

POSITIONALITIES AS *ETHOS*: SANDRA STEINGRABER'S RHETORICAL
NEGOTIATIONS OF SCIENCE, MOTHERHOOD, AND ACTIVISM

by

MOLLIE K. MURPHY

(Under the Direction of Kelly E. Happe)

ABSTRACT

This dissertation examines the rhetoric of Sandra Steingraber, a biologist, cancer survivor, mother, and highly acclaimed activist in the contemporary environmental movement. It examines how Steingraber navigates her understandings of science and the environment by articulating and leveraging her differing epistemological and material “locations” as appeals to *ethos*. Coupling rhetorical scholarship on *ethos* with feminist scholarship on standpoint, it takes on a series of Steingraber’s works including her trilogy of books and her series of “Letters from Chemung County Jail.” The first chapter explicates how *ethos* and feminist standpoint theory can be mutually beneficial, together offering an enriched understanding of a rhetor’s social (yet embodied) location and internal self-division. The next chapter examines *Living Downstream: An Ecologist’s Personal Investigation of Cancer and the Environment*, and argues that strategic juxtaposition allows Steingraber to negotiate her epistemologies as a cancer patient/survivor and biologist. Chapter three takes on Steingraber’s two books that focus on her identity as a mother. It argues that synecdoche in *Having Faith* works to navigate the constraints of maternal appeals and promote “maternal thinking” as a productive means to effect structural change. In contrast, this chapter suggests that *Raising Elijah*’s “master trope” is the metonym; here, Steingraber relies on narratives focusing on her own role as a parent. Because she is a privileged, “intensive”

mom, her rhetoric here recuperates troubling logics of motherhood. The final analysis chapter asks after the implications of Steingraber's appropriation of Martin Luther King Jr. in her "Letters from Chemung County Jail." By rhetorically inhabiting a positionality vastly different from her own, Steingraber inadvertently constructs a logical and temporal hierarchy between environmental and racial oppression. The conclusion addresses Steingraber's body of rhetoric as a whole, and explicates the dissertation's theoretical implications for rhetoric and standpoint.

INDEX WORDS: Ethos, Sandra Steingraber, Environment, Feminist standpoint theory, Strategic juxtaposition, Synecdoche, Irony, Metonymy, Appropriation

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MOLLIE K. MURPHY

B.A., University of Montana, 2012

M.A., University of Montana, 2014

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MOLLIE K. MURPHY

Major Professor:
Committee:

Kelly E. Happe
Barbara A. Biesecker
Belinda A. Stillion Southard

Electronic Version Approved:

Suzanne Barbour
Dean of the Graduate School
The University of Georgia
August 2018

DEDICATION

I dedicate this project to Tom Laughlin of Anaconda, Montana, who made fifth grade the best grade. His unrivaled sense of humor and love for teaching taught me that learning is fun.

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CHAPTER 1

PUSHING THROUGH EPISTEMOLOGICAL DOUBLE BINDS: LINKING LOCATIONS, APPEALING TO *ETHOS*

Sandra Steingraber is one of the most impactful activists in the contemporary environmental movement. After being diagnosed with bladder cancer in her youth, Steingraber earned a Ph.D. in Biology and pursued an academic career. In 1993, she left her tenure-track job as a professor to follow the tradition of Rachel Carson and address the gap between public knowledge about cancer causes and scientific research on carcinogens. Four years after leaving academia, she published the first edition of *Living Downstream: An Ecologist's Personal Investigation of Cancer and the Environment*, which was re-released in a vastly expanded second edition and documentary in 2010. As the title suggests, *Living Downstream* is a mixture of science and autobiography; Steingraber investigates linkages between her cancer and upbringing in central Illinois' farming country. She attributes the multiple cancer diagnoses and deaths in her family (she is adopted) to the context of her environmental roots. Bladder cancer, she explains, has long been understood as an environmentally caused cancer. In *Living Downstream*, Steingraber boldly violates the norms of peer review, challenges the status quo assumption that cancer can be avoided through changes in lifestyle, and shares personal narratives to illustrate the devastating consequences of economic dependence on toxic chemicals.

Though Carson and Steingraber have much in common—both were victims of cancer, earned degrees in science, and authored a trilogy of books—the contemporary context presents unique opportunities and constraints for Steingraber. Whereas Carson focused almost exclusively

on pesticides, the state of the contemporary environmental crisis leads Steingraber to take on a multitude of concerns including climate change, toxins in breast milk, and agricultural practices. Though the situation is extensive and dire, the powerful advocacy of the past half-century's civil rights, feminist, and anti-war movements offer her rhetorical strategies that were unavailable to Carson. Carson died of breast cancer less than two years after *Silent Spring*'s publication, yet kept her struggle private in fear that disclosure would undermine her credibility. Working in the contemporary context wherein feminists have legitimized the personal as political, Steingraber can afford to speak personally, and indeed she does. *Living Downstream* juxtaposes scientific evidence with Steingraber's experiences as a cancer patient and survivor, *Having Faith: An Ecologist's Journey to Motherhood* connects environmental threats to fetal and maternal health to Steingraber's experience being pregnant, giving birth, and breastfeeding her daughter, Faith, and *Raising Elijah: Protecting Our Children in an Age of Environmental Crisis* covers environmental issues affecting parents, including Steingraber and her husband after they become parents to their second child, Elijah. In her contemporary activism, which focuses almost exclusively on the dangers of hydraulic fracturing or "fracking," she emphasizes threats to her children and local community. Steingraber speaks not only as a scientist and concerned citizen, as Carson did, but also more personally as a cancer survivor, mother, and resident of contaminated communities.

As historically and currently practiced, the voice of "science" is nearly always disembodied. In attempt to appear objective, researchers aim to write and speak from a disinterested perspective, depicting their work as transcending context, time, and culture, and ultimately as "homogenous and unitary, because knowledge must be consistent and coherent."¹ As Sandra Harding pointedly states, "'Science says. . . .' we are told. Whose science, we can

ask? . . . If the subject of knowledge were permitted to be multiple and heterogeneous, then the knowledge produced by such subjects would be multiple and contradictory and thus inconsistent and incoherent.”² Scientists thus attempt to erase themselves from their work in an effort to sustain the image of science as unbiased and apolitical. Feminist standpoint theorists have long criticized this construction, arguing knowledge is shaped by the societal positions of those that produce it and, consequently, can never be truly objective. Because the scientific community is composed predominately of white, financially well-off men, Heidi Grasswick explains that research “tend[s] to be oriented toward the production of knowledge that is significant for those who occupy privileged positions.”³ Efforts to depict science as value-neutral mask the ways in which science is often interested, serving the status quo while disavowing more embodied ways of knowing.

Environmental activists have tried to capitalize on the supposed objectivity of science to promote political change; this is evident in calls to “listen to the science” and in the more recent cry “science is real!”⁴ Yet, paradoxically, science has long worked *against* environmental advocacy; historically, polluting industries have benefited from the fact that science always involves elements of uncertainty.⁵ Establishing that a specific trash incinerator, for example, is to blame for heightened cancer rates in communities that surround it is scientifically difficult, if not impossible. Thus, as Kelly Happe notes, science—though beneficial—“cannot be the ground for action given the unavoidable uncertainty that is part and parcel of the scientific method.”⁶ Science may appear to be the most objective, clear-cut way to fight for environmental justice, yet it is not really a stable, objective foundation from which to effect change.

Following Rachel Carson, Steingraber grounds her arguments in scientific research while violating scientific norms; she writes politically and for a public audience. Unlike Carson, her

rhetoric is overtly personal and embodied; her experiences strongly inform her understanding of science and her arguments for policy change. Overall, responses to her rhetoric and activism have been overwhelmingly positive. She is the founder of New Yorkers Against Fracking, a coalition of over 280 organizations that pressured Governor Andrew Cuomo to ban fracking in New York, and has been interviewed and/or discussed favorably in numerous news and media outlets including *The New York Times*, *Outside Magazine*, “Good Morning America,” and “The Today Show.”⁷ She is the winner of the 2011 Heinz Award, which includes a \$100,000 cash prize (she used the money to aid New Yorkers Against Fracking), winner of the Rachel Carson Leadership Award, and was named a *Woman of the Year* by *Ms. Magazine*.⁸ Given Steingraber’s significant violation of scientific norms, how has she not only largely averted criticism, but also achieved such rhetorical success in gaining positive media coverage, galvanizing her readers to take action against environmentally unjust policies, and pressuring politicians to pass policies designed to protect the environment? How has she negotiated her numerous epistemological leanings—scientist, mother, cancer survivor, and activist—throughout her works? How has she located herself, as a privileged woman—albeit a cancer survivor—in relation to her audience, and how has she located herself in relation to other justice movements?

This dissertation answers these questions by coupling rhetorical scholarship on *ethos* with feminist scholarship on standpoint, arguing that Steingraber negotiates various rhetorical and epistemological tensions by leveraging her various “locations” as appeals to *ethos*. That is, she navigates the fact that her understanding of science is based largely—but not exclusively—on embodied knowledge by depicting her social location as a scientifically informed cancer patient, mother, and activist as a source of credibility. This argument extends theoretical understandings of both feminist standpoint theory and *ethos* while offering an extended analysis of Steingraber’s

rhetorical strategies and development. Drawing on and extending scholarly understandings of *ethos*, I cast the term as credibility made possible through the *rhetorical linkages* between a rhetor's epistemological and material "locations" and audience. *Ethos* has long been understood as connected to place or location, yet this connection is typically invoked to highlight its nature as a social negotiation between audiences, rhetors, and the communities in which they are embedded.⁹ For example, Lynda Walsh defines *ethos* in the context of its roots as a rhetorical "place" as "*a coherent set of expectations about how a person should perform in a familiar political role.*"¹⁰ While recognizing the ways in which *ethos* is embedded in social norms, my own understanding of location also attends to one's personal, bodily location. Thus, rather than turning to the *ethos* of the scientist—a social role and "place"—to explain Steingraber's rhetoric, I examine her *ethos* as they emanate from her multi-layered epistemological and material locations, even as they are embedded in a larger cultural context. Thus, this move represents a shift in perspective rather than a dismissal of the ways in which Steingraber's *ethos* are influenced by the many social roles she inhabits, including scientist and mother. By asserting that knowledge is shaped by lived experience—and thus can never be value-neutral—feminist standpoint theory illuminates the privileged and embodied nature of Steingraber's positionality and its connection to her epistemic assumptions, and, thus, her rhetorical strategies. Coupling *ethos* with standpoint shows how and (to what effect) she leverages her seemingly incompatible ways of knowing as appeals to credibility.¹¹

As will become evident, Steingraber's rhetorical practices have changed drastically over the course of her activist career. She has largely abandoned the careful prose of memoirs in favor of civil disobedience. Attention to *ethos* and standpoint help to explain why and how her rhetoric has changed so drastically in terms of praxis. For Steingraber, the exigence of the environmental

crisis has shifted from a lack of awareness to a lack of action; throughout her works, she creates the *ethos* not only to address exigence, but to create it as well. Over time, her shifting constructions of exigence demand new modes of praxis and, consequently, new ways of appealing to *ethos*. As will be explained throughout the chapters of the dissertation, she navigates these demands with varying degrees of success. Over the course of her rhetorical works, Steingraber's trajectory shifts toward tropes that exacerbate her privilege rather than use it toward a greater good. Rather than bolstering her credibility to forward claims to knowledge, she moves toward appeals to her *ethos* as they relate to direct action. Thus, in its attention to the positionality of the rhetor, this dissertation also highlights the interrelationship between ethics and *ethos*.

In the remainder of this introduction, I review scholarship on classical and modern understandings of *ethos* with specific attention to the concept's relationship to the notion of "location" as it is informed by feminist standpoint theory. In doing so, I contextualize my own extension and understanding of *ethos*. I then preview the arguments of the three major chapters of the dissertation; each takes on a specific case study of Steingraber's rhetoric to show how she constructs her location as an appeal to credibility. Taken as a whole, Steingraber's rhetoric offers a rich context for assessing the connections between rhetoric, epistemology, privilege, and *ethos*.

Ethos: Classical and Critical Understandings

Historical theories of *ethos* are rooted in the works of Plato and Aristotle.¹² According to James Baumlin, Plato posited truth as ultimately residing in individuals who may use language to express it, thus situating language as tangential to truth. A Platonic definition considers *ethos* as "the space where language and truth meet or are made incarnate within the individual."¹³ In contrast, Aristotle situated truth not in individuals, but as rhetorically constructed in texts; in this

light, *ethos* is present whenever rhetoric “make[s] the speaker worthy of credence.”¹⁴ Rhetors do not possess *ethos*, but rather are granted *ethos* by audiences who perceive them as credible.

Baulmin summarizes the distinction between Platonic and Aristotelian understandings of *ethos*:

“If Isocratean tradition asserts the speaker’s need *to be* good, Aristotelian tradition asserts the sufficiency of *seeming* good.”¹⁵ For Aristotle, whether a rhetor is honest or not is less important than the rhetorical construction of honesty. Although this perspective splits ethics from *ethos*, it offers an essential foundation for rhetorical scholarship by locating agency in rhetoric.

Many rhetorical scholars have built upon Aristotle’s work to consider how *ethos* is constructed in contexts that expand well beyond the confines of one rhetorical event or narrowly defined “situation.” As George Kennedy observes, Aristotle did not account for the significance of a rhetor’s pre-existing authority—or lack thereof—which holds significant implications for *ethos*.¹⁶ Those without racial, gender, class, or other types of privilege face unique barriers when attempting to garner audience respect, whereas those who are more privileged may have an easier time. Coretta Pittman takes the rhetoric of black women rhetors Harriet Jacobs, Billie Holiday, and Sister Souljah as an example of how *ethos* is mandated by the ruling class and enforced upon the oppressed.¹⁷ As they advocated against racist constructions of black women, Jacobs, Holiday, and Souljah had to adhere to a standard for *ethos* that failed to recognize the barriers of racism, classism, and sexism. *Ethos*, indeed, is normative. As S. Michael Halloran notes, “To have *ethos* is to manifest the virtues most valued by the culture to and for which one speaks.”¹⁸ *Ethos* is thus not an innate quality of some rhetors and not others, but rather the product of a culturally situated negotiation between rhetors and audiences.¹⁹ While I follow Aristotle in considering *ethos* as rhetorically created and not innate, it is critical to recognize that rhetors face unique barriers when aiming to acquire audience respect.

Contemporary scholars have further complicated and revised classical insight on *ethos* by questioning the unity or stability of individual rhetors. Addressing the complexities involved when rhetors negotiate their multiple and often contradictory “selves” (e.g., black woman, author) illustrates that appealing to *ethos* involves more than a negotiation between a rhetor and audience. It also involves *internal* negotiation. Individuals are always part of several communities at once; selves are thus internally split rather than whole.²⁰ However, Bauman notes that Western academics have largely “embrace[d] the ‘central,’ serious, or . . . *philosophical* model of selfhood over the ‘social, dramatistic, or *rhetorical* model.”²¹ By merging scholarship on standpoint and *ethos*, I aim to work through the divide between these two models. Steingraber speaks from many perspectives (scientist, mother, activist) that are often—as she admits—contradictory. She cannot separate her understanding of environmental contamination from her identity as a mother, or from her scientific training. Texts too are split, carrying multiple possible meanings depending on the reader.²² Appealing to *ethos* thus involves a number of negotiations. A rhetor must negotiate her or his multiple “selves” and must negotiate these selves with audience standards for credibility. Nedra Reynolds fittingly explains *ethos* as taking place in these “betweens,” “as writers struggle to identify their own positions at the intersections of various communities and attempt to establish authority for themselves and their claims.”²³ Appeals to *ethos* involve both a complex inquiry into one’s own standing and a commitment to the audience addressed.²⁴

To rhetorically negotiate the plurality of selves and texts, Marshall Alcorn argues that rhetors in modern society must strategically present self-division as an *ethos*.²⁵ He pointedly defines *ethos* as “something energized precisely by the plural, self-oppositional, and divided nature of both the self and conflictual cultural ideologies.”²⁶ Foregrounding self-division

necessitates that rhetors expose their inner struggles and take responsibility for the fact that they inevitably inhabit and speak from multiple locations. This can be done in a number of ways. Aligning with Reynolds' consideration of *ethos* as taking place in the "betweens," Alcorn argues that modern *ethos* "derive . . . from the rhetor's ability to activate the inner dynamics of self-division—the ability to liberate repressed voices, to activate self-conflict, to reshape the linguistic form of self components."²⁷ When rhetors achieve this, they encourage audiences to examine their own self-division, and to (re)consider a political position they may have otherwise dismissed. Alcorn turns to George Orwell's essay "Shooting an Elephant" as an example. An anti-British imperialist socialist, Orwell wrote the essay with political intent, yet his portrayal of internal self-division paradoxically kept the essay from appearing as overtly anti-imperialist.²⁸ Orwell's anti-imperialism is minimized with the acknowledgement that the British Empire is "a great deal better than the younger empires that are going to supplant it."²⁹ Alcorn notes, "as the author balances the two conflicting perspectives, the reader is invited to do the same."³⁰ Rather than leveraging a clear argument, "the *ethos* says, 'This is what happened to me.'"³¹ For Alcorn, if contemporary rhetors want to speak politically to a possibly unfavorable audience, they must foreground self-division as an *ethos*.

This strategy of forwarding self-division as an appeal to *ethos* is readily apparent throughout Steingraber's works, but is perhaps most prominent in *Having Faith*. The book is clearly political; its overarching message is a call to apply the precautionary principle to chemicals in commerce.³² The argument throughout the text—often implicit—is that no chemical should be released into the environment until proven safe for a particularly vulnerable group: pregnant women and their fetuses. Early on, Steingraber investigates four toxic tragedies of the past that convey the permeability of the placenta: rubella, thalidomide, Minamata disease

(mercury poisoning), and diethylstilbestrol (DES). These cases illustrate that “private problems caused by chemicals . . . are also public issues.”³³ Yet rather than overtly pushing for policy or leveraging a clear moral argument, Steingraber follows to state:

How can I reconcile my old identity as a biologist with my new one as expectant mother?
 Mothers always want to know what they can do to protect their babies. I certainly do.
 Biologists are always calling for more research. I do this, too. However self-serving, the
 biologists’ appeal for further study is a truthful acknowledgement of how little we really
 know about living systems.³⁴

Steingraber activates her own self-division, and implicitly encourages her readers to do the same by considering both the limits of scientific knowledge and the implications of toxins for pregnant women. In her more contemporary anti-fracking activism, personal testimony appears in less overt ways. In her letter from jail titled “The Crappy Mom Manifesto,” Steingraber observes that jail is a place almost entirely devoid of nature: “I now inhabit an ugly, diminished place devoid of life and beauty – and this is exactly the kind of harsh, ravaged world I do not want my children to inhabit.”³⁵ The implicit message is that this realization came to Steingraber while in jail rather than beforehand; she thus illustrates a personal journey in which internal struggles yield revelatory insights. When they successfully navigate internal self-conflict and craft it as an *ethos*, rhetors offer “a recognizable voice, a voice that has worked through and attained some mastery of the pain of inner conflict.”³⁶

Of course, *ethos* is not simply about the negotiation of a rhetor’s “selves”; it is also—some argue predominately—social. Alcorn explains how Orwell’s self-division in “Shooting an Elephant” “encourages the reader to identify with the actor and scene.”³⁷ Readers may identify with an actor or scene when they represent a familiar rhetorical place or role. For example,

Halloran explains that *ethos* may refer not only to an individual, but also to a type or kind of person, such as a medical doctor or a professor.³⁸ Thus, some social locations, positions, or “places” have already been granted *ethos*, carrying with them a set of expectations for rhetors inhabiting them.³⁹ These expectations more often than not serve the status quo. While scientific *ethos* may precede an individual scientist, such *ethos* is always already masculine, as women have been more excluded from science than from almost every other profession.⁴⁰ Hilary Rose explains that women who are practicing scientists “have to handle a peculiar contradiction between the demands on them as caring laborers and as abstract mental laborers,” creating a paradox in terms of appeals to *ethos*.⁴¹ Because women are associated with nature, irrational/emotional bodily thinking, and the private sphere, they violate gendered norms even by entering the scientific profession, which is characterized as objective, rational, and masculine.⁴² In sum, *ethos* concerns much more than rhetorical skill; societal expectations, which are inextricably linked to power and injustice, create unique barriers for those who are not seen as fitting or familiar within a given role.

Marginalized rhetors can work to negotiate such barriers in a number of ways. For example, they may explicitly address their position and attempt to leverage it—paradoxically—as an *ethos*.⁴³ Maegan Parker Brooks argues that civil rights activist Fannie Lou Hamer strategically posited her lack of power as a source of credibility.⁴⁴ Hamer “built upon her *ethos* as a representative of one of the country’s most oppressed people by suggesting that those furthest from the center hold valuable insight regarding the national malaise.”⁴⁵ Put otherwise, those most marginalized hold “epistemic privilege,” or knowledge gained through oppression, and can appeal to such knowledge as a rhetorical strategy.

