Graduate Research Fellowship, University of Illinois at Chicago, 2010.
- National Science Foundation Integrative Graduate Education and Research Traineeship (IGERT), Landscape, Ecological and Anthropogenic Processes Program (LEAP), University of Illinois at Chicago, 2008-2010.
- Frederick Stern Award for Excellence in Teaching, Department of English, University of Illinois at Chicago, 2008.
- High Honors, Preliminary Exams, University of Illinois at Chicago, 2008.

VITA (continued)

- Best Graduate Student Paper, “The Local in the Global – The Global in the Local: International Studies Revisited, A UIC Student Conference,” University of Illinois at Chicago, 2008.
- Development Award, Office of the Dean of Liberal Arts, Northwestern University, 2003.

service > academic and public

- Member of the Board of Directors, Local Foods Connection, Iowa City, Iowa, 2008-2011.
- Watershed Intern, Natural Resources Conservation Service, Johnson County, Iowa, 2008-2010.
- Member of the Board of Directors, Rhetoric Society of America, 2008-2009.
- Volunteer Blog Manager/Writer/Farm Worker, Local Foods Connection, Iowa City, Iowa, 2007-present.
- Founding Member of *Horis Topo*, Student Chapter of the Rhetoric Society of America, University of Illinois at Chicago, 2007-present.
- President, Local Knowledge, Global Vision Student Organization, University of Illinois at Chicago, 2007-2009.
- Volunteer farmer, City Farm, a project of The Resource Center, Chicago, Illinois, 2007-2008.

memberships

- Rhetoric Society of America
- National Communication Association
- Modern Language Association
- Association for the Rhetoric of Science & Technology
- Association for Environmental Studies and Sciences
- Soil and Water Conservation Society

professional development

- “Science, Policy, Controversy” workshop with Jean Goodwin (Associate Professor of English, Iowa State University), Rhetoric Society of America Summer Institute, University of Colorado Boulder, June 24-26, 2011.
- Research Network with Krista Ratcliffe (Professor of English, Marquette University), Rhetoric Society of America 14th Biennial Conference, Minneapolis, Minnesota, May 29, 2010.
- National Science Foundation 2010 IGERT Project Meeting, Washington, D.C., May 23-25, 2010.

VITA (continued)

- Iowa Water Conference, Iowa State University, Ames, Iowa, March 8-9, 2010.
- “Science and Its Publics” workshop with James Wynn (Assistant Professor of English, Carnegie Mellon University) and Lisa Keranen (Associate Professor of Communication, University of Colorado Denver), Rhetoric Society of America Summer Institute, The Pennsylvania State University, June 26-28, 2009.

publications > academic

- Bleeden, David, Caroline Gottschalk-Druschke, and Ralph Cintron. “Minutemen and the Subject of Democracy.” *¡Marcha!: Latino Chicago and the Immigrant Rights Movement*. Ed. Amalia Pallares and Nilda Flores-Gonzalez. Champaign: University of Illinois Press, 2010. 179-197.
- Henningsen, Timothy, Diane Chin, Ann Feldman, Caroline Gottschalk-Druschke, Tom Moss, Nadya Pittendrigh, and Stephanie Turner Reich. “A Hybrid Genre Supports Hybrid Roles in Community-University Collaboration.” *Going Public: What Writing Programs Learn from Engagement*. Ed. Shirley K. Rose and Irvin Weiser. Logan: Utah State University Press, 2010. 85-109.
- Gottschalk-Druschke, Caroline. Review of Paula Mathieu’s *Tactics of Hope: The Public Turn in English Composition*. *Community Literacy Journal* 2.1 (2007): 127-129.
- Gottschalk-Druschke, Caroline, Nadya Pittendrigh, and Diane Chin. “Community-based Critique: No Walk in the Park.” *Reflections: A Journal of Writing, Service-Learning, and Community Literacy* 6.1 (2007): 151-168.
- Gottschalk-Druschke, Caroline. “The City that Turned the White Sox Black: Post World II Chicago Boosterism and the Negation of Nelson Algren.” *Nelson Algren: A Collection of Critical Essays*. Ed. Robert Ward. Madison: Fairleigh Dickinson University Press, 2007. 115-125.

publications > public

- Gottschalk-Druschke, Caroline. “Local Foods Connection Combats Hunger and Supports Small Farmers in Eastern Iowa.” *Farmers’ Markets Today: The Business Journal for Direct-to-Customer Marketers*. July/August 2008.

completed projects

- *Watershed: Conserving a Common-Place*. 2008-2011. This dissertation project, a hybrid of quantitative and qualitative methods based on several years of fieldwork with agricultural landowners, operators, and conservation staff, analyzes situated arguments about conservation, land use, ecology, and agriculture in an eastern Iowa watershed.

