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PROTECTING SYSTEMS OF NATURE AND GENDER: ECOFEMINISM
IN BARBARA KINGSOLVER'S *PRODIGAL SUMMER*
AND RUTH OZEKI'S *ALL OVER CREATION*

By

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THESIS

Submitted in partial fulfillment of the requirements

For the Degree of Master of Arts,

With a Major in English

Governors State University

University Park, IL 60484

2017

This thesis and all of my achievements are dedicated to my beloved family.

To my husband David and our sons, Cooper and Knox: your love, patience, and support have always been my motivation.

To my parents, Laura Willoughby and Jim McKay: thank you for continued faith in my steady progress.

Acknowledgements

I would like to express sincere gratitude to Dr. Christopher White, who has filled the role of advisor in multiple respects throughout my graduate studies: academic advisor; faculty advisor of *Reconstructed*, which I edited while conducting my research; and thesis advisor. Dr. White's direction has been paramount to my studies. I owe my discovery of Ruth Ozeki to his use of her fiction in his classroom, and from that introduction to her work, he helped me forge meaningful connections between her writing and that of Barbara Kingsolver.

It is difficult to convey in the constraints of this space how meaningful Dr. White's guidance has been throughout the undertaking of this thesis project. He kept me focused and motivated, and he increased my knowledge and passion in the field of ecocriticism and literature of the environment.

I would also like to thank the members of my thesis committee, Dr. Rosemary Erickson Johnsen and Dr. Kerri Morris, for their contributions to my work. As I became more passionate about literature of the environment, Dr. Johnsen introduced me to ecofeminist theory. My thesis has been shaped by the research I began in her course, and this thesis has incorporated the work done that semester. To Dr. Morris, I owe my understanding of rhetoric, as used within the novels I have studied. I have used many of her lessons to guide my own thinking about the ways that rhetoric functions in activist fiction. To both Dr. Johnsen and Dr. Morris, I am forever grateful for your instruction.

Finally, I would like to acknowledge my family for their continued support. The sacrifices of their time have made the impossible possible. To my husband David, you have been relentlessly dedicated to my continued education, and I could not have gone on without you by my side. Thank you for being my biggest cheerleader. Cooper, your patience and understanding have been instrumental. At only four years old, you are remarkably mature, and I cannot thank you enough for your unconditional love. And finally to Knox: I began this thesis while you were in my belly, and now that you are nine months old, I dedicate the gestation of this thesis to you.

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Abstract

Ecofeminism has permeated the disciplines of politics, philosophy, science, and literature – all of which are embedded in the fiction of Barbara Kingsolver’s *Prodigal Summer* and Ruth Ozeki’s *All Over Creation*. In this thesis, I consider the authors’ use of scientific evidence to engage readers with their rhetorical goals of protecting the systems of nature and gender. In the first chapter, I define the history of ecofeminist activism and how Kingsolver and Ozeki continue its tradition. The second chapter considers the parallels between biodiversity and cultural diversity within both *Prodigal Summer* and *All Over Creation*. In the final chapter, I analyze themes of motherhood, maternity, and fertility in each novel, specifically as they are impacted by toxic human behavior.

Keywords: ecofeminism, Barbara Kingsolver, *Prodigal Summer*, Ruth Ozeki, *All Over Creation*, biodiversity, cultural diversity, motherhood, maternity, fertility

Introduction: Ecofeminism in the Novels of Barbara Kingsolver and Ruth Ozeki

In the late-twentieth century, as concerns around human impact on global health ranged from food production to energy use to global warming, fiction reflected these anxieties by exploring their implications. Meanwhile, ecofeminist theory gained momentum as scholars considered parallels between the prevalent attitude, careless and reckless, toward the health of the environment, in connection with the historic oppression of women. In Barbara Kingsolver's *Prodigal Summer* and Ruth Ozeki's *All Over Creation*, fictional rural farming towns in Kentucky and Idaho, respectively, are populated by individuals working to uncover a true understanding of the effects of modern science on agriculture, such as in pesticides, genetically modified (GM) crops, and precision farming supported by GPS technology. Feminist themes are a strong undercurrent throughout the novel, connecting the effects of ecological damage to the resulting harm experienced by women. Both *Prodigal Summer* and *All Over Creation* are influenced by and utilize ecofeminist theory to analyze human behavior and its effect on both the physical and cultural environments of their novels' settings.

Literary texts with ecofeminist themes address concerns shared by feminist and ecocritical theorists—namely, the dominance of capitalism's systemic patriarchy over earthly and feminine matters. Suzanne helpfully defines ecofeminism in this way: "From ecology, it learns to value the interdependence and diversity of all life forms; from feminism, it gains the insights of a social analysis of women's oppression that intersects with other oppressions such as racism, colonialism, classism, and heterosexism" (169). Through the narratives of three major characters, Kingsolver's *Prodigal Summer* explores feminist concerns of fertility and motherhood while simultaneously considering the

implications of such environmental concerns as cancerous pesticides, displaced predators, extinct and invasive species, and changes in modern farming practices. In *All Over Creation*, Ozeki also focuses on this confluence of environmentalism and feminism as she examines the effects of Cynaco, a satirical characterization of real-life corporation Monsanto, on the cultivation of rural Idaho. Like *Prodigal Summer*, *All Over Creation* highlights cancer, infertility, and cultural insensitivity as repercussions of late capitalism's aggressive overhaul of agricultural practices.

The objectives of ecofeminism have been explored at length by theorists seeking to connect the mistreatment of the environment to the oppression of women. In Colleen Mack-Canty's 2004 essay "Third-Wave Feminism and the Need to Reweave the Nature/Culture Duality," she explains that ecofeminism, ". . . in addition to developing theory from the embodied perspectives of its participants, extends its values of diversity and interconnectedness to other species and the natural world, as integral to feminism today" (156). Mack-Canty places the advent of ecofeminism in the mid-1980s (though others have cited its beginnings in the 1970s), and she traces its influences to certain strands of feminism (liberal, radical, and socialist, which inspire activism and social responsibility) as well as ecology, which promotes understanding of the inextricableness of systems, both social and natural (156).