More privileged individuals have made similar appeals in attempt to promote social justice. Belinda A. Stillion Southard turns to Elizabeth Cady Stanton and Harriot Stanton Blatch's public debate over immigrant and working class voting rights to argue that Blatch leveraged her own "epistemic entitlement" to grant epistemic privilege to oppressed persons. This served as an argument to persuade readers of *The Woman's Journal* that immigrants not only had a right to vote, but also possessed the appropriate knowledge.⁴⁶ Though this affirmed immigrants and the working class as rightful, educated voters, Stillion Southard argues that it simultaneously "objectified the members of these classes as capable but constrained actors."⁴⁷ Speaking to the epistemological advantages of oppression to bolster the *ethos* either of oneself or others is thus a practice exercised by the marginalized and privileged alike. Though it carries the serious risk of romanticizing oppression and, when used by the more privileged, can carry the problem of "speaking for," arguments grounded in epistemic privilege forge an important connection between knowledge and social location.⁴⁸

Feminist standpoint theorists have long argued that there are epistemic advantages to marginalization. By beginning their research with the lived experiences and practices of women, feminist standpoint theorists follow the Marxist belief that knowledge is produced out of the practices in which we engage.⁴⁹ Questioning masculinist beliefs in scientific objectivity, Dorothy Smith—a pioneer of feminist standpoint theory—pointedly argued in 1972 that, "being interested in something does not invalidate what is known."⁵⁰ Because no one can escape their perspective, Smith and other early feminist standpoint theorists argued that researchers should begin their work with the assumption that all work is shaped at least in part by the situatedness of the person(s) conducting it. Efforts of early feminist standpoint theorists—especially those of color—radically changed the sociological method in which the theory is primarily grounded. In

her well known essay, “Learning from the Outsider Within: The Sociological Significance of Black Feminist Thought,” Patricia Hill Collins pointedly explains how efforts of black female intellectuals to expose their statuses as “outsiders within” has moved the predominately white, male academy toward a more humanistic vision.⁵¹ By starting from the standpoint of the underprivileged, feminist standpoint theorists argue that we can expose the implicit and consequential biases of the scientific method while moving toward social justice.

There is a consensus among feminist standpoint theorists that standpoint differs from perspective. Whereas one may be born into a position or granted a perspective, standpoints are achieved through “reflection on and political engagement with one’s own position in society *in relation* to others’ positions.”⁵² Though anyone can critically reflect on their experiences and thus sustain a standpoint, it is more likely that members of oppressed groups will do so. Further, feminist standpoint theorists focus on the collective, political nature of standpoint. An effective political agenda necessitates “an understanding of the social and unifying features of its constituency.”⁵³ Thus, feminist standpoint theory focuses on shared, embodied experiences rather than individuals; however, the appeal to shared experience is the result of an articulation of multiple individual experiences.⁵⁴

Epistemic privilege is perhaps the major contribution of feminist standpoint theory, yet has been the focus of its intense criticism. Julia Wood explains feminist standpoint theorist’s argument regarding epistemic privilege: “Subordinate social locations are more likely than privileged social locations to generate knowledge that is ‘more accurate’ or ‘less false.’”⁵⁵ She offers three reasons for this belief: privileged individuals benefit from the oppression of others, and thus have reason to turn a blind eye to inequality; those living on the margins of society have a unique vantage point of social structures *and* are more likely to understand the vantage points

of those in power (they must in order to survive); finally, the oppressed are more likely to politically resist injustice.⁵⁶ Like many feminist theories, feminist standpoint theory has been charged with essentialism and ignoring differences between women.⁵⁷ D. Lynn O'Brien Hallstein explains the charge that feminist standpoint theory lumps all women together in claiming that they share a common experience of oppression, and is also argued to privilege heterosexual, well-off white women.⁵⁸ Yet feminist standpoint theory strategically views knowledge and experience as partial; it rejects the claim that knowledge can ever be objective.⁵⁹ As Patrice Buzzanell and colleagues write, "Rather than treating women as a monolithic group that holds coherent, shared group understandings, standpoints can be viewed as shifting and socially constructed consciousness, identities, and perceptions of what typically is taken for granted in group members' everyday lives."⁶⁰ At its core, feminist standpoint theory rejects the notion of a female essence; it is women's social location—not "essence"—that offers them the conditions through which to achieve a standpoint.⁶¹ This is not to say that all women share a common social location, but rather that the sexual division of labor operant in patriarchal culture creates a societal disadvantage for women in relation to men.⁶²

The concern with feminist standpoint theorists' validation of inarguably partial, experiential knowledge is less easily dismissed. Early feminist standpoint theorists did not take into account the ways in which epistemic privilege and experience itself are rhetorical constructs. Joan Scott problematizes the assumption that experience can serve as originary, uncontestable evidence.⁶³ Those who depict experience as unfiltered truth "locate resistance outside its discursive construction, and reify agency as an inherent attribute of individuals, thus decontextualizing it."⁶⁴ For Scott, the uniting function of "experience" necessitates the exclusion of other material practices that, in effect, are not counted as experience, "at least with any

consequences for social organization or politics.”⁶⁵ She argues that researchers must historicize experience by viewing it and the identities it produces as discursive. This point is well illustrated in Steingraber’s multiple “Letters from Chemung County Jail” written as part of a civil disobedience campaign against an energy company. After blockading company gates to prevent trucks from entering, Steingraber chose a fifteen-day jail sentence over paying a fine. Her “experience” in jail is, as Scott would argue, discursively produced, in no small part through the rhetoric of Martin Luther King Jr.’s “Letter from Birmingham Jail.” I explain the implications of this further in chapter four. When researchers identify cases in which experience is used rhetorically as evidence, they must be careful to recognize the ways in which language shapes articulations of experience.⁶⁶

What I want to suggest in this dissertation is that rhetoric offers the resources for considering how standpoints are actively constructed and thus not mere reflections of unproblematized “experience.” Standpoint is rhetorical, and often serves an argumentative function. Accordingly, I understand standpoint as a social, rhetorically constituted positionality that significantly shapes and is shaped by epistemology. This approach resists a temporal relationship between rhetoric and material positionality. By turning to Steingraber’s appeals to *ethos*, I show how her rhetoric both reflects and constructs her social positionality she shapes to promote regulation and abolition of toxins. Once again, she navigates this move with varying results. Whereas in some cases her appeals to knowledge acquired through her location function to raise awareness and promote social justice, in other cases she illustrates her location-based knowledge as evidence of her agency, thus exacerbating her privilege.

The few attempts to consider the relationship between standpoint and *ethos* illustrate the utility of merging the two concepts. Susan Jarratt and Nedra Reynolds argue that feminist

standpoint theory allows for an understanding of *ethos* as fundamentally concerned with ethics.⁶⁷ By explicitly speaking from a position, rhetors can take ownership for their words and thus emphasize the role of the rhetor in rhetoric. Jarratt and Reynolds write, “[T]he ideas of place, position, and standpoint in feminist theory offer us a way of reconceiving *êthos* as an ethical political tool—as a way of claiming and taking responsibility for our positions in the world, for the ways in which we see, for the places from which we speak.”⁶⁸ Attention to standpoint foregrounds the positionality of a rhetor to recognize the embodied nature of rhetorical practice while avoiding “naïve privileging of ‘individual’ experience,” and can thus amend—at least partially—Aristotle’s separation of rhetoric from ethics.⁶⁹

At the same time that standpoint can enrich our understandings of rhetoric, rhetoric is beneficial to theories of standpoint. As Glen McClish and Jacqueline Bacon point out, “The articulation of any standpoint requires a speaking character or voice that is constructed by discourse.”⁷⁰ Rhetoric—specifically *ethos*—is the means through which standpoints are communicated.⁷¹ For McClish and Bacon, “a rhetor creates an *ethos* that mediates the expression of one’s experiences and is inseparable from one’s standpoint.”⁷² Foregrounding *ethos* in feminist standpoint theory attends to the social nature of standpoint; a rhetor does not merely express her particular standpoint, but rather expresses it in a particular way that ideally allows her to connect with and persuade audiences.⁷³ Attention to standpoint benefits from an understanding of the role of identification that is part and parcel of rhetorical practice; because it is social and requires a rhetor to be expressed, the construction and political power of standpoint may be said to hinge predominately on rhetoric.

It is from these studies at the intersection of feminist standpoint theory and *ethos* that I make my departure to extend and complicate scholarly understandings of both, arguing that the

two concepts together can be mutually beneficial. While standpoint offers the resources for attending to the ways in which a rhetor's location (and thus privilege or lack thereof) shapes knowledge and thus rhetorical choices, a rhetorical perspective of standpoint offers the means for considering *how* appeals to epistemic privilege acquired through "location" are constituted. Together, the notions of *ethos* and feminist standpoint allow for greater attention to the political and ethical implications of location-based claims to credibility. Building from Alcorn's aforementioned work, I am also concerned with rhetors' internal self-divisions that they must negotiate in order to leverage locations or standpoints as *ethos*. In Steingraber's works, juxtaposition, metonymy, synecdoche, and appropriative use of irony serve as rhetorical devices through which negotiates her own locations *and* negotiates these locations with that of her audience, thus leveraging them as appeals to *ethos*.

Drawing on the resources of feminist standpoint theory to modify *ethos* illustrates how Steingraber negotiates her multiple ways of knowing to effect change despite violating scientific norms. Moreover, it shows the ways in which her privilege is simultaneously enabling and constraining. Whereas her earlier works shape her location as holding access to privileged knowledge that can then be used for the greater good, her more recent works illustrate her location as offering agency while paving over the conditions for such agency. Considering the relationship between Steingraber's rhetoric and "locations" shows that *ethos* involves not only a negotiation between rhetor and audience, but also a negotiation of the rhetor's unique positionalities. The chapters of this dissertation will showcase how, through various rhetorical strategies, Steingraber rhetorically constructs her standpoint to link her own material and epistemological locations to those of her audience. Moreover, they will offer an assessment of

Steingraber's development as it shifts in terms of rhetorical strategies and modes of address over her years of activism.

Preview of Chapters

Chapter two focuses on *Living Downstream*, in which Steingraber struggles with the epistemological tension between scientific knowledge and knowledge she has gained as a cancer patient and survivor raised in a highly contaminated Illinois community. Here, I argue that by juxtaposing lay and scientific understandings of cancer *and* juxtaposing scientific studies against personal experience, Steingraber portrays both ways of knowing as ultimately incomplete. This in turn produces a "critical interruption" of epistemological struggles over scientific authority in environmental controversy; by coupling her multiple ways of knowing as an appeal to *ethos*, Steingraber moralizes cancer research. Depicting her scientific knowledge of cancer as incomplete without her experiential knowledge allows her to negotiate the fact that she violates professional norms. Through strategic juxtaposition, she activates her self-division to moralize cancer, a disease that affects—directly or indirectly—almost everyone. In addition to explaining how Steingraber negotiates science and experience, this chapter rethinks rhetorical understandings of juxtaposition altogether. Rather than viewing it as a means to establish moral hierarchies, I show how juxtaposition can function to negotiate and thus unravel epistemological hierarchies altogether.

Chapter three takes on Steingraber's maternal *ethos* in *Having Faith* and *Raising Elijah*, her two books written specifically about her children. Whereas *Having Faith* focuses on her first experience being pregnant, giving birth, and breastfeeding her daughter, Faith, *Raising Elijah* has a much broader topical focus. Here, she takes on a unique environmental issue in each chapter (e.g., pressure-treated wood, organophosphates in food) and examines how it impacts parents'

abilities to serve their assigned roles as “protectors” of children. I argue that in *Having Faith*, a synecdochical rhetoric of representation works to situate responsibility for environmental toxicity in the public sphere. By depicting the health of the maternal body as representative of the health of the larger environment, Steingraber shows that the public sphere must be regulated to protect pregnant women and children. In contrast, the trope of reduction—metonymy—dominates *Raising Elijah* and recuperates troubling logics of motherhood by substituting the abstract notion of “parent protector” with Steingraber’s privileged maternal experiences. In both *Having Faith* and *Raising Elijah*, Steingraber leverages her standpoint as a scientific expert and mother as a means of credibility, yet a comparison of the two books shows how maternal appeals can be either problematic or productive in an environmental context. Thus, while maintaining the overarching argument of the dissertation, this chapter illustrates the limitations of speaking to one’s experience. Whereas analysis of *Raising Elijah* shows that Steingraber’s privileged maternal experience as cannot be generalized, *Having Faith* shows the power of depicting the maternal body as a synecdochical representation of the larger environment. In sum, changing the means of rhetorically linking her location to her readers from synecdoche to metonymy holds significant implications.

Finally, chapter four examines Steingraber’s most recent rhetoric, which focuses almost exclusively on hydraulic fracturing, a highly contested method of extracting oil and gas from shale formations deep beneath the earth’s surface. As part of a civil disobedience campaign in upstate New York (her current place of residence), Steingraber has elected to serve jail time rather than pay a fine for trespassing, committed when she and others blockade at the gates of an energy company’s construction site. While incarcerated, Steingraber has authored a series of “Letters from Chemung County Jail” wherein she posits jail time as, ironically, a means through

which activists can exercise their agency, show their dedication to the cause, and “walk their words.” Clearly inspired by Martin Luther King Jr.’s famous “Letter from Birmingham Jail,” Steingraber’s “Letters” “give credence” to her actions—and thus appeal to *ethos*—through the rhetorical appropriation of a collective rhetoric tethered to a social positionality that is vastly different from her own. This chapter highlights the notion of her activist standpoint as a rhetorical construct.

Chapter five summarizes and synthesizing the analyses of Steingraber’s works. It considers Steingraber’s activist trajectory as a whole, paying careful attention to the gradual tendency toward troubling tropes that exacerbate her privilege. It also offers a summary and expansion of the theoretical implications forwarded in this first chapter as well as questions, thoughts, and insights to further complicate this study.

CHAPTER 2

NEGOTIATING INCOMPATIBLE KNOWLEDGES THROUGH PERSPECTIVE BY (IN)CONGRUITY

In *Living Downstream*, Steingraber investigates the causes of her cancer through her dual identities as a biologist and cancer survivor. As she tacks back and forth between scientific research and her journey as a cancer survivor, Steingraber challenges the amorality of traditional scientific practices. Formal studies of cancer often focus on genes rather than environment, dehumanize cancer victims by making their identities and suffering invisible, and rely on constraining practices that de-politicize findings. At the same time that scientific research can hinder environmental justice, it serves as a crucial resource for understanding the relationship between cancer and the environment. Most publicly available information about cancer (e.g., organization websites, pamphlets in medical offices) minimizes scientific knowledge that does exist regarding environmental links to cancer. For example, “environmental factors” typically refer to lifestyle rather than quality of air, water, and soil, thus leading the public to believe that cancer can be avoided solely through good habits. In *Living Downstream*, Steingraber addresses both misconceptions of science *and* the incongruity between publicly available knowledge about cancer and research on carcinogens. Writing *Living Downstream* as a scientifically informed memoir allows her to combine the personal and scientific into a narrative that is at once personable and uncomfortably informative.

In environmental debate, personal and scientific ways of knowing have long been constructed as incompatible. When community members suffering the effects of contamination

draw on experience to advocate for change, they are often deemed too emotional to engage in serious problem-solving.¹ Similarly, when scientists speak personally, they violate norms of the scientific method and thus risk losing credibility; science is supposed to transcend individuals and context.² Thus, although personal narratives are recognized as key to bringing otherwise impersonal data to life, they often undermine *ethos*.³ How does Steingraber negotiate the bind between science and experience in *Living Downstream*? As a scientist, how and to what extent does she validate personal experience? How does she challenge the failure of science to adequately address the impact of environmental toxins on cancer?

In this chapter, I argue that Steingraber negotiates this epistemological bind through strategic juxtaposition. She pits “apparently conflicting or contradicting pieces of evidence in close proximity to one another” to show that science—crucial to informing the connection between cancer and the environment—is misleading and dehumanizing without experience.⁴ This argument extends theories of juxtaposition, traditionally understood as establishing a moral hierarchy between two elements.⁵ For Steingraber, a series of juxtapositions illustrate the incompleteness of multiple ways of knowing, thus negotiating rather than reifying a hierarchy between science and experience. In *Living Downstream*, juxtaposition serves as the “rhetorical link” between epistemological (and material) locations; it allows Steingraber to forward her self-division as constituting her *ethos* by simultaneously establishing expert knowledge while foregrounding her humanity.

By creating a rhetorical space between incongruous sources of information, juxtaposition “critically interrupts” taken-for-granted narratives and opens new ways of thinking.⁶ Gloria Anzaldúa’s articulation of epistemology and cultural “borderlands” illustrates the ways in which juxtaposition can inform standpoint. Anzaldúa takes the U.S./Mexico cultural and physical

borderland as her exemplar, arguing that those who inhabit this rhetorical “place of contradictions” carry a unique and potentially valuable perspective.⁷ As Norma E. Cantú and Aída Hurtado summarize, “[L]iving in the borderlands produces knowledge by being within a system while also retaining the knowledge of an outsider who comes from outside the system.”⁸ Cantú and Hurtado also argue that borderlands theory “applies to any kind of social, economic, sexual, and political dislocation.”⁹ For Steingraber, her perspectives as a cancer survivor and scientist constitute a place of contradictions; she inhabits two systems of knowing and is thus an “outsider” to each. Though Steingraber’s standpoint is fundamentally different from that of Anzaldúa, what borderlands theory helps to show is that inhabiting a contradictory location—or being exposed to two incongruous ways of seeing the world—can produce valuable insights. Drawing on her various epistemological and material locations, Steingraber’s rhetoric in *Living Downstream* illustrates the ways in which juxtaposition, *ethos*, and epistemology are inextricably linked, working together to shape scientific and experiential ways of knowing as incomplete rather than incompatible. As her location as a cancer survivor and biologist leads to privileged knowledge and affects her rhetorical choices, her rhetoric in turn shapes this positionality in specific ways. Through rhetoric, it becomes a standpoint that is at once tied to her positionality and rhetorical strategies.

In what follows, I first explain the relationship between science, experience, and *ethos* in the context of environmental anti-toxics efforts. I then describe juxtaposition as a theoretical concept, and explain how it can serve not only to constitute moral hierarchies but may also *negotiate* perceived incongruities. Next, I offer an analysis of *Living Downstream*, showing how Steingraber draws on juxtaposition to supplement publicly available knowledge with scientific research while challenging scientific research itself. Ultimately, Steingraber promotes the

“precautionary principle,” a way of thinking that presumes no chemical should be released in commerce until proven safe. This perspective relies on the resources of science to prove chemical safety while prioritizing human and planetary health. The chapter concludes by reviewing the implications for understandings of personal narratives in scientific *ethos* as well as for theoretical constructions of juxtaposition.

Scientists as Public Advocates and the Struggle with *Ethos*

The sequestering of environmental discussions to the technical domain is a major barrier to environmental justice.¹⁰ As Robert Cox and Phaedra Pezzullo write, “An important theme in the discourse of environmental justice is the right of individuals in at-risk communities to participate in decisions affecting their lives.”¹¹ Yet because participation in environmental decision-making necessitates at least some competency in scientific dialogue, it is difficult to ensure decisions are reached democratically.¹² If members of the public lack in technical knowledge, they are often deemed as having “indecorous voices” because their perspectives lie outside the norms of formal decorum. Cox and Pezzullo argue that the notion of the indecorous voice is “based in the assumption that ordinary people may be too emotional or ignorant to testify about chemical pollution or other environmental issues in settings that privilege ‘rational’ or logical rhetorical appeals.”¹³ Members of the public engage in two primary rhetorical strategies to negotiate this tension: they may increase their knowledge of science to ground their arguments for justice in evidence and data, or they may speak to personal stories. Both of these strategies carry risks.

The perceived incompatibility of scientific and experience-based arguments places environmental advocates in a bind wherein both types of appeals can simultaneously bolster and undermine *ethos*. Scientific support is almost necessary to being heard, yet may be unmoving.¹⁴

Paradoxically, when advocates incorporate personal appeals to *pathos* in order to make data more compelling, their *ethos* often suffers. Speaking to personal stories and experiences violates the norms of scientific decorum as well as the constructed divides between rational mind vs. pre-rational body, objectivity vs. subjectivity, and science vs. experience. The challenges facing environmental advocates are thus significant: they must have technical knowledge of science, and must make data moving in a way that appeals to emotions without undermining credibility.

Multiple scholars have suggested that scientific experts have a unique capacity and perhaps a moral obligation to explain and politicize the social implications of scientific research.¹⁵ The Sierra Club and other groups have long grounded their political arguments in scientific evidence, yet M. Jimmie Killingsworth and Jacqueline Palmer argue that “even more important than the effort of environmentalists to assimilate scientific findings . . . has been the politically motivated writing of a few well-respected and talented representatives of the scientific community itself.”¹⁶ While scientists who speak publicly as environmental advocates may be able to use their expertise to effect change, they face unique constraints of their own. When scientists inform their research with more subjective ways of knowing, they challenge the fundamental assumptions of scientific practice. As Sandra Harding states, “The idea that the very best research . . . does and should ‘speak’ from particular, historically specific, social locations has been out of the question for standard research norms.”¹⁷ Not surprisingly, then, Rachel Carson was harshly criticized for writing *Silent Spring* for a public audience; she was dismissed as unprofessional, unscientific (she held only a master’s degree and had not published any peer-reviewed research), a hysterical spinster, and a pro-communist.¹⁸ Though science was the basis for her arguments for pesticide regulation, Carson had broken the divide between facts and

values.¹⁹ Scientists may be expected to act as public advocates, but doing so requires they boldly challenge the status quo.²⁰

Advocates such as Carson and Steingraber are typically well aware of the risks that come with violating academic norms. To navigate these constraints and attempt to sustain her *ethos*, Carson exposed the uncertainties about pesticides within the scientific community. As Kenny Walker and Lynda Walsh argue, uncertainty is a powerful rhetorical device for environmental advocates and plays a key role in motivating the public to engage debate and take action.²¹ Turning to *Silent Spring* as an example, they explain how Carson foregrounded scientific uncertainty about pesticides “to erode the factual status of the safety of chemical toxins and to provide a bridge for public valuation of science.”²² Foregrounding scientific uncertainty enabled Carson to rationalize her abandonment of the traditional scientific process and frame the pesticide issue as moral. Following her footsteps, Steingraber depicts the uncertainties inherent in the scientific method as troubling rather than comforting. Yet unlike *Silent Spring*, personal narratives are essential to supporting *Living Downstream*’s argument for precautionary policy.