VITA (continued)

- *Evaluating the Educational Outcomes of a Citizen Science Project*. 2009-2010. This collaborative research project determined what participants learned about bees, urban wildlife, and the scientific method through participation in the Chicago Area Pollinator Study.
- *Chicago Area Pollinator Study*. 2008-2010. This capstone project of the Landscape, Ecological and Anthropogenic Processes Program, in collaboration with the Urban Wildlife Institute of Lincoln Park Zoo, brought together ecologists, evolutionary biologists, rhetoricians, and educators to design and execute a citizen science bee collection study in the Chicago area to determine the diversity and abundance of bee species throughout the city and suburbs.
- *Local Knowledge, Global Vision: A Model World Conference on Women's and Girls' Rights*. 2006-2009. This conference, based on the United Nations' Fourth World Conference on Women, brought underserved Chicago high school students to the University of Illinois at Chicago for a one-day model world conference as the culmination of 10 weeks of work on contemporary women's rights in their classrooms.
- *Immigration Mobilization Project*. 2006-2009. This interdisciplinary project at the University of Illinois at Chicago brought together sociologists, anthropologists, political scientists, and educators to study all facets of the 2006 and 2007 immigration marches and rallies in Chicago and throughout the nation. The group is responsible for completing the first large-scale survey of the 2006 Chicago immigration march.

dissertation committee

- Ralph Cintron, Associate Professor, Departments of English and Latino and Latin American Studies, University of Illinois at Chicago. (*Director.*)
- Jean Goodwin, Associate Professor, Department of English and the Program in Speech Communication, Iowa State University.
- Debra Hawhee, Professor, Department of English, The Pennsylvania State University.
- Carl G. Herndl, Professor, Department of English, University of South Florida.
- Norma Claire Moruzzi, Associate Professor, Departments of Political Science, Gender and Women's Studies, and History, University of Illinois at Chicago.
- Silvia Secchi, Assistant Professor, Department of Agribusiness Economics, Southern Illinois University Carbondale.
- David H. Wise, Professor, Department of Biological Sciences and Institute for Environmental Science and Policy, University of Illinois at Chicago.

VITA (continued)

preliminary exam fields

- “Rhetorical Theory: Kairos and Ecology” with Debra Hawhee, Professor, Department of English, The Pennsylvania State University.
- “Situated Knowledges: Genre, Rhetoric, and Social Learning Theory” with Ann Merle Feldman, Professor, Department of English, University of Illinois at Chicago.
- “Ethnographies: Food Security, Globalization, Democracy” with Ralph Cintron, Associate Professor, Departments of English and Latino and Latin American Studies, University of Illinois at Chicago.
- “Gender, Materiality, Ecology, and Power” with Norma Claire Moruzzi, Associate Professor, Departments of Political Science, Gender and Women’s Studies, and History, University of Illinois at Chicago.
- Fifth reader: Amalia Pallares, Associate Professor, Departments of Latin American and Latino Studies and Political Science, University of Illinois at Chicago.

master’s thesis

- “‘The Arms of the Octopus’: Sentimentality and Nelson Algren’s Enduring Hold on Chicago’s Changing Landscape.” University of Illinois at Chicago, May 2005. Thesis Director: Christian Messenger, Professor, Department of English, University of Illinois at Chicago. Second Reader: Ralph Cintron, Associate Professor, Departments of English and Latino and Latin American Studies, University of Illinois at Chicago.

graduate level coursework

- English (rhetorical theory, pedagogy, literature, literary theory), Biological Sciences, Gender and Women’s Studies, Political Science

teaching experience and curriculum planning

- instruction > rhetoric, first-year writing, civic engagement, basic writing, multi-instructor.
 - English 071 > Introduction to Academic Writing
 - English 122 > Understanding Rhetoric
 - English 160 > Academic Writing I: Writing in Academic and Public Contexts
 - English 161 > Academic Writing II: Writing for Inquiry and Research
- tutoring and mentoring > writing center tutor, teaching assistant mentor.