Aligned with ecofeminism's focus on the systems within ecology, Kingsolver and Ozeki utilize similar but unique narrative structures to craft their works of fiction. A notable parallel between *Prodigal Summer* and *All Over Creation* is their similarly constructed narrative forms which utilize multiple perspectives of narratives which at first seem unrelated but ultimately connect in meaningful ways. In *Prodigal Summer*,

Kingsolver rotates among three third-person narratives that are set in Zebulon County, Kentucky, a tobacco farming community. One narrative strand, "Moth Love," follows Lusa, a former moth scientist, who has moved to Zebulon County to marry Cole Widener, a tobacco farmer. Sadly, Cole dies early in the novel, leaving Lusa to manage the farm on her own with only her in-laws to help her. Another narrative, "Predators," is the story of Deanna, also a former scientist, who has retreated from the town in Zebulon to live in solitude on its mountain. Deanna's focus is coyotes and their potential environmental impact as they become a predator introduced into an ecosystem desperately in need of one. Deanna's solitude is interrupted as Eddie Bondo appears on the mountain, hunting for the same coyote Deanna works to preserve. Last, Garnett Walker of the third narrative, "Old Chestnuts" is an elderly farmer and former 4H teacher who uses conventional, chemical farming methods to the chagrin of his neighbor Nannie Rawley, an organic farmer who believes these chemicals are harmful to people and the environment. Garnett is also working on a lifelong project: the American Chestnut trees have become all but extinct as a result of a devastating blight, and he is attempting to cross their genes with a Chinese Chestnut variety which is resistant to the blight. All scientists of biology and all advocates for their passions, these three focal characters work in tandem to reveal the intricacies of ecosystems and the dramatic effects that the introduction or removal of species have on them.

The interweaving narrative form of *Prodigal Summer* assists its primary task of explaining the balance of ecosystems: all characters are independent, but their past and present actions heavily impact on one another's narrative outcomes. In his article "Darwin and Ecology in Novels by Jack London and Barbara Kingsolver," Bert Bender

explains, “Indeed, the way these three women [Lusa, Deanna, and Nannie] take the lead in *Prodigal Summer* resembles what Deanna observes in a coyote family, particularly the ‘coyote women’ (202): ‘a coyote family was mostly females, sisters led by an alpha female, all bent on one member's reproduction’ (20)” (126). None of the female characters of *Prodigal Summer* have children, but by the novel’s end, Deanna discovers her own pregnancy and returns to her community where her stepmother Nannie will support her. Lusa does not have her own family in Zebulon County, but she receives, and in turn gives, support through the Widener family who is by marriage related to Garnett. These “narrative ecosystems” are unmistakable, and as the characters lean on one another for support, readers conclude that, like the coyotes and the American Chestnuts, the removal of even one of their narratives would devastate the balance of the system.

In a technique that parallels Kingsolver’s, Ozeki forms a variety of narrative strands, mostly third person but with one first-person perspective, to fully explore the emerging conversation around GM crops. In the novel’s present (and only first-person account of the story), Yumi Fuller, the daughter of a Caucasian father and Japanese mother, has returned home after decades away. As a fourteen-year-old, Yumi had run away from home because of her father’s overbearing response to her abortion, a result of a pregnancy at the hands of her teacher who, coincidentally, later represents the agribusiness that infiltrates the farming town of Liberty Falls, Idaho. Along with Yumi, Ozeki uses different narratives to provide third person accounts of Lloyd (Yumi’s father), Eliot (Yumi’s former teacher turned Cynaco representative), Cassie (Yumi’s childhood best friend who now owns the Fuller farm with her husband Will), and the Seeds of

Resistance (an anti-GMO activist group working to raise awareness and actively dismantle Cynaco's purportedly irresponsible and greedy use of GMO and pesticides).

Because ecofeminist literature is, by nature, interdisciplinary, writers and critics often incorporate discourses of other disciplines into their works of fiction and literary analysis; the biological and social sciences are especially prevalent in analyses of ecofeminist fiction. When done well, this integration enriches the texts and results in dynamic prose. (Unfortunately, the knowledge and credibility necessary to stake scientific claims is sometimes not held by the literary scholars that undertake such works.) Because of Barbara Kingsolver's extensive scientific background—she holds both Bachelor and Master's degrees in biology—her literary work is scientifically supported and rarely challenged. Ruth Ozeki, whose background is in film-making, is an artist first whose novels are supported by research. While her works are well-crafted and her research documented, she is more frequently challenged by critics who disagree with her representations of science.

Throughout my own analyses of their works of fiction, I will cite examples of scientific studies published around the time of each's novel's publication, and in the years since. The work that Kingsolver and Ozeki have done, respectively, is enriched by the evidence that has unfolded in the years following the publications of their novels: Kingsolver's anticipation of a threatened bee population has proven accurate as many types of bee species suffer from colony collapse disorder (Ellis et. al 134), while Ozeki's prediction of precision farming, a technique enabled by GPS, has become a dominant method in the field. For a more complete understanding of the texts, I turn to research that supplements my readings: scientific studies from both scholarly and popular sources

have been instrumental in my study of these ecofeminist novels which themselves have been built on a foundation of science.

Though Kingsolver and Ozeki are intentional about their use of science, their chosen genre through which to deliver their messages is fiction. Their ecofeminist themes question simultaneously the structures that reduce the power of both women and nature. Storytelling is a tool which allows the authors to connect with their audiences and decrease pushback from readers. In a study on empathy and its role in fiction, Janina Levin explains, “In literature, the claim that empathy leads to altruistic action goes along with arguments for cultivating novel reading as an empathic activity that could make us better world citizens—more likely to help others, donate money to charity, be more tolerant of people different from ourselves” (188). By delivering their messages through the medium of fiction—rather than through a scientific study, editorial text, or any other nonfiction medium—Kingsolver and Ozeki engage with their readers in a way that increases the readers’ empathy and, in turn, the likelihood that they will take action in response.

In each chapter of my study, I will begin with an analysis of Kingsolver’s *Prodigal Summer* before moving on to discuss Ozeki’s *All Over Creation*. The order is based on the chronology of the novels’ publication dates, but I have also found that the order has a natural fluidity based on the stories within: while *Prodigal Summer* is a tale of three major characters whose stories connect in meaningful ways, the narrative structure of *All Over Creation* is a more complex sequence in which all characters do ultimately meet. Thematically, *Prodigal Summer* defines a variety of key elements of ecofeminism; *All Over Creation* expands on these themes and creates additional layers of interest.