In environmental scholarship, personal narratives are typically explained as giving life to facts in order to move and persuade audiences. Robert Musil describes Steingraber’s rhetoric in *Living Downstream*: “The subjects, without Steingraber’s personal narrative would seem mind-numbing or mundane.”²³ Similarly, Lisa Sideris states that Carson and Steingraber are necessary because facts “do not always speak for themselves.”²⁴ I suggest that personal narratives can play an even greater role than simply bringing “facts” to life. If personal narratives functioned merely to motivate readers to care about data, then *Silent Spring*—written without reference to the author’s experiences—would arguably not have had such a profound impact on environmentalism. Certainly, since *Silent Spring* it has become more permissible for scientists to

speak as environmental advocates as activists of the twentieth century have worked to legitimize the personal as political.²⁵ Yet new problems have arisen: chemical use has dramatically *increased* since the time of *Silent Spring*.²⁶ In the United States especially, regulation of potentially toxic chemicals is very loose; as Steingraber notes, lack of proven safety often serves as an implicit argument *for* safety. Explaining how we know nothing about most of the chemicals in commerce, she writes, “Too often, this unknowingness is paraphrased as ‘there is no evidence for harm.’ And this in turn is sometimes translated as ‘the chemical is harmless.’”²⁷ Steingraber, then, benefits from her readers’ familiarity with environmental advocacy, yet still faces a number of significant constraints as an environmental writer. As the analysis section of this chapter shows, she moralizes research by supplementing it with a more personal perspective, thus correcting common mistranslations of scientific information.

In *Living Downstream*, Steingraber seeks to dislodge assumptions about chemical safety. In reference to Carson, Steve Maguire and Cynthia Hardy argue that those who are “outsiders” of the scientific community can “produce and distribute texts to promote particular meanings of practices (i.e., as problematic) and build a case for their abandonment.”²⁸ Once again, I argue that Steingraber does this in *Living Downstream* by linking her epistemological and material locations to those of her audience through strategic juxtaposition. Rather than creating a hierarchy between her knowledge as a cancer survivor and as a biologist, she merges *both* together as a source of credibility. Inclusion of her personal knowledge acquired as a cancer patient and survivor serves as a strategy for humanizing significant scientific findings. In *Living Downstream*, scientific and personal knowledge are no longer incompatible; through juxtaposition, each becomes incomplete without the other.

“Shattering Pieties”: Strategic Juxtaposition as Perspective by Incongruity

Juxtaposition is a form of “perspectives by incongruity” that involves the placement of two incongruous arguments, images, or words alongside one another. Perspective by incongruity is “the wedge that pries apart established linkages” and “prepares for a new fusion.”²⁹

Established linkages that are pried apart might be thought of as *pieties*; piety is, as Burke puts it, “*the sense of what properly goes with what*.”³⁰ When rhetors juxtapose incongruous ideas, they shatter pieties, challenge the status quo, and encourage new ways of thinking and speaking.

Juxtaposition works to create a “fracture” that encourages audiences to resolve the incongruity by opening space for new ways of thinking.³¹ As Kimberly Powell puts it, “The strategy of juxtaposition allows a rhetor to highlight societal flaws, letting the listener draw the desired conclusion.”³² Heather Brook Adams points to artist Nell Brinkley’s images of modern womanhood as an example. By juxtaposing images of working women and women of the leisure class, Brinkley created the space for audiences to engage in critical reflection and cognitive dissonance.³³ For Brinkley, strategic juxtaposition worked by “encouraging audiences to recognize and grapple with sometimes invisible, sometimes uncomfortable differences that surround them.”³⁴ Similarly, Steven Schwarze argues that purposeful juxtaposition can encourage audiences to make moral choices between incongruous rhetorics.³⁵ He turns to the context of the asbestos contamination crisis in Libby, Montana, where high rates of lung cancer, asbestosis, mesothelioma, and over 200 deaths have been attributed to a mining operation active between 1963 and 1990. News coverage of the crisis heightened moral outrage by pitting victims’ statements regarding the exposure against company and government statements minimizing knowledge and assuring safety. Schwarze writes, “Juxtaposition creates the appearance of an incongruity between symbolic characterizations of reality, and it encourages

audiences to take sides and make judgments in order to resolve the incongruity.”³⁶ Whereas incongruous images of women shatter pieties about gender norms, incongruous knowledges about environmental contamination challenge notions of government and employers as protectors of U.S. workers. When faced with such juxtapositions, audiences are encouraged to question dominant constructions of reality and make moral judgments.

Juxtaposition is most often concerned with establishing a hierarchy. This is indeed the case in Schwarze’s example, in which such melodramatic framing encourages readers to pick sides between victims and villains. Clearly, victims’ claims and the data that backs them are morally superior to those offered by industry and government officials. Moreover, as Julia Allen and Lester Faigley argue, “[B]y juxtaposing one ideological correctness with another, of a different ideological stripe, the two call each other into question. And it is more likely that the less powerful one will act upon the other in such a way as to reduce its power.”³⁷ Though juxtaposition is typically understood as privileging one of the elements, Megan Elizabeth Morrissey argues that incongruities can encourage audiences to critically analyze *both* components of the juxtaposition.³⁸ In *Living Downstream*, Steingraber employs strategic juxtaposition to call scientific practice and popular literature on cancer into question. Juxtaposition functions not only to criticize each component, but also to merge the two together. In effect, Steingraber produces a new understanding of the relationship between cancer and the environment.

Steingraber forwards a set of juxtapositions to illustrate the incompleteness of isolated knowledge about cancer and the environment. She pits public knowledge against science to show the limits of the former, yet also juxtaposes her knowledge as a scientist with her knowledge as a cancer patient to show that, without a human perspective, science is always at risk of becoming

apolitical. Rather than employing juxtaposition to privilege one perspective over the other, juxtaposition in *Living Downstream* works to negotiate rather than reify dichotomies as Steingraber leverages her different bases of knowledge as together constituting an *ethos*. She is at once like her readers and possesses valued, privileged knowledge well above most of those for whom she writes.³⁹

Linking Incomplete Knowledges and Cultivating *Ethos* Through Strategic

Juxtaposition

Following Carson's *Silent Spring*, *Living Downstream* depicts the primary exigencies of the environmental crisis as both the public's lack of knowledge about environmental causes of cancer and their general inability to recognize the "*suasive* nature of even the most unemotional scientific nomenclature."⁴⁰ The primary difference between the two books is the strategies employed to address these exigencies. To illustrate the ways in which science is—though useful—not objective and in fact often borders on politically immoral, Steingraber writes *Living Downstream* as a scientifically informed memoir of her experiences as a cancer patient. Though speaking personally would have been detrimental to Carson's *ethos*, memoir offers a fitting genre for Steingraber to address the rhetorical exigence of gaps in knowledge. Following Carolyn Miller, I understand genre as "a rhetorical means for mediating private intentions and social exigence; it motivates by connecting the private with the public, the singular with the recurrent."⁴¹ By negotiating rather than dichotomizing her knowledge as a scientist and as a cancer survivor, Steingraber forwards an *ethos* based in her unique positionality that is at once privileged and peer-like. That is, she "finds a way through" her seemingly contradictory standpoints. She draws on the rhetorical resources of juxtaposition to supplement scientific

research with personal experience *and* to supplement public knowledge with scientific data. Scientific research thus serves as supplement and is itself supplemented.

Steingraber juxtaposes what she learned through research with what she learned as a patient to illustrate a jarring gap in publicly available information about cancer. After bladder cancer struck her at age twenty, Steingraber sought to investigate potential causes. Through preliminary research, she quickly learned that bladder cancer has strong connections to environmental contamination, “meaning that more evidence exists for a link between toxic chemical exposure and bladder cancer risk than for almost any other kind of cancer, with data going back a hundred years.”⁴² At the same time that she conducted research as a graduate student, Steingraber underwent regular treatments and check-ups. As a patient, she observed that public information about cancer contained almost no mention of environmental carcinogens; the words “environment” and “carcinogen” were also absent in conversations with medical providers. Instead, she notes she was “was asked again and again about my family medical history.”⁴³ Whereas medical doctors were concerned with genetics, scholarship on carcinogens emphasized the role of environment. After juxtaposing her research findings with her experiences as a patient, Steingraber concludes, “There seemed to be a disconnect between the evidence that medical researchers had compiled about the environmental origins of bladder cancer and what patients heard about that evidence.”⁴⁴ She pits two incongruous narratives against one another; one story of bladder cancer foregrounds its environmental causes while another altogether neglects a discussion of environment. In effect, she offers scientific evidence as a necessary supplement to publicly available knowledge. Without scientific knowledge of environmental links to cancer, the public is left with an incomplete picture of her own and many others’ suffering.

Later in the book, Steingraber shows that this gap has not been solved since the time of her diagnosis when she was twenty. She juxtaposes her knowledge as a biology professor (rather than student) and cancer survivor. Because bladder cancer has one of the highest rates of reoccurrence amongst all cancers, Steingraber spends a substantial portion of her time subjecting her body to precautionary scrutiny (i.e., cystoscopies). As she juggled her roles as patient and professor, Steingraber began comparing information distributed in medical offices with research on cancer as portrayed in genetics textbooks. In *Living Downstream*, she summarizes the difference between knowledge given to patients and that she offers her biology students. This example of juxtaposition is most powerfully shown in its entirety:

On the topic of how many people get cancer, a pink and blue brochure published by the U.S. Department of Health and Human Services offered the following:

Good News: Everyone does not get cancer. 2 out of 3 Americans will never get it.

Whereas, according to *Human Genetics: A Modern Synthesis*:

One of three Americans will develop some form of cancer in his or her lifetime, and one in five will die from it.

(Since these materials were published, the proportion of Americans contracting cancer has risen from 30 to 40 percent.)

On the topic of what causes cancer, the brochure states:

In the past few years, scientists have identified many causes of cancer. Today it is known that about 80% of cancer cases are tied to the way people live their lives.

Whereas the textbook contends:

As much as 90 percent of all forms of cancer is attributable to specific environmental factors.

In regard to prevention, the brochure emphasizes individual choice and responsibility:

You can control many of the factors that cause cancer. This means you can help protect yourself from the possibility of getting cancer. You can decide how you're going to live your life—which habits you will keep and which ones you will change.

The genetics book presents a somewhat different vision:

*Because exposure to these environmental factors can, in principle, be controlled, most cancer could be prevented. ... Reducing or eliminating exposures to environmental carcinogens would dramatically reduce the prevalence of cancer in the United States.*⁴⁵

Whereas information available to patients contains a neoliberal “glass half full” mentality, the textbook paints a more unsettling picture. Publicly available literature leads readers to believe that cancer is either a random misfortune or preventable through individual change. By juxtaposing these contradictory pieces of information against one another, Steingraber exposes the flaws with “lay” information about cancer. Scientific research fills this gap, enabling readers to reinterpret this information through a new lens. Steingraber inhabits a unique location; she has access to scientific literature, and at the same time is regularly exposed to non-scientific discourses of cancer. Through juxtaposition, she foregrounds her multiple positionalities as offering her unique knowledge; together, they become her main source of *ethos*. Her unique “position” functions to bolster her credibility as both a relatable peer who has experienced suffering from cancer first hand, and as an expert.

While the above examples illustrate how science can supplement or reframe public literature, Steingraber also draws on juxtaposition to portray personal knowledge as a crucial supplement to scientific knowledge. Though experience by itself cannot serve as uncontested “truth,” Steingraber draws on experiential evidence strategically to politicize scientific findings, using it as supplementary rather than primary support.⁴⁶ For example, she compares DDT to atrazine, one of the most commonly used pesticides in the United States. Research on atrazine is inconsistent and confusing: some studies have shown its dangers, while others have dispelled them. The chemical causes breast cancer in one type of rat, but some say the means by which it does this is irrelevant to humans. Most studies have shown no link to adult exposure to atrazine

and risk of breast cancer, but Steingraber notes that no human study has examined early-life exposure to the chemical. Atrazine is banned throughout the European Union, and there is more evidence of its toxicity than there was for DDT at the time it was banned.⁴⁷ After sharing this factual information, Steingraber abruptly moves to speak from a more personal standpoint as a native of central Illinois. She thus juxtaposes two epistemological leanings:

Ten thousand years of tallgrass prairie have left a fainter trace on the place I call home than twenty-seven years of DDT, forty-six years of PCBs, and fifty years of atrazine. Because it is my home, I am driven to pursue the question of the past and ongoing contamination of Illinois and its possible link to increasing frequency of cancer there. . . . I think it is reasonable to ask—nearly a half century after *Silent Spring* alerted us to a possible problem—why so much silence still surrounds questions about cancer’s connection to the environment and why so much scientific inquiry into this issue is still considered “preliminary.”⁴⁸

Aligning with Alcorn’s notion of *ethos* as created by the activation of self-division and self-conflict, this juxtaposition does not function to make an explicit argument. Rather, the writing is tentative, guided by experience, and invites the audience to engage cancer’s connection to the environment; in this sense, her rhetoric aligns with what Karlyn Kohrs Campbell and others have described as “the feminine style.”⁴⁹ As Sara Hayden explains, “A rhetor utilizing feminine style neither demands nor insists but instead she suggests, invites, and requests.”⁵⁰ Steingraber subtly draws on the personal to imply that research is considered preliminary because scientific practices allow it to be considered as such. Inconsistencies in studies on atrazine provide policy makers with the rhetorical resources to stall action. Through juxtaposition, Steingraber shows that science must be supplemented with—not (presented as) separated from—experience. She

does not create a hierarchy, but rather draws on juxtaposition to negotiate the two ways of knowing; favoring one over the other is insufficient.

In a second example, Steingraber challenges traditional scientific practice by juxtaposing her biological understanding of the environment to her perspective as a cancer survivor. She describes the concept of “ecological fallacy,” which refers to the tendency to assume that association signals causation. When she worked as a field biologist studying pine tree reproduction in Minnesota, Steingraber struggled to avoid ecological fallacy. The absence of pine tree seedlings correlated with both high deer and hazel shrub populations as well as with a low frequency of forest fires. It was difficult to tell which of these, if any, prevented the trees from reproducing.⁵¹ As a scientist, Steingraber was particularly attuned to the dangers in assuming that co-occurring patterns are causally related. Applying this concern to the context of toxins in commerce and occurrences of cancer, it is difficult, if not impossible, to discern whether a specific chemical causes a specific type of cancer. Scientific study thus leaves questions unanswered. Steingraber follows this point by invoking her “non-scientific” perspective:

[A]s a woman with cancer who grew up in a county with numerous hazardous waste sites, several carcinogen-emitting industries, and public water wells that, from time to time, show detectable levels of toxic chemicals, I am less concerned about whether the cancer in my community is more directly connected to the dump sites, the air emissions, the occupational exposures, or the drinking water. I am more concerned that the uncertainty over details is being used to call into doubt the fact that profound connections do exist between human health and the environment. I am more concerned that

uncertainty is too often parlayed into an excuse to do nothing until more research can be conducted.⁵²

Through this juxtaposition, Steingraber heightens the immorality of the use of science to serve certain corporate interests. By focusing on precision, definitive causal relations, and the isolation of specific elements, scientific understandings of environment are vulnerable to problematic translations as “uncertain.” Through juxtaposition, Steingraber “wedges apart” linkages between science and objectivity. In turn, she opens the space for a new fusion; in the example above, she frames science as overly rigid, implying that practices should *not* transcend context. Considering the perspective of cancer patients can correct this problem. Through juxtaposition, Steingraber “contextualizes different forms of knowledge about the situation, altering the dynamic of certainty and uncertainty surrounding the situation . . . [and] heightens moral outrage.”⁵³ This example of juxtaposition splits science from objectivity without undermining its usefulness altogether; Steingraber’s scientific knowledge of cancer is not incongruous with her knowledge acquired as a survivor.

In these various juxtapositions, Steingraber activates her internal self-division. By drawing heavily on science to support her arguments, Steingraber appeals to cultural values to cultivate a primary source of her *ethos*, yet paradoxically destabilizes its authority.⁵⁴ Though risky, it is precisely this instability that allows her to break down divides between rational mind vs. pre-rational body, objectivity vs. subjectivity, and science vs. experience. Once again, I understand *ethos* as a rhetorical negotiation between audience and rhetor. Michael Truscello notes that, “This social negotiation of ethos is especially problematic for scientists who conceive of their ethos as self-evident, as something defined from within the boundaries of ‘science’ as it is broadly conceived.”⁵⁵ Drawing on her experience makes Steingraber relatable, as evidenced in

her personal conversations with friends, check-ups at the doctor, and visits to her hometown. At the same time, her expert knowledge of biology makes her an “outsider within.” By juxtaposing scientific research with publicized information on cancer *and* juxtaposing scientific research with a personal standpoint, Steingraber portrays science as both a critical and incomplete resource for decision-making. Rather than reifying the dichotomy between experience and science—which Steve Schwarze notes is a danger of juxtaposition—Steingraber activates her internal division, breaks down epistemological barriers, and invite her readers to consider the questions her own standpoint leads her to ponder.⁵⁶

Steingraber also draws on juxtaposition to highlight the ways in which science inequitably benefits the privileged and works to the detriment of the disenfranchised. In her chapter “Space,” Steingraber juxtaposes the struggles of two different contaminated communities: the financially well-off area of the Upper Cape Cod in Massachusetts, and the lowly populated community of Normandale, Illinois, located just a few miles from Steingraber’s hometown. Normandale sits at the crux of a number of polluting sites: a dumping pond for industrial waste, several chemical companies, a coal-burning power plant, an ethanol distillery, and a landfill that was closed in 1988 after the discovery of twenty barrels of leaking “tarry substance.”⁵⁷ Cancer rates in Normandale are high. In 1991, cancer patients inhabited half the homes on one street, and one neighborhood had fourteen cancer diagnoses within ten years. Steingraber explains, “These numbers were calculated by the people themselves and presented to the health department and the local newspaper. A citizens’ group was organized and a letter dispatched to the Tazewell County Health Department requesting an investigation of cancer incidence in their community.”⁵⁸ Residents of the community relied on scientific evidence to prove that toxins threatened human health. The studies conducted in Normandale—one by the

state and one by the county—ultimately failed the community. The first study (supported by the second) was summarized in the local newspaper heading: “AREA CANCER RATES NORMAL.”⁵⁹ The heightened cancer rates may have been *normalized*, but residents certainly knew there was nothing “normal” about them.

Steingraber carefully unpacks the flaws of both studies conducted on Normandale’s cancer rates. “Neither involved mapping disease patterns, identifying pollution sources, estimating actual exposures, locating those who had moved away, or, for those who had died, interviewing their next-of-kin.”⁶⁰ Public health officials did not even visit the community as part of the study. The second study was based on surveys mailed to 184 residences; only sixty-seven completed forms were returned, among which only eight cancer cases were mentioned. Steingraber notes that any layperson could identify the flaws with each study: the sample was too small, and it was impossible to determine whether or not it represented a random sample, though she notes it likely did not. She suggests that those who did not return the surveys might have been taking care of cancer patients, and highlights the multitude of inconveniences a cancer diagnosis creates (e.g., grief, finances, struggles with insurance). She asks, “How can silence be statistically evaluated? How can such a flawed, limited response to a questionnaire lead to an assertion that there is no problem?”⁶¹ Following the first study, the second study in Normandale ultimately reported that there was no cancer cluster in the community.

Steingraber juxtaposes the story of Normandale by following with that of the Upper Cape, and in doing so further magnifies the flaws in scientific studies of cancer clusters. Throughout the chapter, she interrupts her discussion of science and space with these two stories, thus fracturing the piety linking science to environmental justice and allowing her readers to “‘see’ from an alternative vantage point.”⁶² In the 1980s, Upper Cape residents complained of

unusually high cancer rates in the area. They questioned the possible connection between cancer and environmental toxins, which included pesticide use in cranberry bogs and golf courses, DDT sprays aimed at eradicating the gypsy moth in the 1950s, and toxins from military sites.⁶³ As in Normandale, citizen pressure led to two studies, yet the Cape studies confirmed citizens' concerns that cancer was disproportionately high in the area. Steingraber explains the research conducted on the Upper Cape:

Organized in a case-control fashion, the study's cases comprised Upper Cape residents diagnosed with cancer between 1983 and 1986, and the controls were a random sample drawn from the entire population of Upper Cape residents. . . . The study was impressively thorough: when dealing with people who had already died from their disease, researchers matched them with nonliving controls—people who had died from other diseases whose names were randomly selected from death certificate registries.⁶⁴

The study also controlled for lifestyle habits such as smoking, and involved interviews with next-of-kin to those who had already died. The study resulted in a statement that there was “ample cause for concern.”⁶⁵ Why did the study in the Cape confirm residents' concerns, whereas the study in Normandale did not? Why was the study in the Cape so sound, whereas the analysis of Normandale had such obvious flaws? Through this perspective by incongruity, Steingraber highlights “contradictions in the social order,” encouraging her audience to consider seemingly objective scientific research as influenced by those who conduct it.⁶⁶

The cases of Normandale and the Upper Cape pointedly illustrate feminist standpoint theorists' concern that social inequality shapes scientific questions and methods.⁶⁷ Steingraber's position as a current resident of eastern Massachusetts and former resident of central Illinois affords her unique knowledge. Whereas she met with Cape residents at a beachfront conference

center, she met residents of Normandale in the back room of a local towing business. The effects of inequality on science thus become obvious in the most basic of ways. The resulting report from the studies in Massachusetts was over five hundred pages; the two studies on cancer in Normandale combined to reach just eight. Residents of the Cape had resources simply unavailable to those in Normandale. By presenting readers with two incongruous narratives—that of the Cape and that of Normandale—Steingraber encourages them to resolve the incongruity by considering how scientific findings are inextricably linked to the questions asked, the resources available, and the methods employed.