VITA (continued)

- planning and administration > Chicago Area Pollinator Study, Local Knowledge, Global Vision: A Model World Conference on Women's and Girls' Rights, Chicago Civic Leadership Certificate Program, CityWorks Center.

related experience

- Designer, Educational materials, Chicago Area Pollinator Study, 2009.
- Web Designer, Department of Slavic and Baltic Literatures, 2008.
- Designer, Recruitment brochure, Chicago Civic Leadership Certificate Program, 2007.
- Webmaster, Local Knowledge, Global Vision, University of Illinois at Chicago, 2007.
- Webmaster, Department of English, University of Illinois at Chicago, 2004-2007.
- Webmaster, Department of Neurobiology and Physiology, Northwestern University, 2002-2004.
- Department Assistant, Department of Neurobiology and Physiology, Northwestern University, 2002-2004.

invited presentations

- "Conserving a Common-Place: Collaborating for Conservation in an Iowa Watershed." Department of Writing and Rhetoric, University of Rhode Island, Kingston, Rhode Island, December 6, 2010.
- "Rhetoric – Ecology – Agriculture." Graduate Seminar, Landscape, Ecological and Anthropogenic Processes Program, University of Illinois at Chicago, Chicago, Illinois, April 3, 2009.
- "Food, Art, Environment." "Art and Ecology" course, Department of Art and Art History's Intermedia Program, University of Iowa, Iowa City, Iowa, February 12, 2009.
- "The Scholarship of Sustainability." Institute for Environmental Science and Policy Town Hall, University of Illinois at Chicago, Chicago, Illinois, November 6, 2008.
- "Teaching in the Community Oriented Writing Program." Mile 8 Teaching Workshop Series, University of Illinois at Chicago, Chicago, Illinois, October 18, 2007.
- "Community Oriented Writing." First-Year Writing Program Opening Conference, University of Illinois at Chicago, Chicago, Illinois, August 22, 2007.
- "Teaching with Tactics of Hope." Discussion with author Paula Mathieu (Boston College) and Bridget Sullivan (University of Illinois at Chicago), Negotiated Alliances: When Writing is Academic, Urban, and Public, National Conference on Writing Center as Public Space, University of Illinois at Chicago, Chicago, Illinois, September 30, 2006.

VITA (continued)

- “Taking First-Year Writing Off Campus.” Mile 8 Teaching Workshop Series, University of Illinois at Chicago, Chicago, Illinois, February 28, 2006.
- “Service-learning in Action: Work of the State Farm Faculty Fellows.” Faculty Symposium on Service-Learning: A Call for Civic Responsibility in Teaching and Learning, Roosevelt University, Chicago, Illinois, February 23, 2006.
- “Learning From Community-Based Learning.” State Farm Faculty Fellows Retreat, DePaul University, Chicago, Illinois, July 15, 2005.

interviews

- “Bringing organic to low-income families” by Jennifer Rose, *The Organic Report*, Winter 2009.
- “Chicago’s City Farm: Farming in the City” by Letitia L. Star, *GRIT*, November/December 2008.