The first chapter will unpack the tradition of activism in ecofeminism and connect the activism essential to *Prodigal Summer* and *All Over Creation*. In both novels, the authors themselves act as activists that build their stories on the pillars of ecofeminism. They deliver strong political messages in favor of environmental awareness and against the hunting of predator species, the use of pesticides, and the implementation of genetically modified (GM) crops. Many characters within the novels are illustrated as activists themselves. Nannie Rawley of *Prodigal Summer* is a vocal advocate of organic farming methods; *All Over Creation* features the Seeds of Resistance, a group of activists whose work's primary focus is increasing awareness of the dangers of GM foods. As the activists of each novel present their messages to the other characters, the readers of the novels are concurrently exposed to their rhetoric. Kingsolver and Ozeki also provide compelling counterpoint characters: *Prodigal Summer's* Garnett Walker is an anthropocentric Christian who rejects evolution, while Eliot Rhodes of *All Over Creation* represents the company peddling the controversial GM crops. Through the presentations of each side of their arguments, Kingsolver and Ozeki provide a comprehensive perspective of complicated situations.

In my second chapter, I analyze the correlations created by Kingsolver and Ozeki between biodiversity and cultural diversity. Both novels stress the value of biodiversity, the idea of maintaining many varieties of species in the plant and animal life of ecosystems, while also promoting cultural diversity as it benefits society. Transitioning naturally from the novels' use of activism, connections between biodiversity and cultural diversity raise awareness of the importance of diverse and inclusive populations in order to achieve a healthy society. The communities of Zebulon County, Kentucky, and Liberty

Falls, Idaho, are dominated by almost entirely white populations, and the presence of “foreign” individuals—Lusa of *Prodigal Summer* and Yumi and her mother Momoko of *All Over Creation*—disrupts the norms of each town. As with the plant and animal worlds, though, the overpopulation of a single species (or race) can have devastating effects on the health of a society as a whole. Critics have been particularly fascinated by Ozeki’s connections between biodiversity and cultural diversity, and I will include the opinions of several who find it an area of contention.

The third and final chapter of this thesis considers motherhood, maternity, and infertility as they are presented in *Prodigal Summer* and *All Over Creation*. As Kingsolver and Ozeki confront the problem that has arisen from the links between pesticide use and health problems—especially in women’s reproductive health—they illustrate the foundational theme of ecofeminism which contends that historically oppressive behavior toward women is linked to harmful attitudes toward the environment. Often, the use of pesticides occurs in regions that are not economically equipped to defend themselves from profit-hungry corporations, such as Cynaco (Ozeki’s parody of the real-life agribusiness Monsanto). Worse still, those communities rely on companies such as Cynaco for their livelihood. Therefore, the resulting devastation on women’s health is especially problematic, as women are not usually in the position to change the farming methods used throughout their region, nor do they often have knowledge of connections between the pesticide use and their infertility struggles. It is worth noting that, again, activism on the part of the authors motivates my study of their novels and links their work to the genre of ecofeminism.

While this study focuses on ecofeminist theory and its influence on *Prodigal Summer* and *All Over Creation*, its limitations in scope do not allow for several noteworthy and relevant points. For example, the authors' treatment of masculinity is worthy of consideration, but space constraints prevent me from delving deeply into a discussion surrounding this topic. Kingsolver and Ozeki both create dynamic male characters that represent types of behavior that can have positive or negative impact on women and, at the same time, the environment. Likewise, though there are scenes within each novel that would serve to further demonstrate my argument, I have chosen to analyze only those that I feel best represent my key points.

Literature of the environment has a long history of exploring human exploitation of the earth as well as the dominance which occurs between genders, and the ecofeminist novels by Kingsolver and Ozeki continue this tradition. By fictionalizing anxieties surrounding food production and its global impact, Kingsolver and Ozeki provide a multifaceted view of a complex situation which allows their readers to not only understand but truly connect with their messages. In doing so, the authors generate real calls-to-action that motivate social responsibility and change. Praised for their passion and dedication for creating a more ecologically conscious and socially responsible world, Kingsolver and Ozeki have reached large audiences with their ecofeminist works of fiction.

Chapter 1: “It’s the Protesting That Really Turns Me On”: Ecofeminist Activism in
Prodigal Summer and *All Over Creation*

Throughout the late twentieth century, awareness grew around the harm inflicted on the environment by human behavior, while simultaneously, third wave feminism inspired action to establish equality between men and women. Ecofeminist theorists unified the ideas of ecologists and feminists through the contention that the manner of carelessness, neglect, and violence that is prevalent toward women can be directly linked to the same attitudes commonly exhibited toward the environment. One of the common goals of both ecology and feminism, and ecofeminism unifying the two, has been to inspire social change, shifting society away from these destructive paradigms. Ecofeminism is rooted in an activism that seeks to inspire respect and healthier behaviors toward women and the earth. In their works of fiction, Kingsolver and Ozeki continue this tradition through by advancing their political agendas through scientific logic. In this chapter, I will consider the history of ecofeminism and the ways in which *Prodigal Summer* and *All Over Creation* embody ideals that ecofeminism has traditionally maintained since its 1970s origination, as well as those that have developed as ecofeminist thought has progressed and evolved through the following decades. Finally, I will explore the development of ecofeminism since the novels’ publication dates, as it has dipped in popularity and once again resurged as a significant and relevant mode of philosophy and action. Concurrently, the activism that Kingsolver and Ozeki promote have become all-the-more important in the years since their novels’ publication.

Colleen Mack-Canty cites several different incidents which acted as catalysts for the development of ecofeminist action and theory: Francoise d'Eaubonne's 1974 coining of the term; the use of the term throughout the 1970s, usually "as a response to so-called development activities;" and, the incident that she contends is the most frequently cited origin of ecofeminism: "the Chipko Movement, the movement that began when village women of Himalayan India organized in the 1970s to protect their forests, as described by their countrywoman, Vandana Shiva (1989)" (168-69). Mack-Canty also provides a valuable brief yet thorough overview of the history of ecofeminism:

Ecofeminism, in the United States, originated during the second wave of feminism as (mostly) women in the peace movement began to perceive the interrelationships of militarism, sexism, racism, classism and environmental damage (Sturgeon 1997, 27). The theorizing of how this environmental damage was related to women's oppression and the oppression of other people, together with theorizing from the perspectives of the women involved, including women in the so-called developing world (e.g., Diamond and Orenstein 1990 and Shiva 1989), became evident during the time period seen as the emergence of third-wave feminism, the late 1980s and the 1990s (Arneil 1998). (157)

Both published at the turn of the twenty-first century, Kingsolver's *Prodigal Summer* and Ozeki's *All Over Creation* epitomize the ideals that Mack-Canty distills from ecofeminism.