Examining the conditions of possibility that allow science to both promote and stall environmental action necessitates that science is not the *only* grounds for Steingraber's credibility. The passages in which Steingraber foregrounds her standpoint as a cancer survivor are thus crucial to the thrust of *Living Downstream*. Rather than merely bringing data to life, personal experience serves to supplement and moralize it; as currently practiced, science is simply not enough. Steingraber calls for precaution in the face of ignorance. Cancer represents the human cost of an economy dependent on the production and distribution of toxic chemicals, the majority of which have not been tested. We know little to nothing about how they interact with other chemicals and with human bodies, or how/if they persist over time. "Science loves order, simplicity, the manipulation of a single variable against a background of consistency. The tools of science do not work well when everything is changing all at once."⁶⁸ Nor do they work well when inequitably distributed, as evidenced in the cases of Cape Cod and Normandale. Although the resources of science are critical to understanding the relationship between environmental toxins and human health, science itself must be exposed as both non-objective and deeply embodied.

In *Living Downstream*, juxtaposition functions to foreground epistemological divides and, in effect, negotiate them. Schwarze explains that juxtaposition can reify the dichotomy between scientific expertise and personal experience, yet his analysis concerns the juxtaposition of statements by those responsible for contamination with statements by those who have suffered the effects.⁶⁹ In contrast, Steingraber juxtaposes a series of different bodies of knowledge about cancer and the environment: lay, publicly available knowledge against scientific research, scientific research against personal experience, and one scientific study of a cancer cluster against another. Together, this series of juxtapositions works to shape various ways of knowing as incomplete. Steingraber's *ethos* rely on these various incomplete ways of knowing; through juxtaposition, she links them together, establishing her scientific authority while humanizing the scientific method.

Conclusions

In *Living Downstream*, Steingraber draws on strategic juxtaposition to address the exigence of (mis)information about cancer and the environment. She frames her standpoint(s) as offering a unique awareness of pitfalls in knowledge. Thus, her development of a standpoint is rhetorical. At the same time, it is also shaped by her positionality. As a trained scientist, she sees the value in understanding how chemicals and toxins interact with the environment and human bodies. As a cancer survivor, she is frustrated with the inability of science to persuade political and business leaders and to enact change. Drawing on the rhetorical resources of juxtaposition enables her to portray "science" as a necessary yet incomplete basis for action. By showing the failure of science to provide justice *and* the troubling absence of scientific research in publicly available information on cancer, she bolsters her standpoints as constituting her credibility and elevates the need for rhetorical action.

Illustrating the need for both a personal and scientific eye (specifically her own), Steingraber “critically interrupts” epistemological struggles over scientific authority in environmental controversy.⁷⁰ Cancer cannot be reduced to a random misfortune or an unfortunate consequence of unhealthy living, and science must be exposed as strongly influenced by resources and constrained by method. Steingraber conveys the personal consequences of environmental contamination while avoiding an overreliance on experience. Of course, this is made possible by the fact that she is privileged enough to do so. With a Ph.D. in Biology and a master’s in Creative Writing, Steingraber has the resources to share knowledge in a way that is accessible to the public. With these resources in hand, she challenges the dichotomies of science/experience and ontology/epistemology through strategic juxtaposition. *Living Downstream* calls for an appreciation of both human agency and scientific knowledge while positing that neither alone effect changes.

The arguments put forth in this chapter challenge notions of personal narrative as merely “bringing science to life.” Steingraber’s personal experiences as a cancer patient and survivor are critical to the thesis of *Living Downstream*: toxins must be proven safe before allowed into the environment. A personal, humanizing perspective reinterprets scientific uncertainty; the logic of precaution holds that the benefit of the doubt must be granted to human and planetary health. Experience serves as critical *evidence* of scientific failure and is crucial to Steingraber’s challenge to the scientific method. Though her voice may be “indecorous,” she shapes her standpoints as offering her permission to violate such norms. She does not dismiss the importance of science or posit experience as more valuable; rather, science must be *amended* or *reinterpreted* to benefit environmental justice. In *Living Downstream*, Steingraber bolsters her

ethos by upholding the significance of both science and experience without relying too heavily on either.

This analysis also contributes to theoretical understandings of juxtaposition. Schwarze, Demo, and Allen and Faigley all analyze examples of juxtaposition that privilege one component over another.⁷¹ Through multiple juxtapositions, Steingraber negotiates rather than reifies the troubling dichotomy between science and experience. As feminist standpoint theory shows, science cannot serve as uninterested, objective truth. Neither can experience. As Joan Scott argues, portrayals of experience as originary, uncontested evidence “locate resistance outside its discursive construction, and reify agency as an inherent attribute of individuals, thus decontextualizing it.”⁷² Rather than employing juxtaposition to privilege one component over the other, Steingraber challenges the science/experience dichotomy. Whereas in some juxtapositions the scientific method is an insufficient basis of knowledge, in other cases the absence of scientific information is deeply troubling. Science thus sits on both ends of a hierarchy. Inhabiting a “place of contradictions” as a biologist and cancer survivor, Steingraber understands science as offering powerful information in need of reinterpretation; it must be moralized.⁷³ Though she forwards a series of perspective by incongruity, she ultimately illustrates their congruity. In *Living Downstream*, juxtaposition allows Steingraber to piece a puzzle together for her readers. By presenting them with jarring gaps in knowledge, she encourages them to complete the story.

The current constraints on scientific research and findings hinder environmental progress. Through scientific memoir, Steingraber illustrates the virtues and pitfalls of science in order to inform her audience while at the same time teaching them to be critical consumers of information. She shatters pieties toward the end goal of strategic perspective by incongruity:

demystification. As a “comic corrective” of normative pieties, perspective by incongruity “engenders a form of social criticism that seeks to correct the inadequacies of the present social order through demystification rather than revolution.”⁷⁴ Thus, juxtaposition serves as a strategy for addressing the exigence of insufficient information; it “demystifies” the lack of clarity regarding environmental links to cancer, but is less effective in offering the resources to promote material action. Yet demystification is no small feat. By foregrounding her internal conflict between science and experience as an *ethos*, Steingraber encourages her readers to consider new ways of thinking about science, cancer, and economic dependence on toxic chemicals.

CHAPTER 3

SCOPE, REDUCTION, AND (SCIENTIFIC) MATERNAL *ETHOS*: FROM MOTHERHOOD
AS AN ETHIC OF CARE TO LIMITED, LITERAL MOTHERHOOD

Maternity is central to Steingraber's rhetorical appeals in *Having Faith: An Ecologist's Journey to Motherhood* (2001/2003) and *Raising Elijah: Protecting Our Children in an Age of Environmental Crisis* (2011). Both books explicitly reference her children, Faith and Elijah. In *Having Faith*, Steingraber charts her first-ever experiences being pregnant, giving birth, and breastfeeding. Throughout the book, she builds the case that toxins should not be released in commerce until proven safe for pregnant women, whose fetuses are especially vulnerable to the effects of chemicals.¹ Whereas *Having Faith* is largely confined to issues of reproduction, *Raising Elijah*—published a decade later—covers much more topical ground. *Raising Elijah* serves as a guide for parenting in a toxic environment. Here, Steingraber addresses a multitude of environmental concerns including air quality, hydraulic fracturing, pesticides, and climate change. Each chapter connects public and private spheres by tying a seemingly mundane activity (e.g., bicycling) to a larger political issue (e.g., hydraulic fracturing). *Raising Elijah* posits the environmental crisis as first and foremost a parenting crisis; in the forward to the book, Steingraber argues that, “because the main victims of this unfolding calamity are our own children, this book speaks directly to parents.”² Whereas *Having Faith* confines motherhood to issues related to reproduction, *Raising Elijah* stretches parental concerns to include the entire scope of the environmental crisis.

There is a rich history of women drawing on their domestic roles—especially motherhood—to acquire *ethos* in the public sphere.³ As Kathryn Abrams explains,

When women, who have historically been sequestered from the public realm, have entered the sphere of protest and political critique, they have had to rely on those gendered characteristics that constitute their more limited sources of authority. These characteristics include motherhood, the capacity for care and order that stems from domestic responsibility, and a particular kind of conformist moral virtue traditionally associated with these gender roles.⁴

Historically, the public sphere and thus politics have been gendered male. Thus, women challenge gender norms simply by engaging in political critique. By couching concerns in their authority over issues of caregiving and family life, women have drawn on their marginalized status to gain credibility in this male-gendered arena. Maternal appeals also enable rhetors to establish a familiar point of connection with audiences.⁵ Lindal Buchanan points to Sarah Palin as an example of how women have invoked maternal appeals to *ethos*. During the 2008 presidential campaign, Palin's persona as a mother above all else allowed her to connect emotionally with like-minded voters.⁶ In sum, maternal appeals offer women rhetors—whose credibility is limited—a powerful means for appealing to *ethos*.

At the same time that they are enabling, maternal appeals sometimes recuperate troubling notions of motherhood and womanhood. By emphasizing women's credibility as caretakers of children, rhetors may inadvertently reinforce the public/private dichotomy they seek to dispel, as drawing on *ethos* gained from domestic authority creates boundaries on political reach.⁷ Moreover, the motherhood trope has been criticized for essentializing women as biologically-driven to care for others, especially children and the earth.⁸ By depicting women as first and

foremost mothers, maternal appeals can echo the ideology of intensive mothering, which holds mothers uniquely responsible for every facet of their children's well-being.⁹ Joan Wolf argues that "total motherhood"—an amplified form of intensive mothering—asks mothers to "predict and prevent all less-than-optimal social, emotional, cognitive, and physical outcomes" by being cognizant of every possible risk to children's well-being "regardless of the degree or severity of the risk or what the trade-offs might be."¹⁰ Calling on mothers to protect children from toxic threats is thus a sensible strategy for connecting with audiences and politicizing the consequences of toxins on family life, but can simultaneously flatten womanhood with (oppressive notions of) motherhood. How does Steingraber figure motherhood in *Having Faith* and *Raising Elijah*? As a privileged mother and scientific expert, how does she depict her own maternal location, and how—and to what effect—does she connect her own constructed maternal location to that of her readers?

In this chapter, I argue that the efficacy and ethics of Steingraber's maternal *ethos* in these two books hinges on the primary tropes that accompany them. Each case study illustrates that Steingraber's location as a mother shapes and is shaped by her rhetorical strategies. In *Having Faith*, Steingraber's construction of a synecdochical relationship between the maternal body and the environment at large allows her to draw attention to the effects of environmental toxins on reproduction while positing policy—not individual practices—as the key solution to protecting mothers and children from toxic harm. In contrast, *Raising Elijah*'s primary trope shifts from synecdoche to metonymy. Though metonymy is a "special application of synecdoche," the distinction between the two tropes is important. As Kenneth Burke explains, whereas synecdoche "stresses a *relationship* or *connectedness* between two sides of an equation, a connectedness that, like a road, extends in either direction, from quantity to quality or from

quality to quantity” metonymy “follows along this road in only *one* direction, from quality to quantity.”¹¹ In *Having Faith*, breast milk, amniotic fluid, and food serve as the synecdochical “roads” connecting the environment to human bodies. Because toxins in the environment will inevitably end up in the womb, “Prenatal care means taking care of water, fish, and glaciers.”¹² Maternal *ethos* in this text thus extends “downward” to the care of pregnant women and children, but also “upward” to the environment. What is different about *Raising Elijah* is that the road of representation extends only one way, metonymically “reducing” quality (the ways in which the environmental crisis threatens parents’ roles as protectors) to quantity (concrete, individual parenting practices). Parenting practices are reductions—not representations—of the larger whole. In *Raising Elijah*, caring for children does not mean caring for water, fish, and glaciers; rather, mothering is an individualized practice *threatened* by environmental toxicity. Moreover, because Steingraber’s experiences are shaped by her positionality as an incredibly privileged mother, they cannot represent the general experience of “mothering in a toxic environment” in the same way that breast milk can represent the health of the environment. By substituting condensed, simplified examples grounded in privileged experience as metonyms for the consequences of toxins, Steingraber’s maternal appeals in *Raising Elijah* are alienating and inadvertently aligned with the ideology of intensive mothering. Thus, Steingraber’s ability to effectively bolster her gendered appeals to *ethos* depends on whether her tropes are representative, or not.

The remainder of this chapter is divided into four main sections. First, I contextualize Steingraber’s maternal appeals in scholarly literature on the subject. I then proceed with two analysis sections, one for each book. Analysis of Steingraber’s construction of the relationship between environmental toxins and motherhood in *Having Faith* illustrates the use of synecdoche

in forwarding a maternal *ethos*; when examined in *Raising Elijah*, it shows the potential problems of depicting privileged maternal experiences as metonyms that illustrate threats to parents' roles as protectors of children. I conclude with a review of this chapter's implications for understandings of maternal *ethos*, and offer an assessment of Steingraber's rhetorical development from *Living Downstream* to *Having Faith* and from *Having Faith* to *Raising Elijah*.

Maternal Appeals in Social Justice Activism

The trope of motherhood is nearly ubiquitous in movements for social justice. Throughout history, it has figured prominently in environmental activism, anti-war movements, and protests against gun violence.¹³ As noted at the outset, women's limited resources for credibility leads them to turn frequently to maternal appeals to gain credibility in the public sphere. Despite the practical nature of maternal appeals, scholars express deep concerns over their implications for gender politics. Whereas some argue that maternal appeals can function to promote values such as care, empathy, and nurturance, others criticize the trope as ineffective at best and detrimental to gender justice at worst. Certainly, the context and means by which they are employed affect both their efficacy and ethics.

Though maternal appeals carry a number of risks, they can be—and have been—employed strategically. “Strategic essentialism” or what Susan Zaeske calls “subversiveness through reappropriation” occurs when women rhetors “[employ] familiar notions about women often used to constrain their action in order to radically expand their role in the public.”¹⁴ By consciously drawing on their socially assigned status as the overseers of children and family life, women can politicize shared oppression.¹⁵ Reproduction is a primary area in which women (especially the poor and women of color) are oppressed. Indeed, it is women who are tasked with bearing and raising children and suffer the brunt of reproductive consequences of environmental

toxicity, such as miscarriage.¹⁶ Even women who are childless and have no desire to become mothers are affected by the cultural conflation between womanhood and motherhood.¹⁷ By politicizing a key facet of *all* women's oppression, women can draw on maternal appeals not only to garner respect, but also to strategically politicize and expand their roles.

The motherhood trope can also elevate care, nurturance, and empathy as public, political concerns. Sara Ruddick posits maternal knowledge—acquired through “mother work”—as a feminist standpoint. She argues that mothers acquire privileged knowledge through the material practice of nurturing and caring for children.¹⁸ For Ruddick, maternal knowledge carries with it the profound possibility of developing “peace politics.” Rather than arguing that mothers are essentially peaceful, she suggests that mothers who *are* committed to peace and nonviolence “can contribute distinctively to a collective peacemaking effort.”¹⁹ In the same vein, Sara Hayden argues that maternity is central to promoting a “politics of care” that values nurturance and empathy, and suggests that maternal appeals can sidestep the problems of essentialism when rhetors project maternity as a broad, public commitment, thus expanding the scope of who can mother.²⁰ Collective appeals to motherhood may “transform maternity from an individual experience and a private relationship into a public performance based in a set of shared values and enlarged responsibilities.”²¹ Though historically it has been women who have done the majority of mother work, advocates for social justice can stretch the notion of mother to include men and childless women, thus extending maternal *ethos* beyond its gendered, privatized roots.

Maternal appeals become troubling when they situate the primary brunt of caretaking on women, or when they reinforce troubling (non-strategic) notions of female “essence.” Women and mothers are not biologically predisposed to care about children's welfare above all else, and to suggest otherwise normalizes the logic of intensive mothering, which holds that good women

are mothers and that caring for children is *the* most important aspect of a woman's life.²² More than that, it asks women to become experts in childcare; the good mother must know all she can to best protect her children from harm and ensure they thrive in all areas of life. In this regard, intensive mothering is a paradoxical ideology. As Hayden explains it, "The ideology of intensive mothering suggests that a woman's willingness to subjugate her own desires to those of her children is natural; at the same time, however, it insists that raising children requires skills that must be learned."²³ Intensive mothering posits women as naturally motivated to devote all of their time to childcare, yet they must also seek expert advice in order to do the job well. Intensive mothering is thus oppressive in multiple regards; it essentializes women at the same time that it asks them to selflessly strive to meet impossible demands.

In the context of environmental toxins, rhetorics of intensive mothering can reinforce what Wolf describes as "total motherhood," a combination of intensive mothering and "scientific motherhood."²⁴ In her explication of scientific motherhood as an ideology, Rima Apple explains how, in the mid-nineteenth century, scientific advice came to characterize modern motherhood. "Instinct and tradition in childrearing were replaced by all-important medical and scientific advice."²⁵ To be a good mother, women were required to be knowledgeable in scientific and medical issues that applied to childrearing. Wolf argues that "total motherhood" aligns with intensive mothering, but "stresses the near ubiquity of science and risk analysis to prescriptions for good mothering in a risk culture."²⁶ Like intensive mothering, total motherhood is raced and classed; it assumes both a feminine whiteness and upper to middle class status.²⁷ Indeed, the good mother has historically been defined *against* poor women and women of color (among other oppressed groups of women). Total motherhood, intensive mothering, and scientific motherhood all presuppose that mothers have the time and money needed to access the

knowledge necessary for meeting the demands of total motherhood. Of course, toxins affect everyone—to differing degrees—regardless of race, class, gender, knowledge, and efforts to curb or minimize exposure. Yet mothers are disproportionately expected to “manage” their own and their children’s chemical body burden.²⁸ These oppressive ideologies largely minimize structural threats to children’s well being, instead emphasizing women with children as the *only* ones responsible for and capable of mothering.

In sum, maternal appeals are productive in some contexts—such as when they promote valuation of care and nurturance—but are harmful when used to enforce harmful, essentialist ideologies. As I show in the following sections, *Having Faith* exemplifies productive use of maternal appeals; by portraying bodies and bodily fluids as representative of the larger environment, Steingraber promotes environmental care as the means to protecting pregnant women and, moreover, as an ethic available to everyone. In contrast, *Raising Elijah* metonymically substitutes Steingraber’s personal, privileged experiences parenting in a toxic environment to illustrate the ways in which the abstract role of “parent protector” is under threat. In doing so, she aligns her rhetoric with confining notions of motherhood that normalize intensive practices that are not only sexist, but available only to those with privilege. Thus, a shift in trope makes all the difference in terms of whether Steingraber’s selections of “parts” to portray the toxic whole are representative, or not.

Maternity as Synecdoche: Situating Responsibility in the Public Sphere

In *Having Faith*, Steingraber’s “scientist eye” and status as a(n) (expectant) mother combine to constitute her *ethos*. The thesis of *Having Faith* posits that pregnant women and their fetuses are uniquely vulnerable to toxic chemicals, and that regulatory policy should ensure their safety. This argument is supported by both scientific and maternal knowledge. Steingraber’s

expert scientific literacy is characterized by a deep understanding of human biology, ecology, and environmental toxins; she understands major scientific constructs, the scientific method itself (and thus its strengths and weaknesses), and—crucial to her rhetorical purposes—has “an awareness of the impact of science and technology on society and the policy choices that must inevitably emerge.”²⁹ Her new identity as an enthusiastic mother-to-be leads her to couple scientific knowledge with maternal thinking. As noted earlier, Ruddick understands maternal thinking as emanating from specific practices; a “mother” is one who makes caring for children “a regular and substantial part of one’s working life.”³⁰ Maternal work demands thinking about how best to nurture and protect children. Aligned with scientific motherhood, *Having Faith* suggests that “good mothering” necessitates knowledge of science and ecology, yet Steingraber depicts “motherhood” as a practice available to “everyone concerned about future generations” that involves not just care for children, but for the environment in which they live.³¹ She thus forwards her dual “locations” as together constituting the knowledge and motive necessary to protect children and, by expanding notions of motherhood and writing science accessibly, makes this location one her readers—albeit at a lesser scale—can inhabit.