conference presentations

- “Watershed as Inducement to Action: The Rhetoric of Agricultural Conservation Practice.” National Communication Association Conference, San Francisco, California, November 16, 2010.
- “Starting and Maintaining a Rhetoric Society of America Student Chapter.” Roundtable presentation. Rhetoric Society of America Conference, Minneapolis, Minnesota, May 30, 2010.
- “Arguing Agriculture: County Government, Farmer Freedom, and Competing Visions of the Good Life.” Rhetoric Society of America Conference, Minneapolis, Minnesota, May 29, 2010.
- “Evaluating a Watershed-Based Conservation Initiative.” Poster presentation. National Science Foundation 2010 IGERT Project Meeting, Washington, D.C., May 24, 2010.
- “Communicating on Contested Terrain: A Discussion about the Trials, Tribulations, and Triumphs of Interdisciplinary Work in Environmental Communication.” Roundtable presentation. National Communication Association Conference, Chicago, Illinois, November 15, 2009.
- “Bee species richness and abundance in an urban landscape.” Poster presentation. Nature & Wildlife Research Summit, Chicago, Illinois, November 6, 2009.
- “Chicago Area Pollinator Study: Relationships between land cover and bee distribution using citizen science data.” Poster presentation. Annual Meeting of the Association for Environmental Studies and Sciences, Madison, Wisconsin, October 10, 2009.
- “Making [Amber] Waves [of Grain]: Agriculture and Food Democracy in the American Imaginary.” Conference on College Composition and Communication, San Francisco, California, March 14, 2009.

VITA (continued)

- “Rhetorics of Sustainability, Rhetorics for Sustainability.” National Communication Association Conference, San Diego, California, November 22, 2008.
- “Responsible Publics, Responsible Selves: Interrogating Rhetorics of Civic Engagement.” Special presentation. Rhetoric Society of America Conference, Seattle, Washington, May 25, 2008.
- “Consciousness Raising.” Rhetoric Society of America Conference, Seattle, Washington, May 24, 2008.
- “Reflections on Pedagogy.” Panel chair. Rhetoric Society of America Conference, Seattle, Washington, May 23, 2008.
- “Rhetorics of Global Food Policies and Women-Centered Local Alternatives.” UIC International Studies Program 2008 Student Conference, University of Illinois at Chicago, Chicago, Illinois, April 22, 2008.
- “‘Glorified Guerrilla Gardening’: The Ironies of Urban Agriculture.” Biocultures: Science, Technology, Culture, Humanity, University of Illinois at Chicago, Chicago, Illinois, November 17, 2007.
- “Laotian or Latino? Citizenship and Status in Small Town Iowa.” Asian Pacific American Graduate Studies Organization National Conference, University of Illinois at Chicago, Chicago, Illinois, March 17, 2007.
- “‘Hate Speech’ or ‘The Rule of Law’? Anti-Immigrant Rhetoric, National Borders, and Transnational Exploitation.” Marching for Change: Chicago in the National Immigrant Movement, University of Illinois at Chicago, Chicago, Illinois, March 2, 2007.
- “Changing Faces and Changing Rhetorics: Undocumented Labor in Storm Lake, Iowa.” UIC Interdisciplinary Immigration Initiative Conference, University of Illinois at Chicago, Chicago, Illinois, April 7, 2006.
- “Bridging the Digital Divide? Books, eBooks, and the First-Generation College Student.” The Third International Conference on the Book, Oxford Brookes University, Oxford, U.K., October 12, 2005.
- “Cultural Capital and Geography: The Author as Icon in Contemporary Urban Space.” Craft, Critique, Culture, University of Iowa, Iowa City, Iowa, April 7, 2005.
- “Irvine Welsh's Rhetorics of Liminal Space: ‘A History of Leith Fae the Merger tae the Present.’” NEMLA Conference, Harvard University, Cambridge, Massachusetts, April 1, 2005.
- “Jack Kerouac: Author or Icon? Literature and the Cult of Celebrity.” Cultural Studies Association Annual Conference, Northeastern University, Boston, Massachusetts, May 6, 2004.
- “Dueling Realities: Revenue and Representation in Post WWII Chicago.” Print Culture and the City conference, McGill University, Montreal, Quebec, Canada, March 27, 2004.
- “Cracking the Canon: A Cultural Approach to the Criticism of *Chicago: City on the Make*.” 45th Annual M/MLA Annual Convention, Chicago, Illinois, November 8, 2003.

VITA (continued)

- “Breaking Ground: Nelson Algren's Rise and Fall from National Book Award Success.” Culture and the Literary Prize, Oxford Brookes University, Oxford, U.K., October 5, 2003.
- “The City that Turned the White Sox Black: Post World II Chicago Boosterism and the Negation of Nelson Algren.” 3 Cities Project Final Conference, New York, Chicago, Los Angeles: Cultures and Representations II, University of Nottingham, Nottingham, U.K., April 5, 2003.