Writing at the time of emergence for ecofeminist theory, Bernice Marie-Daly defines ecofeminism by explaining how the two theories, ecology and feminism, are compatible and also how they diverge in belief. She explains the connections between

human mothers and mother earth as they are inflicted with the damage of a patriarchal system which dominates, often violently, marginalized groups—the earth, but also women, children, and people of color. Marie-Daly’s theories support Kingsolver’s assertion that her readers must think in terms of systems (qtd in Leder 233); by connecting the ideas of Marie-Daly and the fiction by Kingsolver we can gain a deeper understanding of the ways that the systems are designed to work, both from a human and natural perspective. As the dominant capitalist culture seeks to control nature, so it does the female gender. Marie-Daly’s proposed solution is to again elevate the “Divine feminine,” because, as she states, “The air will not be polluted because it is holy, women will not be raped because we are holy, children will not die of hunger because they are holy, and whales will not be killed because they are holy” (8). Though Marie-Daly’s ideas are idealistic, they inspire a direct action that can be taken to create social change: the first step is a transformation of the prevailing mindset that women and nature are inferior and unworthy of respect.

Though many ecofeminists like Marie-Daly associate maternal knowledge with a natural connection to the earth, the connection is not a prerequisite to an ecofeminist mode of thinking. Sherilyn McGregor challenges the care ethic ecofeminism associates with women’s connection with nature and calls ecofeminists to consider “other sources of women’s concern for environmental well-being besides their maternal feelings of protection for their children” as well as “other forms of and motivations for environmental and community engagement that do not fall into a stereotypically or exclusively feminine orientation” (64). McGregor proposes instead that ecofeminists consider “religious belief, academic training, scientific and philosophical curiosity,

national and regional forms of identity, attachment to places or landscapes, and so on” (64). Interestingly, and perhaps not coincidentally, Kingsolver and Ozeki both utilize *all* of McGregor’s suggested ethics, in addition to their comprehensive exploration of maternal care.

Explaining ecofeminism, Mack-Canty says that the genre “emphasizes local activism” while also “maintaining the importance of a global perspective” (170). Kingsolver has advocated for political, environmental, and feminist concerns across a multitude of genres including fiction, non-fiction, poetry, speeches, among others. While Kingsolver is especially known for her activism in her creative works, she also advocates for social responsibility through nonfiction, as reflected in her year-long account of growing her family’s food *Animal, Vegetable, Miracle*, and in public rhetoric such as her 2008 commencement address to Duke University in which she appeals to her audience to take action against climate change. Melissa Schoeffel writes, “For Barbara Kingsolver, ‘writing is an explicitly political act,’” (17) and argues that Kingsolver’s fiction is activist in nature not only because of its political nature but also because it “work[s] for change. . . to create in story a political urgency to which the reader is (strongly) encouraged to respond, and to use narrative to imagine alternatives to life as we (and their characters) know it” (17). Kingsolver has taken an even further step to ensure that fiction acts as an engine of social progress. In a review of Kingsolver’s 1998 bestseller *The Poisonwood Bible*, Sarah Kerr explains that with her advance, estimated at close to a million dollars, Kingsolver created the Bellwether Prize which awards \$25,000 and publication to a writer of an unpublished novel which works to create “social change” (Kerr n.p.). Continuing, Kerr explains that, such as with the Bellwether prize, Kingsolver’s activism

is grounded in creating change through realistic measures: “She wants progress . . .but she's realistic about what she can do, and careful not to overextend. Hers is a pared-down radicalism -- a radicalism of lowered expectations, aware of its limits and selectively strategic” (Kerr n.p.).

In her novels, including *Prodigal Summer*, Kingsolver’s characters also utilize this strategy of “pared-down radicalism” to effect change in environments that do not welcome it. *Prodigal Summer*’s two female scientists Lusa and Deanna advocate for the natural world in a society that, complacent in its current practices, pushes against change. In her solitude on Zebulon Mountain, Deanna must confront and educate Eddie Bondo about the importance of allowing coyotes to introduce themselves into the ecosystem of the Appalachian Mountains. Meanwhile, Lusa quibbles with her husband Cole over the use of insecticides, but after Cole’s death she is immersed in an environment of such distant and forced relationships that she keeps most of her thoughts to herself. While Lusa is mum about her opinions, the evangelical Garnett Walker, a senior-aged farmer, is outspoken about his Creationist beliefs to his Unitarian neighbor Nannie Rawley who, in turn, counterpoints with Darwinism. Each character affects a realistic amount of impact in their respective narratives: no dramatic transformations occur, but reluctant minds are convinced; behaviors are altered.

Kingsolver is frequently cited as a writer of place by critics who either praise or condemn her as such (Wagner-Martin 120). The significance of her use of place transcends her novels’ intricately-developed locations; it is fundamental to the overarching cultural and political message that is always at the heart of her fiction. Her novels are often associated with the locations in which she sets them – typically fictional

locations, including in *Prodigal Summer's* Zebulon County, Kentucky. Along with *Prodigal Summer's* fictionalized Zebulon, Kingsolver's fiction provides richly detailed settings in real-life locations. These settings almost always assist in conveying her political themes, such as in *The Bean Trees'* Arizona, where Taylor's adopted Native American daughter and aid of Mexican immigrants drives Kingsolver's themes of cultural diversity in the American Southwest, and *The Poisonwood Bible's* Congo of Africa, where Kingsolver's exploration of postcolonialism on the African Congo is demonstrated through an American missionary family. Linda Wagner-Martin highlights two motivations for Kingsolver's strategic use of location in her fiction: first, the author's own acknowledgement of her fiction as it is set "in geographic and psychic territory that I know" (qtd on 120); and second the "newly identified set of theories" that focus on location, such as translocation, globalism, and more (120).

Historically, the consideration of location as has been considered primarily in terms of women's writing, and the criticism of Kingsolver's use of place is considered by some an attempt to confine her to the limitations of a regional writer. Eudora Welty has said, "Literature does belong in essential ways to place, and always invokes place to speak in its fullest voice" (n.p.). Kingsolver's distinct political purpose infuses her writing as she utilizes place to define her and her characters' fullest voice. Nannie Rawley's efforts to stop the overuse of pesticide treatments would not be appropriate in an urban setting, nor would Deanna's attempt to persuade Eddie Bondo of the importance of predatorial species be important in any other setting than the forest where he is hunting them.