Coupling her scientific knowledge with her new drive toward nurturance of the young, Steingraber shapes the exigence in *Having Faith* as the prevalent misconception that bodies are protected from environmental toxins. In the context of pregnancy, this surfaces through what Steingraber calls the “myth of the impermeable placenta.” The placenta does not serve as a barrier to toxic chemicals: “small, neutrally charged molecules that readily dissolve in fat are afforded free passage regardless of their capacity for harm.”³² Further, toxins do not even need to cross the placenta to cause harm, and the placenta can actually function as a magnifying glass—quite the opposite of a barrier—when it comes to pesticides and mercury.³³ Steingraber

emphasizes that this is well evidenced in past tragedies such as Minamata disease, rubella, and thalidomide, making it all the more infuriating that the myth persists. She explains how pregnancy added a new filter—or exigence—to her concerns about toxins. In the conclusion of *Having Faith*, Steingraber asserts that precautionary thinking is foundational to parenting: “It is time for mothers around the world to join the campaign for precaution, which is fundamental to our daily lives as parents or expectant parents and about which we are all experts. . . . We need to ensure that it is enacted in political decision-making as well.”³⁴ With the help of science and maternal thinking, Steingraber draws on synecdoche to illustrate that what is in the environment will always be in human bodies. She forwards a maternal *ethos* that extends from womb to world and from her own pregnancy to an ethic of care that anyone—but especially parents—can exercise.

Depicting a part for whole/whole for part relationship, synecdoche is the trope of representation. Kenneth Burke argues that synecdoche “[implies] an integral relationship, a relationship of convertibility, between the two terms.”³⁵ Synecdoche can provide focus to complex environmental situations, and thus lends itself to rhetorical constructions of environmental degradation. Mark Moore examines the construction of salmon as a synecdoche for life in the Pacific Northwest, arguing that this trope connects humans and nature. He writes, “If salmon represent life and that life is deemed in crisis, then the synecdochic relationships established in the debate . . . depict an ironic sense of human folly.”³⁶ Synecdoche can help environmental rhetors to embed “parts” in their larger context and, in doing so, show the ways in which all forms of life are connected to a larger whole.

Synecdoche has its weaknesses. One concern that arises is whether the part is in fact representation of the whole.³⁷ Not surprisingly, then, Burke argues that the “noblest synecdoche”

is one wherein the part is truly representative of the whole and vice versa.³⁸ As I will explain, synecdoche *Having Faith* works two ways: from part to whole and whole to part. The health of the part—the maternal body—can represent the health of the environmental “whole” at the same time that the health of the whole (e.g., water, fish, and glaciers) can indicate the health of the maternal body. This synecdochical construction enables Steingraber to cultivate a maternal *ethos* grounded in public, metaphoric notions of mothering; strict regulation of toxins in the environment is the only means to protect pregnant women and their fetuses from their effects. Thus, though Steingraber draws on her domestic authority, she does so to situate responsibility in the public sphere. This differs from *Raising Elijah*, wherein privileged mothering experiences (as opposed to the maternal body) are reductions—not representations—of a larger whole. Whereas *Having Faith* may be said to portray the “noblest synecdoche,” *Raising Elijah* fails the test of whether the part is representative of the whole.

From the start of *Having Faith*, Steingraber foregrounds her internal self-division as an ecologist expecting her first biological child. This division is both epistemological and material. Maternity adds a new lens to Steingraber’s perspective of the environment at the same time that it “splits” her own body. As Ruddick writes, “Birth, more than any other experience except perhaps sexuality, undermines the individuation of bodies.”³⁹ As Steingraber examines tragedies of the past including rubella, Minamata disease, DES, and thalidomide, she conveys an internal identity conflict between biologist and mother:

How can I reconcile my old identity as a biologist with my new one as expectant mother?

Mothers always want to know what they can do to protect their babies. I certainly do.

Biologists are always calling for more research. I do this, too. However self-serving, the

biologists' appeal for further study is a truthful acknowledgement of how little we really know about living systems.⁴⁰

Though continued research is important, it is also necessary to exercise precaution in the face of uncertainty. Steingraber cannot protect her growing baby by waiting for more research findings; she must extend the benefit of the doubt to herself rather than to chemicals. Whereas her knowledge of biology affords her the information necessary to recognize danger, her knowledge as a mother leads her to take action regardless of incomplete knowledge. Thus, she negotiates her internal self-division by using her maternal standpoint to guide her ethical understanding of science.

By foregrounding a tension between maternal and scientific thinking, Steingraber portrays herself as "multiple and heterogeneous."⁴¹ As noted in chapter one, rhetors can portray such self-divisions strategically as an *ethos*. This strategy is evidenced when Steingraber reconsiders her dissertation research conducted years before her pregnancy, now through a maternal lens. Her dissertation examined the relationship between shrubs and pines in Minnesota forests, and, years ago, she became annoyed when she found that Agent Orange had been sprayed on the plants, thus tampering with her scientific study of virgin forest growth. As a pregnant woman, she revisits her project with a new perspective, wondering how much Agent Orange—if any—was present in the woods during her study. Did it affect her ovaries? Did it contaminate the fish she ate, caught from nearby? Further, she wonders, what about the pilots who sprayed the chemicals? Did they have children?⁴² Steingraber's new standpoint as a pregnant woman leads her to ask new questions. Rather than only wondering whether and how Agent Orange affected her scientific research, she wonders how the pesticide affected pregnancy and children. As she digs for answers to these questions, the literature tells her that there is some

evidence connecting reproductive harm to pesticide usage, but the findings are unclear and inconclusive. The most thorough study suggests a connection between birth defects and proximity to farming communities. Rather than telling the reader what to make of this information, Steingraber simply shares it, and moves on to a new narrative about drinking water. This strategy aligns with Alcorn's aforementioned argument that self-division can function as an appeal to *ethos* by inviting readers to consider their own positionality.⁴³ Steingraber's scientific expertise does not by itself constitute her *ethos*; her maternal standpoint is critical to illustrating why and how scientific knowledge matters.

In *Having Faith*, Steingraber's scientific expertise allows her to frame precautionary, maternal thinking as a means for engaging scientific debates. Though such a perspective might seem overly subjective, Wendy Wagner argues that values inevitably play a role in any type of environmental policy making.⁴⁴ There is no such thing as a purely scientific position, as evidenced in examples of "wildly different 'scientific conclusions' reached by sister agencies or even sister departments of the same agency at the same time under the same administration."⁴⁵ Decisions about how best to regulate commercial use of toxins or determine the toxic potential of substances are thus always influenced by values. *Having Faith* recognizes the inevitable incompleteness of scientific knowledge on toxins. As Steingraber explains throughout, maternal values—care, nurturance, and protection of those most vulnerable—can serve as a guide for interpreting science.

In *Having Faith*, maternal thinking is not literal. Though mothers/parents may be more likely to exercise precaution in the face of uncertainty, synecdoche frames maternity broadly as an ethic of environmental care. Steingraber thus draws on the personal (reproduction) strategically in order to sever the public/private binary. As I argue next, her separate discussions

of toxins' effects on amniotic fluid, food, and breast milk together illustrate how synecdoche enables her to forward a successful maternal *ethos*. In each example, she depicts a part for whole/whole for part relationship between the maternal body and outside environmental, thus expanding the domain of maternal *ethos* to public policy.

Steingraber's description of amniotic fluid as a synecdochical representation of water implicitly shows that preventing toxic harm necessitates regulation of the outside environment. Because Steingraber was thirty-nine at the time of her first pregnancy, doctors recommended she undergo amniocentesis, a procedure that detects abnormalities in fetal genes. In Steingraber's reflection of this experience, her obstetrician tells her to be sure to drink plenty of water after the procedure. Her thoughts drift to water and its relationship to amniotic fluid:

Drink plenty of water. Before it is baby pee, amniotic fluid is water. . . . And what is it before that? Before it is water, amniotic fluid is the creeks and rivers that fill reservoirs. . . . When I hold in my hands a tube of my own amniotic fluid, I am holding a tube full of raindrops. . . . Whatever is in the world's water is here in my hands.⁴⁶

This synecdoche shows that bodily contamination is a problem extending beyond the private sphere—it requires a structural solution. By extending both from part (amniotic fluid) to whole (the world) and from whole to part as well, the trope may be aptly described as the “noblest” form of synecdoche. When the outside environment is contaminated, so too are human bodies. As I have argued in previous work, Steingraber's use of synecdoche in *Having Faith* also allows her to avoid undermining women's bodily autonomy.⁴⁷ The environment—not women—must be regulated to protect all from the devastating effects of environmental toxicity. By situating bodily contamination in its larger context, synecdoche allows Steingraber to draw on maternal *ethos* without cloistering concerns about toxins to the domestic sphere.

Throughout *Having Faith*, Steingraber depicts foods including salmon, tuna, and root vegetables as representative of the environment; to keep pregnant women safe from toxic harm, it is crucial to protect the environments of the foods they eat. As a pregnant woman eating foods to nourish her growing baby, Steingraber's very bodily state troubles the public/private divide. Toxins biomagnify, meaning they become increasingly concentrated as they move up the food chain; thus, salmon, tuna, and other large fish are often highly contaminated. Of course, fish are also rich with anti-oxidants and healthy fats. Steingraber illustrates this paradox in a narration of her visit to Alaska during a lecture tour. She describes her struggle choosing between fresh caught salmon and spaghetti made with canned tomato sauce: "The food from this place has to feed me and my baby for another week. The food from this place will become the body of my baby. It is irreplaceable."⁴⁸ Again, the synecdoche extends both from part to whole and whole to part. When the larger environment is contaminated, so too is food, and thus bodies, and the placenta offers little protection to fetuses. Steingraber explains how the literal splitting of self that is involved in pregnancy illuminates the implications of her food options and choices.

Call it mother-earth-hood: an awareness of how my own doubled self is contained within the body of the world. . . . The glacier's meltwater fills the inlet that feeds the fish on which we two both feed. Prenatal care means taking care of water, fish, and glaciers.⁴⁹

"Prenatal care" means care for the environment, and this is certainly not a task for mothers alone. Steingraber shapes this knowledge of the earth/body connection as acquired through her positionality as an expectant mother. As her definition of "mother-earth-hood" implies, material, maternal practices and experiences—such as "eating for two"—heighten awareness of connections between the earth and human bodies. Even the most intensive mothering practices cannot accommodate environmental contamination. Thus, synecdoche shows that asking mothers

to be the gatekeepers between their babies and toxins is thus not only unjust from a feminist standpoint, but also ineffective in preventing toxic harm.

Though food may connect environment and body, Steingraber's synecdochical portrayal of breast milk shows that environmental contamination is always already embodied. Breast milk is incredibly healthy for infants; as Steingraber explains, it lowers risk of infant hospitalization and death, and is correlated to a decreased risk of numerous health ailments including gastrointestinal problems.⁵⁰ Despite its benefits, the process of biomagnification makes breast milk one of the most contaminated foods on the planet. Steingraber reflects on a speech she delivered to an auditorium filled with U.N. delegates gathered to negotiate a treaty on persistent organic pollutants (POPs). Her assignment was to present the impacts of POPs on reproductive health. The event occurred shortly before Faith's first birthday, when Steingraber was still breastfeeding. Steingraber explains how she ultimately came to the decision to display her breast milk to the delegates:

My breasts are aching because I haven't nursed Faith since dawn, so I head for the women's room to pump. . . . That's when it occurs to me: probably most of those drafting this treaty have never before seen human milk. . . . When it's my turn to speak, I send the jar around the room and watch as delegate after delegate holds it briefly in his or her hands. Some study it closely. Some avert their eyes. Some smile with recognition. Then I begin talking about the food chain.⁵¹

In this example, Steingraber alerts audiences to the embodied nature of environmental toxicity. Further, she draws on cultural aversion to human breast milk by constructing it as "disgusting" in a new way: through its toxicity. Phaedra Pezzullo explains that disgust both diverts and attracts attention, and can be mobilized for political ends.⁵² Yet evoking disgust is risky in that activists

must balance the tension “of trying to expose the disgusting industries that perpetrate this disease without becoming linked or articulated to the disgusting themselves.”⁵³ Though Steingraber may indeed articulate her body to disgusting toxins, through synecdoche she portrays *all* bodies in this light. Breast milk represents humans’ status as the end of the food chain. Breast milk is not simply a portrayal of what is inside breastfeeding mothers’ bodies; rather, it serves as a synecdoche for environmental health.

In the above examples, Steingraber’s constructions of the maternal body as synecdoche sidestep the problems of essentializing women and privatizing responsibility. Coupling scientific and maternal *ethos* leads Steingraber to consider how best to protect pregnant women and children from toxins’ effects, and the answer is an expanded ethic of care or “mothering” that anyone can enact. Rather than framing mothers as biologically driven to care for children or the environment, she depicts the maternal body strategically as a representation of environmental pollution, a problem that necessitates regulation of toxins at the level of policy. Each of the synecdochical representations—amniotic fluid, food, and breast milk—are two-directional; each part represents the environment at the same time that environmental health can represent each part. Toxins cannot be kept from the womb unless they are kept from the larger environment. Thus, though Steingraber draws on her maternal authority over domestic life and reproduction, she avoids confining her authority to the private sphere. Though *Raising Elijah* forwards the same general argument for political regulation, the personalized metonyms chosen to convey toxins’ effects confine rather than contextualize the issue.

Parenthood as Metonym: The Problem of Non-Representative Experience

Through a subtle shift in trope, *Raising Elijah* relies on troubling notions of motherhood to make the case that children are the main victims of the environmental crisis. Though the book

shares much with Steingraber's previous works, it frames the representative anecdote of the "parent protector" as a role *threatened* by toxins rather than a role that must be applied to environmental protection. Like *Having Faith*, *Raising Elijah* targets an audience of parents to direct attention to the effects of toxins on vulnerable bodies. Also as in *Having Faith*, Steingraber recognizes the structural problems contributing to the environmental crisis. For example, when emphasizing the importance of organic food, she reminds her readers that co-ops should be accessible to everyone and that organic, healthy food should be made affordable.⁵⁴ Most pointedly, she states, "Believing that we can buy safety for our children with money and knowledge leaves those with neither in harm's way."⁵⁵ Yet the preceding analyses of *Living Downstream* and *Having Faith* should have already made it clear that Steingraber favors political solutions to toxicity. The problem with *Raising Elijah* is not one of Steingraber's knowledge or approach to advocacy; rather, the problem is with her construction of parents' agency. In *Raising Elijah*, Steingraber draws on her maternal *ethos* to argue that toxins threaten parenting practices. Because she relies on her own privileged experiences of motherhood to illustrate this, her anecdotes reduce rather than represent the larger context in which they are embedded.

In *A Grammar of Motives*, Burke thoroughly explains the distinction between the rhetorics of representation (synecdoche) and rhetorics of reduction (metonymy). Whereas synecdoche extends from quality (e.g., environmental contamination) to quantity (e.g., contamination of breast milk) *and* from quantity to quality, in metonymy, quantity is substituted *for* quality.⁵⁶ Though one could represent the quality of an experience (e.g., parenting), Burke argues that this is different from "reducing the quality to a quantity."⁵⁷ He explicates the distinction through the example of art, which he argues (typically) represents rather than reduces an experience. A painter represents an experience (quality) through art (quantity), yet the

medium of art asks the viewer to extend back from quantity (embodiment of the art in the painting) to quality (meaning in the art).⁵⁸ As Burke explains,

True, every art, in its nature as a medium, reduces a state of consciousness to a “corresponding” sensory body . . . But the aim of such *embodiment* is to produce in the observer a corresponding state of *consciousness* (that is, the artist proceeds from “mind” to “body” that his representative reduction may induce the audience to proceed back from “body” to “mind”).⁵⁹

As this example makes clear, reductions can indeed be representative when they encourage audiences to make the jump back from quantity to quality, as is the case in Steingraber’s portrayal of breast milk in *Having Faith*. Rather than “representing the quality of an experience,” metonymic substitutes reduce quality to quantity, and thus do not allow for this bi-directional convertibility between part and whole. An example is evidenced in Oren Abeles’ analysis of Charles Darwin’s use of agricultural breeding as a metonymic substitution for natural evolution.⁶⁰ Abeles argue that the metonym of breeding works to “delineate an identical but far more complex natural process.”⁶¹ Reducing complexity comes at a cost. In the case of evolutionary theory, Abeles argues that Darwin was mistaken in his flattening of agriculture and evolution, and suggests that this has caused even contemporary biologists to struggle with explaining the complex nuances of evolutionary relationships.⁶² When reductions are not representative, they can be troubling and misleading.

Burke offers an example that shows how metonyms, when used as argumentative evidence, can be problematic. He describes a hypothetical scientist who, in effort to understand human behavior, conducts a study on animals.⁶³ From the animal case study, the scientist develops a terminology that is then applied to other case studies, such as human adults or infants.

A general claim about a subject matter (e.g., human behavior) cannot be reliant on the terminology developed from a specific case study (e.g., one on animal behavior) that has little in common with the subject matter itself. In reference to the hypothetical scientist, Burke argues that “this misapplication of his terminology would not give him a representative interpretation at all, but a mere ‘debunking.’”⁶⁴ Debunking through metonymy occurs when anecdotes chosen to illustrate abstract concepts are not representative of a larger point.⁶⁵ Burke summarizes the typical method of the debunker: “He discerns an evil. He wants to eradicate this evil. And he wants to do a thorough job of it. Hence, in order to be sure that he is *thorough enough*, he becomes *too thorough*.”⁶⁶ The debunker inadvertently “*covertly* restores important ingredients of the thought that he has *overtly* annihilated.”⁶⁷ For example, a person advocating against the principles of hierarchy and status might inadvertently undermine *ethos* if she achieved an ironic status of her own.

In *Raising Elijah*, I suggest that metonymy creates a rhetoric of debunking. Throughout her works, Steingraber argues against an individualized approach to managing environmental toxins, yet she is so thorough in making the case for policy that writing a book about parenting in the environmental crisis becomes a difficult task. Her emphasis on “parenting” differs from her emphasis on pregnancy in *Having Faith* in that the focus shifts from bodies to practices. Whereas *Having Faith* is subtitled as “an ecologist’s journey to motherhood,” *Raising Elijah* is a guide to “protecting our children in an age of environmental crisis.” In *Raising Elijah*, Steingraber covertly reinforces individualized approaches to toxic regulation as she explains—in a new context—the ways in which toxins threaten parents’ ability to protect their children’s health and well being.

Before offering specific examples of metonymy and its effects in *Raising Elijah*, it is worth noting that the heavy reliance on metonymic anecdotes may be attributed to the book's much broader scope. Rather than focusing exclusively on issues of reproduction as she did in *Having Faith*, Steingraber takes on a different focus in each chapter of *Raising Elijah* in attempt to show how private issues are connected to a wide array of social problems. She attempts to illustrate the "quality of an experience": the environmental crisis threatens parents' roles as protectors of children. To do so, she predictably turns to her own experiences, which become anecdotal reductions of the larger problem. Though metonymy enables her to convey the abstract in terms of the tangible, it does not allow or encourage audiences to make the extension back from tangible to abstract, as synecdoche does. This may be inadvertent, but is not without consequence.

Steingraber portrays abstract parental concerns with convenience and child well being through the metonymic substitute of breastfeeding, a material, tangible practice. Just as she does in *Having Faith*, Steingraber explains how environmental toxins contaminate breast milk, thus interfering with mothers' ability to protect children from harm. She reiterates the benefits of breastfeeding: breastfed babies are better at fighting infectious disease, are less likely to acquire asthma, diabetes, or leukemia, are at reduced risk of obesity, and have higher verbal IQs.⁶⁸ Breastfeeding benefits mothers as well, putting them at lessened risk of ailments including premenopausal breast cancer, ovarian cancer, and type 2 diabetes. Whereas the benefits to the baby led Steingraber to breastfeed Faith, she saw breastfeeding Elijah as an act of self-care. She states, "With the first baby, you realize that you would sacrifice anything for your child. With the second baby, the impulse is toward self-preservation."⁶⁹ Thus, as a mother of one, Steingraber was driven to "*breastfeed if it kills me*" whereas the second time she decided to "*breastfeed to*

stay alive.”⁷⁰ In any case, she frames these risks of not breastfeeding as “supremely inconvenient events.”⁷¹ Mothers are not only driven to protect their children (intensive mothers must protect their children at all costs), and mothers of more than one (and likely mothers of only one) know the importance of convenience. Thus, breastfeeding allows Steingraber to describe parental concerns with convenience and nurturance in a way that is quantifiable. In *Raising Elijah*, breast milk is not a synecdoche; rather, *breastfeeding* is a metonym.

In this example, Steingraber problematically flattens her own location with that of her readers, thus drawing on maternal appeals in a way that depicts privileged motherhood as the standard to which all mothers should aspire. This is evidenced when, after explaining how breastfeeding is both more convenient and beneficial than bottle-feeding, she offers a refutation to counterarguments:

Critics who complain that breastfeeding advocacy creates guilt in mothers who choose not to nurse are missing the point. The choice is not between a gold-plated but sometimes tricky, painful, and inconvenient way to feed a baby (breastfeeding) and the perfectly adequate standard model that offers ease and convenience (formula) . . . According to a 2010 study published in the journal of *Pediatrics*, low breastfeeding rates in the United States kill 911 infants per year and cost \$13 billion. That’s the choice.⁷²

Failure to breastfeed is both inconvenient (in cost) and fails to protect children from harm (by increasing risk of infant mortality). What Steingraber paves over is the fact that the “choice” to breastfeed is not equally available to everyone. Kathleen de Onís pointedly explains how choice ideology is raced, classed, and inextricably linked to cultural values: “<Choice> is an assimilationist term that advances White, monolingual feminism, while eliding and often erasing the experiences, bodies, and voices of women inhabiting more precarious positionalities.”⁷³

Explaining the benefits of breastfeeding through the constraining ideology of choice is thus a metonymic substitute *for* rather than a representation *of* parental priorities. Whereas positing breast milk as a synecdoche for environmental contamination encourages audiences to connect the part back to its larger whole, metonymies—when grounded in privileged ideologies—prevent the connection back from quantity to quality. Because her construction of breastfeeding is, in this example, shaped by privilege, it cannot serve as an “indicator” of a larger issue (e.g., barriers to nursing).