In the Appalachian Mountains of *Prodigal Summer*, the lives of Deanna, Lusa, and Garnett are ruled by the wildlife that cohabitates within their homes. The disappearance of the iconic American Chestnut tree has as great of an impact on Garnett's life as does the appearance of the predatorial coyote on Deanna's, while Lusa's misunderstanding of the impact of invasive species is only amended by her knowledge of the profitability of goat-farming. Collectively, the narratives each demonstrate a variant of ecofeminist activism. Elizabeth Engelhard examines mid-century Appalachian ecofeminism, before the term was defined, shedding light on Zebulon County as well as on Kingsolver's reputation as a female "Appalachian writer." Noting the history of women activists from the Appalachian region, Engelhard contends, "Historians of women's environmental activism have until recently privileged a certain group of women (middle class and white) and a certain group of places (the United States' Northeast or West) . . . [Female Appalachian writers] are thus excluded not only by geography but also by theoretical slant" (156). Though Kingsolver is notable for her extensive use of locations other than the Appalachian region, her fiction set there highlights the region's underexposed problems of sexism and poverty.

While *Prodigal Summer* is first a novel of science, called by Wagner-Martin "Kingsolver's most important ecological novel," it is also a work of feminist activism which is a significant addition to the literary canon of Appalachian women writers. Engelhardt remarks of their fiction, "Perhaps most significantly, it is a feminism connected to place through the lives and bodies of these women . . . [emphasizing] who holds knowledge and who has authority in a community. By including, even privileging, these diverse women, it models a feminist activism among Appalachian women" (164).

Though Engelhardt intended her remark as a general comment about a regional group of women writers, this statement is an apt description of *Prodigal Summer* and demonstrates the tradition of ecofeminist activism which, Mack-Canty says, was inspired during the advent of second-wave feminism as a reaction to “militarism, sexism, racism, classism and environmental damage” (157). The impact of these power-structures on women are key to the women’s stories: Nannie as mother of a daughter lost from poisonous pesticides, Lusa who plans to adopt Jewel’s children after her cancer proves to be fatal, and Deanna who is impregnated by a hunter and will raise the child on her own. (Motherhood and maternity are explored more fully in Chapter 3.)

Among Kingsolver’s political messages in *Prodigal Summer*, her clearest call-to-action is one common among ecofeminists: the call to reduce the use of toxic pesticides which are frequently linked to women’s reproductive issues. Linda Layne considers three cases of proven incidents of toxicity linked between pesticide use and women’s health in her article “In Search of Community: Tales of Pregnancy Loss in Three Toxically Assaulted U.S. Communities.” Among the case studies she examines are those of Woburn, Massachusetts; Love Canal, New York; and Alsea, Oregon as she researches the social and community impact of pregnancy loss caused by toxicity. Layne speculates that the women of the three studied communities would have a shared communal experience of loss, yet none do. All three studies fail to create a communal connection despite successful efforts to petition the polluters: in the case of Woburn, the women were unaware of the community-wide elevated instance of miscarriage and birth defects because of an overshadowing awareness of instances of leukemia; in Love Canal, the physical distribution of at-risk and affected citizens prevented community connection;

and in Alesia, community fear of economic risks prevented women from publicly advocating—yet their private petition was successful. Layne contends that along with many other factors, the burden of reproductive loss on women, combined with the load of self-blame often inflicted, prevents public discourse on pregnancy loss (41). Layne’s studies shed a fascinating light on Nannie Rawley, whose experience with birth defects in *Prodigal Summer* motivate her anti-pesticide activism. The male citizens of Zebulon county, especially Garnett Walker and Lusa’s brothers-in-law, resist the idea that pesticides may have caused the birth defects of Nannie’s child and the cancers of both Jewel and Garnett’s wife; the continued use of pesticides—like the “tree spray” dioxin of Alesia (Layne 34)—seems to put citizens at an economic benefit yet at the peril of their health.

While farmers such as Garnett believe that pesticide use results in higher yield of their crops, the corporations selling them are actually the only player profiting from the use of pesticides. Nannie explains to Garnett the Volterra principle which is “all about how insecticide spraying actually drives up the number of bugs you’re trying to kill” (Kingsolver 216). When farmers spray the insects, all are killed, predator and prey alike. Upon their return, the prey species resurge in far greater numbers than their predators, and with no predator species to reduce their numbers, they thrive. The conflict between Garnett and Nannie over insecticide is longstanding; in one of their first encounters in the novel, Garnett remembers, “Nannie Rawley had declared war not only on the county’s Two-Four-D but also on the Sevin dust and other insecticides Garnett was bound and obligated to put on his own seedling trees to keep them from being swallowed whole by the army of Japanese beetles camped out on Nannie Rawley’s unsprayed pastures”

(Kingsolver 86). His pretension is evident as he wishes, “If only his poisons *would* drift over onto her trees. He knew very well, and had said so, that without his constant spraying to keep them down, the Japanese beetles would overrun her orchards completely . . . Success without chemicals was impossible” (87). Despite the information he receives from Nannie, Garnett is cognitively dissonant from the chemicals’ failure to solve his problem with Japanese beetles. He thinks of, “Something to add to his list for the hardware today: malathion. The Sevin dust wasn’t killing them dead enough Or it was washing off in all this rain” (131). His frequent trips to Oda Black’s store for Sevin dust subtly demonstrate his outgoing expenses to pest control, while Nannie’s organic farming methods, such as composting to kill weed seeds and beetle larvae, are free (131). Nannie does not contribute to the profits of insecticide-engineering corporations, and her own crop yields are impressive.

The Volterra principle also applies to the importance of the introduction of coyotes in the Appalachian Mountains, as explained by Deanna to Eddie Bondo in her own personal act of activism. Despite Eddie’s obstinacy against understanding the implications of his predator-hunting, Deanna tells him, “I’m going to change your mind or die trying” (323). She explains many of the fascinating characteristics of the species to him, but his interest is only piqued when she explains, “After a hundred years of systematic killing, there are more coyotes now than there have ever been, in more places than they have ever lived before” (325). Reflecting the Volterra principle described by Nannie, though Deanna does not call it by its name, coyotes reproduce more quickly when they are being hunted because, she explains, they “aren’t just predators. They’re also a prey species . . . Their main predator before we came along was wolves. Which we

erased from the map of America as fast as we could” (325). Deanna hopes that the coyotes will replace the wolf as a predator species in Appalachia and balance the overpopulation of prey species which have since the wolves’ extinction become invasive.

Kingsolver is notable for her activism across genres; she has written works of fiction, nonfiction, essays, and poetry that inspire the responsibility of society to care for the earth through all possible channels. In “Mother Nature Has It Right: Local Food Advocacy and the Appeal to the ‘Natural,’” Anne Portman considers Kingsolver’s use of local food in her nonfiction work *Animal, Vegetable, Miracle*: “The foods that become so integral to a local diet have complex transnational histories; as people move, their seeds and recipes move with them. Attending to the narratives of people and food as they migrate reveals that the global is in constant relationship to the local in food systems of all scales” (24). Kingsolver has continued her advocacy on behalf of food production and its effect on the environment in her twenty-first century publications, such as in *Flight Behavior* as she returns to the setting of a failing family farm.

Like Kingsolver, Ozeki is also known for her influence as an author of activist fiction of global environmental concerns. She frequently focuses on ethical dilemmas that stem from food production, as in *All Over Creation* as well as her earlier novel *My Year of Meats*. In *Global Appetites: American Power and the Literature of Food*, Allison Carruth notes that critics commonly categorize themes within Ozeki’s fiction under “international slow food and North American locavore (or local food) movements” (118, parenthetical original to Carruth). *All Over Creation* fits within these categories neatly: problems of pesticides causing infertility arise, as well as overarching themes of diversity in both social culture and agriculture. Ozeki characterizes activism literally in the Seeds

of Resistance, a traveling group of activists concerned with the consequences of GM crops and pesticides. Anahita Rouyan also makes a critical point that, “By allowing readers to detect the conventions and mythologies in which her environmental activists situate their utopianism, Ozeki exposes the disturbing similarities behind anti- and pro-GMO rhetoric” (145). By illustrating many perspectives involved in the GM conversation—from Cynaco representatives to members of the Seeds of Resistance—Ozeki explores the limitations of radical activism and demonstrates the ability of more subtle strategies to create change.

The most vocal advocates of local and organic food in *All Over Creation* are The Seeds of Resistance, who inhabit a subplot of *All Over Creation* that is aligned with but not central to Yumi’s narrative. The Seeds’ activism is in direct opposition to Cynaco, an agribusiness that parodies the real-life company Monsanto; and while they are based in San Francisco, they drive around the country to, as Geek explains to sixteen-year-old Frank, “engage with the people and do actions. Basic Biotech. Consciousness Raising 101” (Ozeki 52-53). Frank first encounters the Seeds when they ask him to steal the old vegetable oil from the fryers of McDonalds where he works as a janitor: an act that is devious and illegal but arguably not immoral, as the oil will be thrown away before it is refreshed. They soon discover that Frank is entirely ignorant, not just of activism, but of the entire existence of genetically modified (GM) food. Geek defines the genetically engineered food that they protest: “Robocrops. Frankenfoods. Fish genes spliced into tomatoes” (53). The bizarreness of this illustration is even further pressed as the Seeds bring their message to the public.

As Frank takes part in his first action with the Seeds, he holds the role of lookout while the others—Geek, Y, Lilith, and Charmey—hold a theatrical demonstration amidst a grocery store filled with their target demographic: mothers with their children. As Y makes a scene asking the cashier whether his potatoes have been poisoned through genetic engineering, Geek enters dressed as Mr. Potato Head. Before the police come, Geek is able to squeeze in a speech to his rapt audience:

This, my friends, is the perverted magic of biotechnology . . . BBut genetic engineering is no joke, not when it comes to the food you feed your children. As of 1997, over thirty genetically engineered crops were approved by the U.S. government for sale, including potatoes that are genetically spliced with a bacterial pesticide and tomatoes crossed with fish genes to increase their resistance to the cold. (Ozeki 92)

According to Anahita Rouyan, this action is likely based on a real protest that took place in Toronto, in which, Jennie Addario states, “50 protesters march toward the grocery store, chanting, ‘Hey hey, ho ho, leave our DNA alone’” (qtd in Rouyan 147). Through Ozeki’s fictionalization of actual events and caricature of a real-life corporation, she connects with audiences who are already familiar with the conversation surrounding the science and ethics of GMOs. “The image of the flounder-tomato has become a favorite of GMO opponents,” Rouyan writes, “because it reflects the general concerns of environmental activists—maintaining species boundaries and cultivating natural biodiversity” (148). Readers of *All Over Creation* who have previously encountered these ideas will connect with the Seeds’ demonstrations, while Ozeki provides a thorough account of the case in lay language to readers who are unaware of the controversy.

As the narratives converge, the Seeds' local activism is elevated and receives national attention—on the textual level of the plot within the novel but also on the metafictional level of Ozeki's publication of *All Over Creation*. After discovering Lloyd's newsletter that opposes GMOs from a Christian perspective, the Seeds begin a pilgrimage to meet him so that he will act as their "guru," providing guidance to their mission. Lloyd is elderly and dying, but his energy for righteousness drives him to take part in the Seeds' mission; he develops a close relationship with Y, who gives Lloyd the privilege of using his birthname Melvin. Geek proposes that the Seeds host an event at the Fuller Farm that will be "something like the Boston Tea Party . . . They threw tea into Boston Harbor to protest taxation without representation. We're digging up potatoes to protest genetic engineering without our consent" (265). Beyond the usual rhetoric of the flounder-tomato, Geek plans to demonstrate against developing GMOs such as the Terminator technology that is a "self-destruct mechanism" that is engineered to destroy the plants' own embryo so that the farmer must buy seeds year after year. In one way, the event is a success: the Seeds gain the national attention that they hope for. Even so, the event is a devastating turning point in the novel as the Seeds' Winnebago is blown up—with Charmey inside.

The complexity of the discussion around food means that the issue is not just scientific (or economic) but also moral, as recognized by Molly Wallace: "The 'unknown' of genetic engineering is here processed through the 'known' of existing moral, ethical, and philosophical belief systems" (163). Still, Wallace damages her argument through her lack of consideration of Ozeki's logic for providing perspectives from a variety of characters. Anne Portman gets at the heart of this complexity: "Those

who argue that GM food is natural and those who argue that it is unnatural both depend on the idea that the ‘natural’ is good” (2). As Ozeki fictionalizes the corporate narrative of Cynaco and its representatives Eliot and Duncan, she withdraws from the moral argument of its naturalness and considers instead ethical and economic ideas such as hunger in poverty-stricken countries and the corporate greed of agribusiness.