In her discussion of breastfeeding, Steingraber also misrepresents feminist critiques of breastfeeding advocacy, and in fact recuperates the very ideologies that concern many feminists. Feminists who promote breastfeeding *and* feminists who resist it agree that the practice is inextricably linked to cultural ideals of good mothering; critics of breastfeeding advocacy are thus not merely concerned with inducing guilt in new mothers.⁷⁴ In a culture that makes breastfeeding economically and socially difficult, breastfeeding is a far less available choice for underprivileged women with limited resources. Recognizing that the medical costs of breastfeeding are likely not high on the list of new mothers’ concerns, Steingraber highlights the convenience of breastfeeding. She states that breastfeeding is convenient for two main reasons: it “allows you to make crying children fall asleep on demand” and takes only one hand, whereas bottle-feeding takes two.⁷⁵ “With your free hand you can—read a story to a toddler, analyze data, make dinner, give interviews over the phone, draft a grocery list, write a book.”⁷⁶ This passage exemplifies why some feminists are concerned with breastfeeding advocacy. Erika Kirby and colleagues argue that the good *working* mother in contemporary public culture is characterized as a “juggler” who performs three cultural ideologies at once: intensive mothering, domestic womanhood, and ideal worker.⁷⁷ Moreover, good working mothers perform two, seemingly

contradictory identities: “the privileged, full time, ‘stay-at-home’ mothers versus frantic professional mothers working outside the home.”⁷⁸ By portraying breastfeeding as a practice that enables this type of good mothering—feeding while working and performing domesticity—Steingraber makes herself susceptible to the very criticisms she seeks to refute.

In her discussion of pressure-treated wood as a threat to child welfare, Steingraber again draws on personal experience that reinforces troubling notions of motherhood and choice. Injected with copper and arsenic to protect from rotting and insects, pressure-treated wood is poisonous and ubiquitous. It supports outdoor decks, playgrounds, staircases, railings, and bridges. In a reflection, Steingraber notices the outdoor play structure at her daughter’s nursery is constructed with pressure-treated wood. She works with other parents to get the soil tested, estimate levels of exposure, and move playtime to another area. Ultimately, she is defeated; the teachers and majority of parents decide that creative play is more important than protecting the children from seemingly miniscule levels of carcinogens. Steingraber clearly expresses the need for policy; without government oversight, adults decided to return children to the playground. Yet a few—including Steingraber and her husband—refused, opting to switch schools instead. After acknowledging that the problem of carcinogens in playgrounds warrants policy change, Steingraber states,

And yet, I could not watch my three-year-old narrate stories about herself while climbing around on a structure that contained carcinogens. . . . It was my job to keep my children safe. Whatever I could do to prevent my daughter from entering the world of biopsies, ultrasounds, and phone calls from the pathology lab, I would do. It wasn’t even a choice. If I couldn’t remove the play structure from the community, then I would have to remove Faith from the community.⁷⁹

Once again, the role of “parent protector” is not portrayed as an attitude that can extend to environmental care, but rather a private role threatened by toxins. Of course, removing Faith from the community *was* a choice, made available to Steingraber through her knowledge, resources, and access. Meeting the demands of “total motherhood” in a risk society, Steingraber is knowledgeable in science and can thus identify, evaluate, and take measures to reduce risks to her children’s welfare.⁸⁰ While knowledge of carcinogens (e.g., arsenic) may be second nature to Steingraber, this is certainly not the case for the majority of her readers. Thus, Steingraber’s version of doing whatever she can to protect her children looks quite different from what another mother—especially one living in poverty—would be capable of doing.

In a final example, Steingraber draws on motherhood to bolster her arguments for organic foods. Although biologists debate whether organic foods are healthier than conventional foods, Steingraber chooses to interpret science through maternal knowledge when it comes to her children: “All pesticides are inherently poisons, and all organophosphate pesticides are, inherently, brain poisons. So I don’t feed my children food grown with pesticides. Period.”⁸¹ As in *Having Faith*, Steingraber promotes precaution, yet the problem with *Raising Elijah* is that Steingraber posits these choices—to feed her children only organic food, to keep them from toxic playgrounds, and to breastfeed—as just that: individual *choices*. She chooses to take these measures because she is a good mother, and a good mother does everything she can—even at significant cost—to protect her children from harm.

Whereas her use of synecdoche in *Having Faith* enables Steingraber to forward a maternal *ethos* grounded in an ethic of care, in *Raising Elijah* she fails to articulate her own maternal location to that of her readers. *Raising Elijah* focuses on literal parenting, inevitably explained through Steingraber’s privileged personal experience. This rhetorical problem may be

traced to the implied exigence of the second book: many parents are unaware of the ways in which environmental toxins compromise their roles as protectors of children. Whereas in *Having Faith* Steingraber constructs the main problem as ignorance regarding the effects of the environment on human bodies—especially the vulnerable bodies of pregnant women and fetuses—in *Raising Elijah* she addresses those who she believes have the most to lose *and* the resources to promote change: parents. The body of a pregnant woman can serve as a representation of environmental health; though a woman's chemical body burden varies according to many factors, toxins accumulate—to varying degrees—in *all* pregnant women's breast milk and amniotic fluid. In contrast, the “parent-as-protector” is a role fraught with ideology and influenced by positionality. When Steingraber metonymically substitutes her own experiences to illustrate environmental threats to parenting, she inadvertently recuperates a confining notion of motherhood available to only those with equal levels of societal privilege, and likely desirable to far fewer.

Conclusions: Scope, Reduction, and Implications for Maternal *Ethos*

Whereas *Having Faith* negotiates the pitfalls of maternal appeals through synecdoche, *Raising Elijah* relies predominately on metonymy, and reinforces problematic notions of motherhood through rhetorical reliance on non-representative experiences. Analyzing both texts illuminates the ways in which the efficacy of maternal appeals may depend—at least in part—on the tropes that accompany them. In *Having Faith*, synecdoche allows for the cultivation of a maternal *ethos* that transcends the public/private divide. Though Steingraber's experiences as a pregnant woman are not representative, her portrayals of amniotic fluid, food, and breast milk show that what is in the world inevitably ends up in bodies, and the consequences are especially concerning for vulnerable populations. She shapes maternal standpoint through rhetorically

through synecdoche. In *Raising Elijah*, she turns to individual parenting practices to elucidate how the environmental crisis threatens parents' roles as protectors of children. Steingraber's individual experiences naturally reflect her privilege and are thus not representative; moreover, her parenting practices mirror those of intensive mothering. In her various examples, she does everything within her power to predict and curb environmental threats to her children's well being. Together, assessment of the two books shows that rhetoric shapes maternal *ethos* and that a rhetor's positionality can shape her use of maternal *ethos*. Thus, rhetoric and positionality may work together to create standpoint, or to showcase privilege. A subtle change in trope determines the efficacy and implications of Steingraber's maternal *ethos*; whereas "mothering" refers to an ethic of care in *Having Faith*, in *Raising Elijah* it is a literal practice understood through Steingraber's privileged, intensive experiences.

This analysis suggests that synecdoche can help rhetors productively appeal to their domesticity while bolstering *ethos*. When explicated through the "noblest synecdoche," maternal appeals can enhance a rhetor's credibility by expanding notions of who can mother and how. In contrast, when maternal appeals are invoked to reinforce confining notions of the "good (working) mother," they become alienating and thus work against ethical appeals to *ethos*. This chapter shows that synecdoche can help rhetors to navigate constraints of maternal appeals and productively bolster gendered appeals to *ethos*. Practically speaking, rhetors should ensure that selected "parts" are representative of their larger contexts. Metonymy and synecdoche are both reductions of a larger whole, and are thus attractive options for rhetors aiming to convey the personal implications of a larger social ill. While metonymy's most attractive feature is that it can work to make abstract concepts concrete—and thus relatable and/or more understandable—

the same task can be accomplished through synecdoche without problematically reducing its complexities.

The rhetorical concepts of *ethos* and exigence help to account for Steingraber's shift in emphasis and rhetoric over the course of her three books. Her rhetoric is simultaneously consistent and radically changing; in all her books, she draws on personal experience as well as scientific evidence and writes for a broad audience, yet her emphasis (and thus construction of exigence) changes. Accordingly, so do her strategies for locating herself in relation to her audience.⁸² In both *Having Faith* and *Raising Elijah*, she locates herself in relation to both motherhood and her scientific training, yet the arguments in *Raising Elijah* hinge on her privileged parental experiences. It is clear that in each text, Steingraber is attempting to find the best rhetorical strategies for galvanizing the public to become aware of environmental ills and take action to curb them. Nonetheless, her shift in rhetorical strategies is not without consequence. Examining the tropes she employs to bolster her claims for environmental protection sheds light on the ways in which her rhetoric shifts from enabling to constraining. Forwarding a maternal *ethos* necessitates that "motherhood" is not based on exclusive experience, but rather takes the best of maternal appeals while leaving behind its essentialist tendencies.

CHAPTER 4

ARTICULATING ACTIVIST *ETHOS* THROUGH RHETORICAL APPROPRIATION

Steingraber's work from 2010 onward focuses almost exclusively on the dangers of hydraulic fracturing or "fracking," a highly contested method of extracting oil and gas from shale formations deep beneath the earth's surface. Although she calls for a nation-wide ban on fracking and a timely departure from fossil fuel dependency, much of her activism focuses on local issues affecting her home in New York's Finger Lakes region. On March 18, 2013, she engaged in civil disobedience for the first time when she and ten others were charged with trespassing for blocking a truck belonging to Inergy Midstream (now Crestwood Equity Partners) from entering company gates. The storage and transportation company had purchased the salt caverns beneath Seneca Lake in 2008 with plans to repurpose the chambers for gas storage.¹ Steingraber voluntarily chose incarceration over paying a trespassing fine, and the arrest marked a shift in her primary mode of address. In a press conference statement following the arrest, she emphasizes that her actions were, for her and other community members, a last resort after "[taking] every legal avenue to raise the serious health, economic, and environmental concerns associated with the Inergy plant."²

Steingraber has since served more than one jail sentence, and during her incarcerations has written a series of "Letters from Chemung County Jail." By writing letters from jail, Steingraber gestures toward Martin Luther King Jr.'s famous "Letter from Birmingham Jail," and her identification with King's activism is made all the more apparent within the letters and in a number of statements released after her incarceration. For example, her "Earth Day Letter from

Chemung County Jail to Environmental Leaders,” addressed to leaders of mainstream environmental groups (e.g., the Sierra Club), closely mirrors the format and general purpose of King’s “Letter”; though his message was directed at a broad audience, King’s “Letter” also responded directly to eight white clergymen who had advised activists to practice patience and abide by the law. In her own “Letter,” Steingraber denounces mainstream groups’ willingness to further stall the turn to renewable energy by negotiating with industry. Though her address to environmental leaders is clearly based off of the “Letter from Birmingham Jail,” she makes explicit references in other statements. In a speech delivered following a fifteen-day sentence, Steingraber explains her experience behind bars with a fellow activist: “One document that we passed back and forth between us was a copy of Martin Luther King’s 1963 ‘Letter from Birmingham Jail.’ In it, Dr. King makes the case for civil disobedience as a tool of social change when all other lawful efforts to attain justice have failed.”³ Gesturing again towards King and his notion of “the ordeals of jail,” she argues that jail “deepens one’s commitment to our campaign, fosters patience and bravery, and reveals a side of American life . . . that is otherwise hidden from view.”⁴ Throughout her jail writings and related statements, Steingraber follows Kenneth Burke’s formula of irony as “what goes forth as A returns as non-A” to denounce fracking and construct jail time as a necessary, laudable mode of activism, yet these short examples demonstrate that this move hinges on her appropriation King’s (and other civil rights activists’) rhetorical strategies.⁵

In this chapter, I examine how Steingraber makes incarceration an ironic mode of action “worthy of credence” through the appropriation of a collective language tethered to a positionality that is vastly different from her own. Though her willingness to use her privilege for good is commendable (e.g., she can afford to spend two weeks in jail, she has both the rhetorical

skill and scientific knowledge necessary to address the problem), her rhetorical construction of her “experience” in jail pave over that privilege by likening her actions to civil rights activism, especially that of King. In her “Letters from Chemung County Jail,” there is a significant disconnect between her position and the way in which she articulates it. As this final analysis chapter shows, Steingraber has, over time, gradually shifted toward rhetorics that exacerbate her privilege, which may be due to her shift from raising awareness to advocating action. Whereas *Living Downstream* and *Having Faith* point toward structural problems that affect vulnerable populations (using personal experiences as evidence of harm), *Raising Elijah* and her “Letters from Chemung County Jail” are far more focused on individual actions. In these texts, she draws on her (privileged) personal experience to show *agency* rather than *evidence*. Though she maintains a steadfast commitment to structural change, her increasing emphasis on her own ability to effect change inadvertently ignores the conditions of possibility for that agency and the “experiences” it produces. Once again, her rhetorical strategies both reflect her positionality and constitute it.

This chapter proceeds by first explaining the relationship between ironic “perspectives” and a rhetor’s positionality. This section shows how and why irony has served as a powerful rhetorical trope for black rhetors of the civil rights movement and, in doing so, illustrates the problems with Steingraber’s appropriative use of irony to articulate her experience as an activist behind bars. Next, I offer a close read of Steingraber’s rhetoric in her “letters,” with specific attention to her references to King. As Elizabeth Galewski states, “Analyzing the operations of irony is a tricky endeavor . . . since it involves identifying and studying a trope that trades, to a greater or lesser degree, in the hidden and the unsaid.”⁶ Steingraber’s subtle and implicit gestures toward King are no less significant than her explicit references; both are key to her construction

of incarceration as a powerful means of advocacy. This chapter concludes with a review of its contributions to understandings of the relationship between standpoint, irony, and *ethos*.

Attention to the rhetorical forms that enable Steingraber's construction of jail offers a way to think critically about the "perspectives" that constitute irony by examining *how* irony works to transform "A" to "non-A." This chapter also supports the argument leveled in chapter one that Steingraber leverages her position—in this case, as an activist—an appeal to *ethos*. In the "letters," she does so by appropriating the rhetoric of others in what is often a troubling way.

Irony and (the Rhetor's Construction of) Perspective

Alongside synecdoche, metonymy, and metaphor, Burke selects irony as his fourth "master trope." He describes irony as the "perspective of perspectives"; although it involves representation, perspective, and reduction, its configuration is notably distinct from the other tropes. Whereas metaphor shows "A" in terms of "B" and metonymy and synecdoche break down "A" according to its (representative or reductive) parts, Burke describes the "overall formula" of irony as "what goes forth as A returns as non-A."⁷ To constitute a distorted version of "A," the ironic rhetor must present two ways of seeing at once by bringing contradictory images into the same "field of vision."⁸ This differs from the other tropes, which all rely on sequence. As Terrill explains, "[t]he tenor and vehicle of metaphor cannot be presented simultaneously or at the same conceptual distance from the auditor," and representations (synecdoche and metonymy) likewise preclude the equal presence of part and whole.⁹ In contrast, irony "asks that two or several things be presented before the auditor in the same place at the same time," so that they may together create a meaning that inexactly resembles each term, instead relying on both to constitute the third, composite meaning.¹⁰

Like all rhetoric, this composite ironic meaning (and the parts that constitute it) is inextricably linked to the positionality of the rhetor. Yet irony makes this connection perhaps more difficult to recognize, as it “requires the speaker for a moment at least, to put on a mask.”¹¹ This is evidenced in Steingraber’s “letters,” wherein she first appears as a criminal behind bars before flipping the script and positing Crestwood as the criminal guilty of “toxic trespass.” Irony asks the audience to understand this (often implicit) “strategic moment of reversal”; they must recognize a rhetor’s “mask” and its subsequent removal. As Linda Hutcheon puts it, “[I]rony has an evaluative edge and manages to provoke emotional responses in those who ‘get’ it.”¹² For example, in the case of Steingraber’s “letters,” the audience must “get” that she is reversing a villain/victim relationship rather than simply legitimizing her actions. Even if the audience “gets” the ironic turn, a rhetor’s privileges or lack thereof inevitably shapes her rhetoric, as was noted at the outset of this dissertation. In the case of irony, the “contradictory perspectives” a rhetor brings into the same field of vision are the *rhetor’s* limited, subjective perspectives. When a rhetor’s perspective itself is difficult to identify, parsing this out becomes a challenging task. Although any rhetor’s offered perspective is limited, feminist standpoint theorists hold that those who have considered how their social position is constructed in relation to others hold a perspective—or standpoint—that is better (or at least “less false”) than that of others. The unequal value of differing “perspectives” thus becomes especially difficult to recognize in the case of irony.

Given this, it is interesting to note that irony has long been deployed as a rhetorical strategy of the oppressed. As Leland Spencer notes, “Black rhetors and others speaking from marginalized positions have found irony particularly useful.”¹³ Though Spencer does not attempt to explain why this is so, I suggest feminist standpoint theory can offer potential insights. It may

be that irony offers a way for disenfranchised rhetors to illustrate the societal contradictions made visible to those without privilege. Robert Terrill argues that “[a]n ironic distancing allows us to step back, see the big picture, and disengage from the present.”¹⁴ Given that Terrill takes Frederick Douglass’s oration “What to a Slave is the Fourth of July?” as his focus, this “stepping back” may imply a shift from a privileged positionality to that of the oppressed. Irony, as a strategy for unhinging a taken-for-granted narrative, offers a fitting means to bring the subjugated rhetor’s “doubled-vision”—or standpoint—into focus. As I show next, standpoint theory is implicit in many analyses of black rhetors who have drawn upon their social standpoint and, likewise, standpoint is implicit in analyses of black rhetors who have employed irony.

In her analysis of civil rights/black power activist James Forman’s the “Black Manifesto,” Maegan Parker argues that Forman’s use of irony worked to encourage reparation of U.S. race relations.¹⁵ Through prophetic irony, Forman “predict[ed] an inevitable reversal of power between white and black Americans”; at the same time, he appealed to retributive irony “to justify black-led violence against whites, who had previously used a similar violence against blacks.”¹⁶ Finally, Forman challenged this narrative of violence and oppression altogether, inviting blacks to lead the path toward racial justice, and whites to recognize their responsibility for past injustices and take on a supportive role in reparation.¹⁷ Undoubtedly, this use of irony is inextricably linked to Forman’s standpoint. As a long time activist in the black freedom movement, Forman had witnessed the frustration activists encountered as they tried to effect change within a racist system dominated by whites. As noted in chapter one, standpoint involves the “reflection on and political engagement with one’s own position in society *in relation to* others’ positions.”¹⁸ Forman’s initial audience of the “Black Manifesto” was composed of leaders of white church organizations and black participants gathered together at the National

Black Economic Development Conference. Keenly aware of both whites' and blacks' societal positions, Forman "empowered black American[s] to recognize their capacity to resist an oppressive social role" at the same time that he urged whites to "[recognize] . . . their position of privilege [as] the result of an historically interconnected and exploitative relationship that perpetuated black oppression."¹⁹ Forman, then, used irony to convey his arguably privileged perception of U.S. race relations and to envision a more just system of U.S. race relations.

Terrill's analysis of Douglass's "What to a Slave is the Fourth of July?" similarly illustrates an implicit connection between standpoint and irony. Like Forman, Douglass spoke to a predominately white audience, and drew upon on irony to showcase inconsistencies—made visible to him through his standpoint—between the birth of the nation and the institution of slavery. Irony worked "first as a strategy through which to allow [Douglass's] white audience to recover the attitudes of the founders," but then shifted "to force his audience to acknowledge its inconsistencies" by offering them a rhetorical "tour" of the internal slave trade.²⁰ As a former slave and political activist, Douglass, like Forman, was well aware of the nation's inconsistencies. His societal position enabled him to bring these incongruous narratives of slavery and the nation's founding "before the eyes" of his (mostly) white auditors. His powerful ironic depiction was thus arguably made possible by his standpoint.

Whereas standpoint is implicit in the above analyses of irony, irony is implicit in Maegan Parker Brooks' analysis of Fannie Lou Hamer's strategic use of epistemic privilege as an appeal to *ethos*. Indeed, the notion of epistemic privilege itself rests on irony, as it shows how that which oppresses becomes a source of power. As Parker Brooks writes, "Hamer's strategic reversal—turning her absence of institutionalized power into the primary source of her rhetorical authority—built upon her ethos as a representative of the country's most oppressed people by

suggesting that those furthest from the center hold valuable insight regarding national malaise.”²¹

This notion of “strategic reversal” indicates the use of irony; Hamer’s oppressed position ironically afforded her privilege. As Burke explains, irony’s “A” to “non-A” pattern “places the essence of drama and dialectic in the irony of the ‘peripety,’ the strategic moment of reversal.”²² Thus, appeals to epistemic privilege are ironic, and ironic perspectives—at least in many assessments of black rhetors—imply access to standpoint.