As Ozeki portrays the relationship dynamics between the Seeds of Resistance and their newly acquired Idaho audiences, she illustrates common attitudes regarding activism in America. Their naïve new member Frank is not only unfamiliar with activism and its agenda; moreover, he isn’t truly concerned with their mission or its outcomes. As Frankie gets peanuts from a kiosk, Geek asks, “Did you know that the FDA says that peanuts are the most pesticide-saturated food in the American diet?” to which Frankie responds, “No shit.” Geek asks, “Do you care?” (Ozeki 123). Mocking Frank, Geek says, “Mmm. I like the taste of toxaphene . . . Zesty diazinon. Delicious DDT” (123). Despite Geek’s playfulness towards Frank’s flippancy, the divide between their levels of concern over the problem is underscored, especially when Frank admits, “It’s the protesting that really turns me on. Doing the actions. And I like you guys, so if you say something’s worth fighting, I’ll go along with it. But for me, I don’t really care what I eat, you know?” (125-26). In joining the Seeds, Frank’s primary interest in participating is an act of youthful rebellion; he is motivated also by his romantic relationship with Charmey, rather than a vested interest in organic, sustainable food. In a 1988 study of the motivating forces behind youths’ participation in politics, Wim Meeus finds, “Adolescents, both those with high-level and those with low-level educations, endorsing adolescent rebellion, were found to prefer left-wing political

parties more often than the group that rejected adolescent rebellion” (429-30). Frank’s initial attitude characterizes one typical of youthful rebellion, but as he becomes more involved with the Seeds, he develops a personal responsibility for their concerns.

By the novel’s conclusion, Frank demonstrates that his interests have evolved as he allows Cass to adopt his infant daughter and continues his own activist efforts. In a letter to Tibet, he explains, “Of course, it’s a personal thing—Charmey was really into nature, and I prefer asphalt—but suddenly I understood why I’m doing all these political actions. It’s because I gotta make sure there’s still some nature around for you when you grow up, in case you decide you dig it, too” (Ozeki 416). No longer flippant about the purpose of environmental activism, Frank now represents a person who has changed fundamentally in his thinking by exposure to the Seeds’ activism. Their efforts have paid off: they have transformed Frank from careless to responsible for the cause.

In Eliot Rhodes, readers see a character whose transformation is the opposite of Frank’s, yet still one that is common in American politics. As Yumi reflects on Eliot’s character as a grade-school teacher in his early twenties, she thinks, “Rhodes had just graduated from college. He was a hippie, a commie, an anarchist, a freak . . . He’d protested the war in Vietnam. He’d marched on Washington” (Ozeki 21). At this age, Eliot is knowledgeable and concerned with the effects of postcolonialism; following Yumi’s annual performance of a Native American princess in the school’s Thanksgiving play, he angrily tells her, “It’s revisionist bullshit! It was genocide—we *stole* their land, and then we exterminated them. And now we call it Thanksgiving?” (22). In his middle-age, Eliot represents everything he had protested in his youth: he represents a corporate giant whose only interests lie in profits. His boss Duncan informs him that Cynaco’s

NuLife potato has been rejected by the European market where it is “perceived as being excessively American and arrogant” and will be retargeted in Asian and third-world countries where Duncan says he has “suggested ‘Enlightened Compassion’ as the motivating theme to drive the new campaign, which will focus exclusively on the human health benefits of GE crops, like Golden Rice and other pharmaceutically enhanced lines” (344). With no moral resistance to the push of GM crops in third-world countries, Eliot only thinks of his own consequences—“Delhi was better than Alaska. Better than no job at all” (344)—before discovering that, humorously, he has indeed been fired because of his personal involvement interfering in Cynaco’s profits.

Both Ozeki and Kingsolver demonstrate the vulnerability of low-income populations at the hands of largescale agribusinesses that profit from the maltreatment of their own customers. In *Prodigal Summer*, Nannie Rawley is a lone activist, championing the use of organic farming methods, but her efforts fall short on Garnett. Even so, Deanna’s concern for environmental health proves that Nannie’s wisdom, both maternal and scientific, has been passed down through her stepdaughter. *All Over Creation’s* activist group, the Seeds of Resistance, is arguably more effective in its efforts of activism—they spur real societal change as Cynaco halts, at least temporarily, its production of the NuLife potato. Like Nannie and the Seeds, ecofeminism itself has experienced accomplishments and hinderances from its actions, yet theorists continue to work toward change and awareness from society.

Chapter 2: “Pray, Take Our Seeds and Plant Them”: Biodiversity and Cultural Diversity
in *Prodigal Summer* and *All Over Creation*

In nature, homogeneity is not a good thing. Soil benefits from being planted with a variety of crops that supply an abundance of nutrients; fields planted with monocrops are depleted of essential nutrients. The analogy between biodiversity and cultural diversity appears in both Barbara Kingsolver’s *Prodigal Summer* and Ruth Ozeki’s *All Over Creation* as towns of majority-white populations are negatively impacted by racial and cultural homogeneity. As I examine these parallels, I will consider how some characters, particularly Lusa of *Prodigal Summer* and Yumi of *All Over Creation*, have been characterized as outsiders because of their foreignness in their respective communities. Both first-generation daughters of immigrants, Lusa and Yumi bring personalities that to their communities are seen as eccentric, yet the elements of their character are invaluable to the community: like soil, only by embracing variety can the communities be replenished from the depletion of their essential nutrients. Continuing with the ecofeminist tradition of activism, Kingsolver and Ozeki’s analogy between biodiversity and cultural diversity underscores their political message that the human experience is inextricably linked to the environment.