What, then, to make of a white, privileged woman using irony to convey her activist experience in jail, which for her was a choice? Steingraber is careful to note that her own advocacy differs from that of Martin Luther King and other civil rights activists for whom “continuing their civil disobedience witness in jail was not a choice.”²³ She also implies that jail—because it is a powerful means of advocacy—should be employed by “at least some of us,” thus indicating that jail is not a necessary or appropriate strategy for everyone.²⁴ Yet at the same time that she recognizes her privilege (at least to some extent) and uses it for the greater good, her “experience” as an activist behind bars, writing letters, is not entirely of her own construct. Indeed, the “positions” from which a rhetor speaks are always constituted through language. As Joan Scott notes, “experience” may be radically reconsidered as “historical processes that, through discourse, position subjects and produce their experiences.”²⁵ Language cannot be thought of as reflecting one’s “experience,” yet this is not simply because experience is shaped by positionality. As Scott pointedly states, “Since discourse is by definition shared, experience is *collective as well as individual*. Experience is a subject’s history. Language is the site of historical enactment. Historical explanation cannot, therefore, separate the two.”²⁶ Rhetoric does not merely “emanate” from a rhetor, but, rather, is a part of a collectively shared language that the rhetor then draws upon.

In the case of Steingraber's "Letters from Chemung County Jail," I am interested not only in the rhetoric of her letters and how they convey her experience in jail, but also in the rhetoric and history that allow her to convey her experience in these ways. As Steingraber herself recognizes, she is far from the first to be arrested in an effort to promote social justice; it is precisely because she is not the first that she chooses incarceration (and letter writing) as a mode of praxis. Martin Luther King Jr. is arguably the most remembered and celebrated civil rights activist, and David Benjamin Oppenheimer argues that the "Letter from Birmingham Jail" is "widely recognized as the most important single document of the civil rights era."²⁷ Steingraber's appropriation of King's rhetoric is thus almost surely an appeal to *ethos*, yet the differences between her and King, between civil rights protests in Birmingham and anti-fracking blockades in the well-off community of the Finger Lakes, makes her letter writing a contentious, risky rhetorical strategy.

In what follows in the next section, I consider the differences between Steingraber's articulation of her "experience" in jail while attending to the ways in which jail (as it pertains to civil disobedience) is an experience that is already constituted in specific ways. By (voluntarily) inhabiting a jail cell and writing letters based on King's own "Letter," Steingraber draws on the collective language of a social group that inhabited (and still inhabits) a social location vastly different from her own. She transforms jail from "A" (a restriction on freedom) to "non-A" (a powerful mode of advocacy), but this move from A to non-A depends, largely, on her appropriation of the rhetoric of civil rights and King's famous letter. Whereas King, Douglass, Forman, and Hamer drew on irony to offer a subjective perception grounded in recognition of their location within a particular, collectivized "experience," Steingraber's use of irony as a

means to explain her civil disobedience represents a gross appropriation of a rhetorical history to which she does not belong.²⁸

Legitimizing the Jail Cell Through Rhetorical Appropriation

Steingraber's ironic construction of jail is filtered through her privileged positionality. Steingraber forwards a familiar narrative of jail time ("A") as a place wherein activists' freedoms are restricted and, therefore, they can accomplish little. She describes her experience behind bars: "I now inhabit an ugly, miserable, loud and ungraceful world. There are no flowers; no local, delicious food; no tranquil landscapes; and not even coffee or tea."²⁹ She is away from her loved ones and the natural world, and has no access to a phone, Wi-Fi, email, or the Internet.³⁰ Steingraber explains how being away from the luxuries of (her) day-to-day life offers a glimpse into what is at risk of being lost in the fight against fracking. She states, "I now inhabit an ugly, diminished place devoid of life and beauty – and this is exactly the kind of harsh, ravaged world I do not want my children to inhabit."³¹ While these constructions of jail fosters appreciation for the often taken-for-granted wonders of the natural world, they also illustrate Steingraber's comfortable life outside of jail. What stands to be lost in Seneca Lake—beautiful landscapes, local foods and drinks, and ready access to technology—are, unfortunately, luxuries. To be sure, Steingraber is clear that her actions are part of a larger fight for clean drinking water, but it is the above descriptions that enable her to depict jail as a laudable mode of advocacy.

Steingraber explains how jail offers time for thinking and reflection, allows the activist to feel they are "walking their words," and "teaches you how to stand up and fight inside of desperate circumstances."³² After a fifteen-day sentence served just after Crestwood was authorized to begin the gas storage project, Steingraber released a public statement entitled, "The Case for Going to Jail and How to Do It: Guide to the Chemung County Jail—for Women."

Steingraber targets women only to recognize that her experience with incarceration took place in a women's jail. As she makes a pitch for serving a jail sentence over paying a fine (while recognizing that "[n]o roles are more heroic than others"), she states,

As a personal experience, enduring what Martin Luther King Jr. called, "the ordeals of jail" deepens one's commitment to our campaign, fosters patience and bravery, and reveals a side of American life—the world of incarceration—that is otherwise hidden from view. Most of all: there is great satisfaction in aligning one's actions with one's values. Those of us who have chosen jail sentences—by refusing to pay the county a fine for the privilege of arresting us—have discovered joy behind our bars and a sense of being at peace with oneself.³³

Steingraber ironically transforms jail time to depict it as, for the civil disobedient, an opportunity to acquire a privileged perspective. Yet as the above passage makes evident, this move hinges (as will become clear) in no small part on her appropriation of King. While she makes a powerful case for incarceration as a critical component of a civil disobedience campaign, what gives this rhetoric its force is its overt connection to civil rights. Although using strategies similar to those employed by King is not inherently problematic, the rhetorical problems become evident upon closer examination of the differences between King's experience in 1963 Birmingham and Steingraber's efforts in Seneca Lake.

Martin Luther King Jr. wrote his 1963 "Letter from Birmingham Jail" at the height of the contentious civil rights movement. The Southern Christian Leadership Conference (SCLC) had targeted the segregated city of Birmingham, Alabama for a series of nonviolent protests, and some supporters were wary about the timing given that newly elected city officials had not been given a chance to address the city's racial inequality.³⁴ Preceding the demonstrations,

Birmingham attorneys served King with an order preventing protests or demonstrations without a permit from the city, and, moreover, King received word that the movement was almost out of bail funds.³⁵ Edward Berry explains the predicament this created for King:

He was thus faced with a terrible choice: to obey the injunction and to lose not only the symbolism of the Easter season but the momentum of the protests—to reproduce, in short, the disastrous results of the previous campaign in Albany; or to defy the injunction, something he had never done, and thereby both weaken the support of the federal government and waste time in the Birmingham jail that was sorely needed for fundraising.³⁶

King elected to assume the risk; he led a protest and was subsequently arrested. During his sentence, he read a letter from eight local clergymen published in the *Birmingham News*. Though the clergymen were supporters of the civil rights movement, they echoed the concerns of many moderates regarding the timeliness of the protests, and urged protestors to use lawful means in their efforts to challenge racial injustice. Although King and his advisors had been considering the possibility of a jail letter for some time, King's "Letter" is widely assumed and interpreted as a direct response to the clergymen.³⁷

Rhetorical scholars have produced numerous analyses of King's "Letter."³⁸ Although his audience stretched beyond the white clergymen, Berry explains that the "Letter" *reads* as a direct response; King draws heavily on religion, and carefully addresses and refutes the clergymen's key concerns.³⁹ In the "Letter," King validates civil disobedience and direct action as appropriate means of advocacy, and denounces moderate leaders and supporters' calls for patience and lawfulness to usher in support for the civil rights movements' efforts and tactics, specifically in Birmingham.⁴⁰ To this end, he illustrates the horrific past and present experiences of black

Americans. As King explains years of black oppression, “[t]he reader experiences vicariously . . . the humiliations of segregation and the irresistible desire to bring the experience to an end.”⁴¹ According to Michael Leff and Ebony Utley, the “Letter” is rhetorically powerful because it criticizes white auditors while appealing to their goodwill, and it galvanizes black readers to realize and exercise their agency in the movement toward civil rights.⁴² The “Letter” is a communal and contextualized appeal to *ethos*.

The rhetorical situation surrounding Steingraber’s “Letters from Chemung County Jail” is quite different in ways beyond the obvious focus on the environment rather than race. Whereas King went to jail for demonstration, Steingraber went to jail for trespassing. Civil disobedience was not exactly a “last resort” for Steingraber in the same way it was for King, who could not even protest or demonstrate without breaking the law. Though King made the “choice” to demonstrate and go to jail, it was a choice made in more constraining circumstances than those facing Steingraber, especially given that the movement was out of bail funds. Moreover, the ordinance against demonstrations in Birmingham specifically targeted civil rights protests; anti-trespassing laws were not a direct attack on Steingraber’s activism. In his “Letter from Birmingham Jail,” King carefully articulates the difference between just and unjust laws, arguing that unjust laws are those worth breaking. He notes that “an individual who breaks a law that conscience tells him is unjust and who willingly accepts the penalty of imprisonment in order to arouse the conscience of the community over its injustice, is in reality expressing the highest respect for law.”⁴³ Thus, King’s appeal to the lawfulness of his actions is complex, resting on a careful distinction between just and unjust law. Steingraber, in contrast, appeals to lawfulness without such nuance, even as she appropriates King’s words. She writes,

Even before the infrastructure for this gas storage is built, Crestwood Midstream has polluted the lake with salt, at levels that exceed its legal limits. Crestwood's response is to pay a fine and keep polluting. By contrast, I refuse to pay a fine to excuse my crime and so accepted the lawful consequences of my actions.⁴⁴

In other letters and statements, she repeats that one of the reasons jail is a valuable means of advocacy is that it "shows respect for the law."⁴⁵ The indication is that Steingraber is more lawful than Crestwood, but the laws themselves are not directly called into question. What she does call into question is the ability of corporations and individuals to buy their way out of serving sentences. Although her rhetoric is powerful in calling out the injustice of Crestwood's actions and the flaws with the system, the problem lies in how she constructs her rhetoric based on King's "Letter." Certainly, the condition of possibility for her to make such appeals, to illustrate the lawfulness of her actions as an appeal to *ethos*, is made possible in large part through her racial and class privilege.

Steingraber makes direct comparisons between her situation and that of the civil rights and other justice movements; though meant to emphasize the urgency of the rhetorical situation, they paradoxically exacerbate her privilege while misrepresenting the situation facing past activists. In her "Letter" addressed to fellow mothers, she states that busy parents have always participated in human rights activism. "They, like I, probably also kept a list labeled, 'Things to do before going to jail.' Their list, like mine, probably included: making meal plans, paying bills, cleaning the bathroom, and finding a costume for the school play."⁴⁶ This statement may be read as an appeal to privileged parents whose day-to-day concerns are trivial in comparison to potential water contamination. Although it shows a helpful perspective to such a target audience, Steingraber follows to implement a troubling hierarchy between contemporary environmental

concerns and the threats facing civil rights, abolition, and anti-fascists. The following example points to fascism specifically, but it is preceded by comparisons to civil rights, suffrage, and abolition movements:

To fight against Hitler, anti-fascist partisans sent their children away to safe places in case they were betrayed. They were busy parents, too. They loved their children just as much as we do. The difference is: *now there is no safe place for our children*. We can't hide them from the ravages of climate change.⁴⁷

Of course, there *is* no way to escape climate change, although it is indeed easier for the privileged to at least avoid seeing or experiencing some of the more immediate effects.

Nonetheless, Steingraber is correct to note that toxins are ubiquitous, and thus affect everyone, albeit unequally.⁴⁸ There is thus no safe place wherein parents can protect children from climate change. The key word in the above passage is *now*. Steingraber inadvertently implies that Jewish and black children *did* have safe places to go during the height of the civil rights and anti-fascist movements. In his "Letter from Birmingham Jail," King explains why civil rights activists are no longer willing to wait patiently for justice. Black Americans are "harried by day and haunted by night by the fact that you are a Negro, living constantly at tiptoe stance, never quite knowing what to expect next, and are plagued with inner fears and outer resentments."⁴⁹ The problem with Steingraber's "Letter" is not that she exaggerates the threats of climate change, but that she invokes a hierarchy between environmental and other forms of oppression while paving over the ways in which environmental and racial injustice are, in many ways, connected—the case of lead poisoning in the predominately black community of Flint, Michigan being one of many examples.

Perhaps Steingraber's most overt appropriation of King is her "Letter from Chemung County Jail to Environmental Leaders." Before offering an assessment of the implications of the "Letter's" rhetorical appropriation, I first illustrate the parallels. The "Letter" challenges moderate environmental groups that have expressed willingness to negotiate with industry, thus ironically suggesting that the environmental advocates behind bars are more committed to the environment—and are more moral—than those who are not. She states,

In my home state of Illinois – where no fracking is currently occurring – the Sierra Club and Natural Resources Defense Council has [*sic*] joined hands with industry to draft model regulations for fracking (which are not as strict as those that we rejected in New York). The Sierra Club's subsequent endorsement of the fracking regulatory bill now under consideration by the State legislature has allowed pro-fracking forces in both government and industry to claim that Sierra Club has endorsed regulated fracking.⁵⁰

Steingraber explains how, in personal conversations with Sierra Club and NRDC officials, she has been told that a total ban on fracking is politically unrealistic. She argues that regulated fracking is oxymoronic; the fossil fuel industry—deceptive, prone to accidents, and exempt from many environmental acts—cannot be expected to regulate itself. Moreover, she argues that a "compromise" of such sorts is really just another way to excuse continued use of fossil fuels. Steingraber and her fellow anti-fracking activists call for a complete ban on fracking as a means to transition to renewable energy; this contrasts with claims that fracking itself is the "bridge" to green energy. On behalf of those protesting the operation in Seneca Lake, she states, "[O]ur act of civil disobedience—for which I now wear an orange jumpsuit and reside in a six by seven foot cell—is directed at the practice of shale gas extraction."⁵¹ She explains how she and other activists are "taking a stand" against projects that enable fossil fuel dependency. By framing her

(and others') actions as morally superior to those of mainstream environmental groups, she appeals to *ethos* while attacking the credibility of more moderate groups. This move closely mirrors King's challenge to the clergymen, who called for patience and civility in a time of racial violence and turmoil.

The opening paragraphs of Steingraber's "Letter" are strikingly similar to King's. She begins by addressing four leaders of mainstream environmental groups: Fred Krupp of the Environmental Defense Fund, Frances Beinecke of the Natural Resources Defense Council, Michael Brune of the Sierra Club, and Philip Johnson of the Heinz Endowments. Just as King implicitly addressed more than just the clergymen, Steingraber acknowledges "[o]ther fellow leaders in the environmental community" before beginning her "Letter." In comparison, King's opening line states, "While confined here in the Birmingham city jail, I came across your recent statement calling my present activities 'unwise and untimely.'"⁵² He follows to note that the letter will provide a response to the clergymen's concerns, and then moves to explain why he came to Birmingham. Steingraber's first line states, "While confined in the Chemung County Jail, here in the southern tier of upstate New York, I have had to think deeply and long about the environmental community's response to the boom in natural gas extraction from shale via hydraulic fracking, which is now sweeping the nation, from west to east."⁵³ She too follows to state the purpose of the letter (to share her insights about the fracking controversy), and immediately moves to explain why she is in jail. King's "Letter from Birmingham Jail" thus served as more than mere inspiration for Steingraber's own "Letter."

Steingraber's letter draws heavily upon the theme of time that was so forceful in the "Letter from Birmingham Jail" to make the case for the abolishment of fracking and fossil fuels. It is here that her rhetoric is troubling in that it covertly relegates racism to the past. Seemingly,

whereas King's "Letter" illustrates the "time" for racial justice, Steingraber continues his legacy by addressing the issue plaguing the contemporary era: economic dependence on toxins. In King's case, the clergymen echoed a larger concern that the protests in Birmingham were untimely; they "called for an end to demonstrations, for patience, and for pursuing reform through negotiation and the courts."⁵⁴ King countered the call for gradualism, arguing that African Americans had spent far too much time under oppression. His "Letter" states, "*Now is the time* to lift our national policy from the quicksand of racial injustice to the solid rock of human dignity."⁵⁵ In comparison, Steingraber states,

The voices that cry "wait" and capitulate to powerful industry forces through their willingness to trade one fossil fuel for another are taking us down a perilous path. *It is time to say now* – grassroots groups and big green groups together – that the unholy trinity of coal, oil and gas is part of a ruinous past.⁵⁶

Regulated fracking becomes akin to gradual racial integration, and arguments for moving slowly away from fossil fuels are seen in terms of arguments for patience in the face of overt racial injustice. While this parallel to King and civil rights allows her to moralize the rhetorical situation and bolster her credibility, it also neglects the pervasive links between environmental justice and racism, and ignores the fact that although segregation has technically been abolished (even while many areas and schools are still heavily segregated), racism, like the environmental crisis, is a dire issue of the present. In the context of environmental toxins, racism is apparent in the inequitable distribution of hazardous sites—such as landfills and factories—in communities inhabited predominately by people of color.⁵⁷ It is also evident in the disregard of environmental problems plaguing communities inhabited predominately by people of color, such as the earlier mentioned case in Flint. By appropriating King's rhetoric and his emphasis on time, Steingraber

inadvertently constructs racism an issue of past and the environment as *the* issue of the present. This echoes her earlier claims in *Raising Elijah*, wherein she appropriated civil rights rhetoric by describing the environmental crisis as, in contrast to the civil rights movement, “the great moral crisis of our own day.”⁵⁸ Rather than leaving this troubling comparison behind, she has increased her reliance on it.

Scott argues that experience is “not the origin of our explanation, but that which we want to explain.”⁵⁹ Steingraber’s “Letters from Chemung County Jail” do not simply portray her activist experience; rather, they construct it, and in doing so rely necessarily on an already existing body of shared discourse. Her experience is represented and thus constituted through a terminology tethered to King’s “Letter from Birmingham Jail.” Of course, all “experience” is produced through language, yet what makes Steingraber’s construction troubling is the fact that it appropriates a collective “experience” of jail time. King’s “Letter” was communal; it targeted moderates while demonstrating faith in their goodwill, and encouraged blacks to activate their agency. Steingraber’s “Letters” attempt to give meaning to a much different rhetorical situation. The environmental crisis is permeated by racism, classism, and sexism, all while it hurting everyone in some way. In an attempt to reach a broad collective, Steingraber inadvertently paves over the ways in which her activism and perception of the environmental movement is uniquely situated, and privileged. She gives credence to her time in jail by appropriating the rhetorical “experience” of King.

Conclusions

A year and a half after Steingraber’s first arrest, Crestwood Equity Partners received federal approval to transform the salt caverns beneath Seneca Lake into storage containers for methane. One day before the company was authorized to begin construction, the “We Are

Seneca Lake” (WASL) campaign held their first protest. Steingraber was among the many Seneca Lake “defenders,” who cited drinking water contamination as a primary concern. Activists also vehemently opposed Crestwood’s plans to become a gas storage hub for the entire northeast and thus enable fracking well beyond the confines of New York. Within two years of WASL’s first protest, over 600 arrests had taken place.⁶⁰ What started as an eleven-person effort had blossomed into much more, in no small part thanks to Steingraber’s leadership and rhetorical skill. In May 2017, Crestwood announced that it would be abandoning their plans to store methane in the caverns, although it maintained plans to move forward with propane storage in the same area.⁶¹ Although the struggle continues, anti-fracking activists have made tremendous gains.

What was the role of incarceration—and Steingraber’s constructions of this mode of advocacy—in the campaign against Crestwood? Undoubtedly, the willingness of some activists to choose incarceration and Steingraber’s accompanying series of “Letters from Chemung County Jail” helped to draw media coverage and thus bolster the *ethos* of their efforts. The campaign indeed captured the attention from media sources including the *New York Times*, and well-known activists such as Bill McKibben came from afar to join the protest and subject themselves to arrest.⁶² Steingraber argues that filling jail cells with activists “provoke[s] a crisis that cannot be ignored by media or political leaders” and “shows seriousness of intent.”⁶³ Indeed, her arrests and incarceration have been beneficial to anti-fracking efforts and the environmental movement at large. In December 2014, New York Governor Andrew Cuomo banned fracking in the state of New York.

While recognizing Steingraber’s willingness to speak out and use her privilege to promote social justice, this chapter has shown that her appeals to *ethos* in her “Letters from

Chemung County Jail” problematically rely on the appropriation of Martin Luther King Jr.’s rhetorical strategies in the “Letter from Birmingham Jail.” To transform jail—a no compromise, last resort call for justice—into a fitting activist response to the rhetorical situation, she turns to already existing rhetorics she perceives as enabling. Her ironic appeal to jail time is not merely shaped by her own perspective, but also shaped *through* the discourses that are available to her. Though her intentions are noble, her rhetorical strategies are not without consequence. Relying heavily on King to “invent” her situation, Steingraber masks the nuances that undermine a comparison between the two situations. At the same time that this inadvertently flattens racism and environmental injustice while historicizing the former, it also prevents Steingraber from conveying the distinctive nature of the environment struggle as a problem that affects everyone at the same time that it exacerbates racism, sexism, classism, and other forms of injustice.

Together, irony, standpoint, and *ethos* inform an understanding of Steingraber’s rhetorical invention and strategies in her “Letters.” As Susan Jarratt and Nedra Reynolds explain, feminist standpoint theory can help scholars to reconceive of *ethos* “as an ethical political tool—as a way of claiming and taking responsibility for our positions in the world, for the ways we see, for the places from which we speak.”⁶⁴ Attending to the ways in which rhetoric is filtered through social location—which is itself rhetorically produced—shows the ethical implications of rhetorical “positioning.” Steingraber positions herself as an activist through the “master trope” of irony. Ironic depictions of jail and fracking enable her to give credence to her civil disobedience, but only through the appropriation of King’s standpoint and a failure to convey her own privileged social location.

Steingraber’s rhetoric has changed a great deal since *Living Downstream*. She is still committed to understanding local issues and their global implications, yet has increasingly

emphasized the importance of individual, direct action as a key means of promoting structural change. Along with this shift in focus, she has tended toward tropes that exacerbate her privilege. Andrew Szasz observes that activism tends to be a radicalizing experience, especially for leaders.⁶⁵ Although Steingraber's contemporary rhetoric is certainly not radical in comparison to groups like Earth First!, it is far less palatable than the writing in her three books. Whether accurately labeled as "radical" or not, her advocacy has led her to believe that the contemporary exigence is no longer a lack of knowledge; thus, words alone will not suffice to change the status quo. Perhaps her focus on action has led her to compromise her rhetorical strategies; they are now less careful, and at great cost. Though King and his "Letter" offer powerful resources to social justice activists, appropriating King's tactics—especially his "Letter from Birmingham Jail"—inadvertently tethers Steingraber's positionality to King's, a move that paves over racial and class inequality while at the same time masking issues of inequality and ubiquity that permeate the contemporary environmental crisis.

CHAPTER 5

ARTICULATING LOCATIONS, APPEALING TO *ETHOS*: CONSIDERING THE PARTS AND WHOLE OF STEINGRABER'S CORPUS

Chanda Chevannes, a Toronto based producer and director of the 2010 documentary on *Living Downstream*, has followed Steingraber in her turn toward civil disobedience. In 2017, Chevannes began holding public screenings of her newest documentary, *Unfractured*. The film centers on the anti-fracking movement in New York and Steingraber's role in galvanizing and sustaining it. According to the website on the film, it "takes us through a battle of astonishing international significance and into the life and mind of a complicated and compelling woman, asking us to consider the risk and reward of activism."¹ The "risks" in this description refer primarily to the time and efforts that can be spent on activism. Steingraber has spent much of her life writing, traveling, speaking, and rallying in her fight for a clean environment. As evidenced in her "Letters from Chemung County Jail," her activism has taken her away from her family for weeks at a time. The documentary aptly describes Steingraber as someone who "fights with her whole heart," at great cost yet at great reward.

This dissertation has analyzed the conditions, risks, and rewards of Steingraber's activism from a distinctly rhetorical perspective. It has asked after *what makes* Steingraber "complicated and compelling," and has aimed to provide an understanding and assessment of her rhetorical choices in her key works. In this final chapter, I first provide a summary and synthesis of the preceding analysis chapters with specific attention to Steingraber's development over time. Which strategies has she carried through to today? In what ways has her rhetoric changed, and to

what effect? Taken as whole, what does an assessment of her rhetoric offer? This section aims to make sense of the corpus of Steingraber's rhetoric. Next, I harken back to the theoretical issues, insights, and questions raised in chapter one. In light of the analyses offered of *Living Downstream*, *Having Faith*, *Raising Elijah*, and the "Letters from Chemung County Jail," I revisit the relationship between *ethos* and feminist standpoint theory in attempt to further unpack the ways in which I understand these two concepts as mutually beneficial. I conclude the chapter by raising additional questions, thoughts, and suggestions for future scholarship related to these issues.

From *Living Downstream* to the Jail Cell

Living Downstream is Steingraber's first book, and is perhaps the one for which she is best known. Since its original publication in 1997, it has been rereleased in an expanded second edition and documentary. Though inspired by Rachel Carson's *Silent Spring*, *Living Downstream* relies heavily on personal narrative. Thus, Steingraber not only violates the norms of peer-review in this book, but also challenges the taken-for-granted assumption that "science" is a disembodied, ideally "objective" practice. As advertised on her website, the book is deliberately and overtly a mix of science and experience: "Poet, biologist, and cancer survivor, Steingraber uses all three kinds of experience to investigate the links between cancer and environmental toxins."² This quote illustrates the inherent splitting of self that affects any rhetor's strategies, but is typically made invisible in the case of science to sustain its image as transcendent of the individuals who conduct it.

In chapter two, I argued that Steingraber's activation of her self-division in *Living Downstream* simultaneously maintains and undermines the authority of science. Through strategic juxtaposition, she illustrates the incompleteness of different ways of knowing, and thus

negotiates rather than reifies a hierarchy between science and experience. By articulating her “locations” as a cancer patient and biologist, she challenges the perceived divides between objectivity and subjectivity, science and experience, and rational mind and pre-rational body. To this end, juxtaposition functions as a powerful appeal to *ethos* that establishes her expert knowledge at the same time that it fosters identification. Inhabiting a contradictory location as someone analyzing dehumanizing cancer research while personally experiencing the implications of a cancer diagnosis, Steingraber’s location affords her unique insight into the commonplace narrative of cancer as a genetic disease that can be avoided through changes in lifestyle. In *Living Downstream*, Steingraber addresses gaps and disconnections in rhetorics of cancer by negotiating her differing epistemological leanings.

Having Faith takes a slightly different focus, yet the two texts share many rhetorical commonalities. The purpose of *Having Faith* is similar to *Living Downstream* in that it aims to shed light on the devastating effects of toxic chemicals, this time on pregnant women and their fetuses. The difference, obviously, is that Steingraber enters the treacherous terrain of motherhood rhetorics. As noted earlier, appeals to maternal *ethos* can be constraining or enabling, and sometimes both. While they have allowed women to use their association with childcare to bring seemingly “irrelevant” issues to the public sphere, they can also work to conflate womanhood with motherhood and reinforce oppressive notions of both. In my assessment of *Having Faith*, I argued that Steingraber effectively overcomes the constraints of maternal appeals. By portraying the womb as a representation of the outside environment, she shows that structural change is the solution to protecting women’s bodies. She draws on her maternal *ethos* to showcase a key site of toxic harm and depict it as a synecdoche for

environmental harm. Moreover, she promotes maternal, precautionary thinking as an approach to toxic regulation.

Though Steingraber faces significant rhetorical tensions in both *Living Downstream* and *Having Faith*, I have argued that she navigates them quite productively. This may be due to the implied goals of the text; they function *primarily* to raise awareness and convey knowledge. As a scientific expert willing make her personal commitments explicit, Steingraber's appeal to *ethos* in these two books rest on her authority (she is more knowledgeable on the issues than the majority of her readers) and relatability (she exercises a peer like, sometimes even feminine, style). She is both insider and outsider; she makes her privileged knowledge as a scientist explicit at the same time that she illuminates how other forms of knowledge can give value to scientific findings. She thus successfully navigates her differing epistemologies, using them toward the goal of illustrating that structural change is the solution to environmental toxicity.

Although Steingraber's move from writing to civil disobedience is her most dramatic change shown in this dissertation, an earlier shift in her rhetoric is evidenced through a comparison of *Having Faith* and *Raising Elijah*. Here, she targets and galvanizes a specific audience to take action. On the grounds that children stand to lose the most from environmental catastrophe, *Raising Elijah* "speaks directly to parents."³ Although she explains that parental action is part of a larger political effort—and clearly states that individual actions alone are not enough—*Raising Elijah* inadvertently relies on a rhetoric that is privileged, alienating, and aligned with the ideology of intensive mothering. In chapter three, I argued that this outcome is inextricably linked to her reliance on metonymy rather than synecdoche. While both tropes involve the use of a "part" to represent a larger whole, in synecdoche the whole also represents the part. In metonymy, the "direction of convertibility" extends only one way. In *Having Faith*,

the maternal body is the “part” that illustrates the health of the environmental whole, and the environment is also made to represent the health of women’s bodies. In contrast, *Raising Elijah* shows how the abstract notion of the “parent protector” is threatened by environmental contamination through examples from Steingraber’s day-to-day life as a mother. These examples are not only shaped by her privilege, but also reinforce the ideology of intensive mothering. As an intensive, scientifically informed mom, Steingraber goes above and beyond to reduce risks to her children’s health; although she is overtly *against* individual change as a primary means to effect change, she covertly restores a logic of individual change throughout the text. I argued that this represents what Kenneth Burke describes as “debunking.” In *Having Faith*, the “parts” she selects represent a larger problem; in *Raising Elijah* they do not, and thus are confining and constraining.

The rhetorical turn evident in *Raising Elijah* deserves closer attention, as it seems that this book represents the beginning of Steingraber’s shift toward rhetorics that exacerbate her privilege. I speculate that this “shift” is the result of her increasing specificity in her construction of the rhetorical situation, which is likely a product of her desire to effect material change. Paradoxically, as she gets more specific in her delineation of a target audience and her calls for action, she becomes increasingly alienating. *Living Downstream* speaks to an incredibly broad audience. Here, Steingraber constructs the general exigence as the public’s lack of knowledge regarding both environmental links to cancer *and* the societal failure to use scientific findings to protect public health. Even though *Having Faith* seemingly addresses mothers, it forwards a broad construction of the rhetorical situation. At the outset of the book, she explains that she addresses “everyone concerned about future generations,” and the book concludes by arguing that precautionary thinking—an approach familiar to many mothers—must be applied to policy.⁴

Thus, *Having Faith* examines reproduction, but through synecdoche frames it as an issue that should matter to everyone. Moreover, it shows that regulation of toxic chemicals would benefit from a “maternal” perspective. In sum, both *Living Downstream* and *Having Faith* address a broad audience in attempt to shed light on the connections between toxins and illness, and to support political, structural action.

In contrast, *Raising Elijah* directly addresses a specific audience, advocating they take concrete steps to protect their children’s futures. Likely, this book is an attempt to identify a rhetorical audience. Though Steingraber addresses a broad range of issues (e.g., organophosphates, pressure-treated wood, fracking), she focuses on implications for family life. To bolster her construction of parents as agents of personal and political change, Steingraber offers a personal model for her readers. In attempting to activate the agency of a specific audience, she fails to fully recognize the conditions *for* agency. Privilege is blinding, and this becomes clear in Steingraber’s case as she offers herself as an example for her readers. Thus, her increasing specificity—and focus on herself as an exemplar of appropriate action—inadvertently exacerbates her racial, class, and educational privilege.

This increased specificity in focus is made all the more clear in Steingraber’s recent turn towards civil disobedience. Although she focuses specifically on fracking related issues in her local community, the specificity that interests me in this case is her focus on civil disobedience and incarceration. In her “Letters from Chemung County Jail,” Steingraber posits civil disobedience and incarceration as necessary modes of address in the contemporary fracking crisis. In chapter four, I argued that she forwards her position as an incarcerated civil disobedient as an *ethos* by appropriating the rhetoric of Martin Luther King Jr. This rhetorical appropriation is consequential; Steingraber (perhaps inadvertently) constitutes a hierarchy between

environmentalism and racism (the former being conveyed as more timely and threatening), and relegates racism to the past in her failure to portray the intersectionality of environmental issues with other forms of oppression. Moreover, by appropriating the rhetoric of King, Steingraber paves over her own unique, privileged positioning. I suggested that irony is a primary rhetorical device in the “Letters from Chemung County Jail,” and posited a close connection between irony and standpoint. In her “Letters,” Steingraber appropriates an ironic rhetoric tethered to a positionality that, put bluntly, is not hers to use.

As in *Raising Elijah*, Steingraber’s construction of the fracking situations demands that she specify her appeals to *ethos*. In the “Letters,” she emphasizes a specific mode of action—civil disobedience—rather than a specific audience. Nonetheless, the bind it places her in is similar. Focusing on incarceration demands that her appeals to *ethos* address her controversial mode of address. It is perhaps not surprising that she considers King, whose “Letter from Birmingham Jail” is arguably the most memorable document of the 1960s civil rights movement.⁵ Yet it *is* surprising that she is willing to appropriate his message to such an extent as an attempt to garner *ethos*. This raises serious ethical implications even while it may very well have played a role in the campaign that led to the New York fracking ban. In any case, injustices are linked, and treating classism, sexism, and contamination as separate issues results in a gross oversimplification of oppression and, thus, of oppressive systems.

Chanda Chevannes is on point in describing Steingraber as compelling and complex, labels that just as easily apply to her rhetorical strategies. In offering this analysis of Steingraber’s rhetoric across her writing and activist career, I have attempted to highlight the strengths of her rhetoric without neglecting the areas in which it is troubling. Steingraber is one of the most impactful activists fighting for the environment, making her rhetoric a rich site of

study. She is undoubtedly skillful, but at times ignorant of her racial and class privilege. Attention to the strategies of this skilled and privileged environmental advocate shows that it her calls for direct action wherein she goes awry. Activists should always reflect on their societal position, yet this is perhaps all the more important in cases wherein a rhetor offers their own experiences as a model for action. From *Living Downstream* to the Chemung County Jail, Steingraber has had her rhetorical ups and downs. She has consistently maintained a focus on the human consequences of toxicity, refusing to separate the personal and the scientific. At times, however, she uses the personal as a template for others without recognizing conditions of possibility for her own agency.

Standpoint and *Ethos*: Implications and Final Thoughts

At the outset of this dissertation, I argued that feminist standpoint theory and rhetorical scholarship on *ethos* can be mutually beneficial. Together, these bodies of literature help to explain how Steingraber's social position influences her rhetoric *and* how she actively constructs and shapes her position as an appeal to credibility. Rather than positing a temporal relationship between position and *ethos*, I have argued that each informs the other. Feminist standpoint theory offers a corrective to Aristotle's separation of *ethos* and *ethics* by recognizing the embodied nature of rhetorical practice. Rhetoric is never separate from rhetors, and feminist standpoint theory shows how a rhetor's positionality and (lack of) privilege impacts her or his discourse.⁶ Contemporary understandings of *ethos* are equally beneficial to feminist understandings of standpoint. Attention to *ethos* shows that positionality is layered and complex, and is perhaps more accurately considered as *positionalities*. Considered in light of feminist standpoint theory, I have defined *ethos* as credibility made possible through a rhetor's articulation of their epistemological and material locations *and* the articulation of their "locations" to the audience.

Steingraber's appeals to credibility in the studied texts illustrate *ethos* in this light. In *Living Downstream*, she articulates her identity as a cancer survivor with her identity as a biologist, thus creating a rhetoric that is at once authoritative and peer like. In *Having Faith* and *Raising Elijah*, she supplements scientific thinking with a moral, maternal lens. Through maternal appeals to *ethos*, she aims to connect with her readers while illuminating the relationship between toxicity and "motherhood." Finally, in her "Letters from Chemung County Jail," she articulates her "location" in jail to Martin Luther King Jr.'s time in Birmingham Jail in an attempt to appropriate *ethos*. Attending to the connection between location and self-division helps to illuminate the complexity of rhetorical appeals to *ethos*.

Scholars of rhetoric and philosophy have long debated the location of *ethos*, asking whether it emanates from culture or the individual. As James S. Baumlin writes,

Translated as "character," *ethos* would seem to describe a singular, stable, "central" self. Translated as "custom" or "habit," *ethos* would describe a "social" self, a set of verbal habit or behaviors, a playing out of customary roles.

And yet, with a few striking exceptions, Western intellectual culture has tended to embrace the "central," serious, or as I might term it *philosophical* model of selfhood over the "social," dramatic, or *rhetorical* model.⁷

Rather than embracing the social, rhetorical nature of *ethos* at the cost of unhinging it from the individual rhetor(s), I have aimed to show how the rhetorical model can both correct and make use of the notion of a singular "self." Certainly, Steingraber's positionality affects which rhetorics she draws upon at the same time that her rhetorics shape her positionality in specific ways. In this dissertation, I have attended to the layered, divided nature of her "self" to show how it affects and is affected by her appeals to *ethos*. Ethical use of *ethos* involves a complex

series of negotiations that demand rhetorical skill as well as careful attention to one's social, embodied position.

Throughout her books, essays, and speeches, Steingraber challenges status quo narratives about cancer and numerous other health ailments. She “critically interrupts” commonly held assumptions that toxins are well regulated, safe in small amounts, and unable to cross the placental “barrier.” Through a careful weaving of science and personal narrative, she shows the devastating implications of economic dependence on toxic chemicals. Her rhetoric is discomforting, provocative, and memorable.

At the same time that Steingraber undermines status quo narratives, in other ways she reinforces them. *Raising Elijah* can be read as a pitch for intensive mothering in a high-risk society, and her “Letters from Chemung County Jail” can be understood as a racist appropriation of Martin Luther King Jr.’s activist positionality. Her rhetoric is thus also—in some cases—elitist, blind, and normative.

Like any project, this dissertation has likely raised more questions than it has answered. As I conclude, I want to offer questions of my own. Rachel Carson paved the way for scientists to speak out as advocates for public health. Steingraber follows in her footsteps, but also pushes the envelope further by incorporating her personal experience and thus making herself vulnerable to charges of “interested” science. Have contemporary rhetorics of scientific advocates become more personal in nature? What is the construction of “science” in today’s culture? I noted at the outset that depictions of science as objective are still common, as seen in the claim “science is real.” Yet it may be the case that there is increasing pushback against this narrative. If so, where and how does this resistance take place? Further rhetorical scholarship should examine cases of

resistance against the narrative of science as objective, especially as it takes place in progressive arenas.

In my assessment of *Raising Elijah*, I examined Steingraber's use of privileged, non-representative "experience." Although Steingraber's portrayal of her personal experience exacerbates her privilege and is thus alienating, questions remain regarding whether "experience" can *ever* be representative. Of course, appeals to common experience can serve an important collectivizing function. In reference to charges of essentialism against feminists, D. Lynn O'Brien Hallstein states, "Retaining a notion of commonality is . . . important because of feminism's commitment to politics; working toward social change for women has always been central to feminism, in all of its varieties."⁸ Can metonymic reductions of "experience" work toward this end? If so, how? Clearly, articulations of experiences can show a larger whole, but what are the conditions of possibility for *one* rhetor's experience to serve as a representation of a larger social ill?

Finally, more sustained attention is needed to the relationship between Steingraber's race and her rhetorical strategies. Does she continue to appropriate the rhetoric of civil rights in *Unfractured*? The "We Are Seneca Lake" movement of upstate New York—which features heavily in *Unfractured*—is predominately white. What are the implications of race in this campaign? How does race figure in the New York anti-fracking movement, and in the anti-fracking movement more broadly?

Steingraber holds a powerful presence in the environmental movement, and will no doubt be remembered and commemorated for years to come. She is a biologist, poet, cancer survivor, mother, writer, and activist; these identities often lead to contradictory epistemologies. By articulating these locations as an appeal to *ethos*, Steingraber pushes through these binds with

varying effects. She is not simply a “two-way translator between scientists and activists” (as her website claims); rather, she is a uniquely positioned, skilled, and privileged rhetor.⁹ Her positionality figures heavily in her rhetorical strategies, enabling her to challenge, negotiate, and reinforce commonplace narratives of the relationship between humans and the environment

NOTES

Chapter One

¹ Sandra Harding, "Rethinking Standpoint Epistemology: What is 'Strong Objectivity'?" in *The Feminist Standpoint Theory Reader: Intellectual and Political Controversies*, ed. Sandra Harding. (New York: Routledge, 2004), 132.

² Harding, "Rethinking Standpoint," 132.

³ Heidi Grasswick, "Climate Change Science and Responsible Trust: A Situated Approach," *Hypatia* 29, no. 3 (2014): 547.

⁴ Such claims are perhaps most evident in the rhetoric of the recent Marches for Science. See Ryan W. Miller, "March for Science 2018: Passionate Advocates Push the Cause for Research Across the Globe," *USA Today*, April 14, 2018, <https://www.usatoday.com/story/news/nation/2018/04/14/march-science-2018/517294002/>; David Willman, "Meanwhile in Washington..." *Los Angeles Times*, April 22, 2017, <http://www.latimes.com/science/la-sci-march-science-live-updates-meanwhile-in-1492891742-htmlstory.html>.

⁵ Kelly E. Happe, *The Material Gene: Race, Gender, and Heredity after the Human Genome Project* (New York: NYU Press, 2013), 166.

⁶ Happe, *The Material Gene*, 166.

⁷ Ithaca College, "Featured Experts," *IC News*, 2018 <https://www.ithaca.edu/ic-news/experts/?item=475>; Jonah Ogles, "One Mean Motherfracker," *Outside Magazine*, November 7, 2013, <https://www.outsideonline.com/1920041/one-mean-motherfracker>; John Schwartz, "Environmental Activists Take to Local Protests for Global Results," *New York Times*, March 19, 2016, <https://www.nytimes.com/2016/03/20/science/earth/environmental-activists-take-to-local-protests-for-global-results.html>; Sandra Steingraber, "Highlights," *Sandra Steingraber*, 2018, <http://steingraber.com/>.

⁸ Ithaca College, "Featured Experts," *IC News*, 2018, <https://www.ithaca.edu/ic-news/experts/?item=475>; Sandra Steingraber, "Heinz Award Acceptance Speech," *Sandra Steingraber*, November 15, 2011, <http://steingraber.com/heinz-award-acceptance-speech/>.

⁹ Susan C. Jarratt and Nedra Reynolds, "The Splitting Image: Contemporary Feminisms and the Ethics of *Ethos*," in *Ethos: New Essays in Rhetorical and Critical Theory*, ed. James S. Baumlin and Tita French Baumlin. (Dallas, TX: Southern Methodist University Press 1994), 48; Nedra Reynolds, "*Ethos* as Location: New Sites for Understanding Discursive Authority," *Rhetoric*

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Chapter Two

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Chapter Three

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