In Kingsolver’s *Prodigal Summer*, Zebulon County has a majority white population, but cultural diversity is linked to biodiversity. Examining *Prodigal Summer*, Suzanne Jones explains that while ecofeminism is greatly concerned with nature, it includes the sociocultural aspects of feminism, as well. Jones writes, “From ecology, it learns to value the interdependence and diversity of all life forms; from feminism, it gains

the insights of a social analysis of women's oppression that intersects with other oppressions such as racism, colonialism, classism, and heterosexism” (169). Besides being from the “city,” Lusa is also the first-generation daughter of immigrant parents of Polish and Middle Eastern descent. Her foreign name is unfamiliar to the women of rural Kentucky and deepens their perception of her as an outsider. As Lusa fights with Cole, she argues, “I’ll give you ten dollars if one of them gets it right—the whole thing, Lusa Maluf Landowski. They make a show out of not being able to remember it. You think I’m kidding? Lois evidently told Oda Black my maiden name was Zucchini” (Kingsolver 39-40). Later in the same argument, Lusa curses Cole in Arabic, and he fires back, “If my Ay-rab mama had taught me to swear, I wouldn’t be proud of it” (Kingsolver 45), highlighting the hostility and her own insecurity surrounding her status as foreigner within her new marriage and family.

Lusa’s anxieties about the community’s perceptions of her as a foreigner are well-founded. Before Cole’s death, they do not approve of her choice to break tradition and keep her maiden name, and call her Mrs. Widener anyway, making her feel “as if there were no Lusa at all” (Kingsolver 40). Following his death, rumors circulate that Lusa had immediately changed her last name back to her maiden name. At Cole’s funeral, Lusa explains that she had never changed her name in the first place, and Jewel, surprised, says, “Nobody meant any harm, honey. It’s just normal to take your husband’s name around here” (Kingsolver 126). Deeply offended, Lusa retorts, “God, Jewel, did you all really believe I’d take his name and then throw it *back*, a week after he died? Some carpetbagger, erasing your family name and stealing your homeplace, is that how you see me?” (126). In this dialogue, Lusa acknowledges her feeling of foreignness

within the family, serving as the first step toward healing her feeling as an outlier in the Widener family.

Beyond Lusa's identity, her passion for entomology also alienates her from the community in Zebulon, and from their definition of normal behavior. Her fascination with bugs is part of her heritage; her father was also an entomologist. In her fight with Cole, she recalls her sister-in-laws' behavior at her first attempt to host a family Thanksgiving. The oldest, Mary Edna, had taken a bite of dinner and shrieked when she noticed the moth pattern on the plateware underneath. Lusa is not just hurt by her new sister's disgust of the moths she loves—she feels that the reaction insults her family history. Kingsolver writes, "It had been her family's [china], a pattern from England with delicately tinted botanical paintings of flowers and their pollinators. But did they have to scorn everything she loved?" (41). The sisters had not since returned for a family dinner at Lusa's house, and Cole's failure to understand why she is upset creates a further divide in their turbulent marriage.

As the novel works to show the harms of pesticide use, it concurrently explains the critical importance of biodiversity by promoting the benefits that often unwanted populations, such as Lusa's bugs, have in the natural environment. Moths are considered pests simply because of their unsightly appearance, but bees and coyotes are villainized and exterminated. Nannie and Deanna, in their respective narratives, work to change the misconceptions surrounding these species by persuading their audiences with scientific evidence of the necessity of unwanted animal populations. Lusa discovers a way to capitalize on the unwanted goat population, a failed 4H experiment, that has thrived in Zebulon County. By integrating nonhuman species into the narratives, Kingsolver

demonstrates that they contribute to human life by providing balance to nature and even surprising economic benefits. Ultimately, however, Kingsolver hopes that the reader gains a fundamental perspective that these species are inherently valuable without the consideration of humanity.

As Garnett Walker interacts with his neighbor Nannie Rawley, their differing opinions about pests frequently cause turbulence in their relationship. Garnett takes pests at face-value rather than considering their inherent worth to ecosystems. When Nannie attempts to release him from the bite of a snapping turtle by hitting the turtle with a stick, Garnett sarcastically replies, “I can’t feature it. Knowing what a soft spot you have in your heart for pests and vermin” (Kingsolver 90). Nannie understands the vital role of all components of an ecosystem, even those that humans deem annoyances in daily life. For example, Nannie is called to the church (by Mary Edna no less), following its building’s chemical fumigation for bees that have built hives within its walls. Discussing the situation with Garnett, Nannie proposes that the church should have called her first: “I’d have smoked them and got the queen out so they’d all come out of the walls in time. I could use another hive on my place. Goodness me, I could use twenty more hives—the way people are using insecticide around here, I can use every bee I can get to pollinate my apples” (Kingsolver 334). Bees, of course, are pollinators necessary to many crops that are a foundational food source, and without them, much of our food supply would be at risk of elimination.

Nannie’s conversation with Garnett foreshadows the very real impact of human actions on the environment—an impact that would become more apparent in upcoming decades. The conversation about endangered bees was already prevalent Kingsolver’s

publication of *Prodigal Summer* in 2000 and had been for decades, but since its release, the bee population has continually been threatened, and not just by insecticide use. Nannie sadly notes, “Isn’t that sad, that nobody in this county under the age of seventy knows how to work bees? Everybody used to. Now they’ve all let their hives go” (Kingsolver 336). She is articulating a very real threat to bees: diminishing numbers of beekeepers. Myrna E. Watanabe writes in her 1994 article “Pollination worries rise as honey bees decline”: “No one expects the honey bee to become a truly endangered species. Entomologists believe it will eventually develop resistance to the mites, and there are still plenty of maintained colonies. Even so, the population declines are raising concerns that farmers won’t have enough of the helpful insects to pollinate their crops” (1170). The population of bees has continued to decline in worrisome numbers. Two studies published in 2010 by the *Journal of Apicultural Research* addressed the concerning trend of increasingly elevated losses in the bee community: “Colony losses, managed colony population decline, and Colony Collapse Disorder in the United States” and “Declines of managed honey bees and beekeepers in Europe.” Both scientific studies recognize the nearly impossible nature of gathering precise data on bee populations but report sufficient evidence to draw conclusive results on declining bee populations.

The endangerment of bees is the ultimate threat to the ecosystem of Zebulon County, as their disappearance would devastate the region’s biodiversity. Flora and fauna alike would suffer rapid population declines alongside declines in bee populations. In 2014, BBC claimed in its article “What Would Happen if Bees Went Extinct?” that bees are responsible for seventy percent of pollination and feeding ninety percent of the world (n.p.). They also play a significant role in economic performance: as much as

thirty billion dollars in crops annually (BBC n.p.). Nannie brushes off her deep sadness over the bee extermination by jokingly telling Mary Edna “that the Lord moves in mysterious ways, and that among all his creatures he love honeybees just about the best” (Kingsolver 336). While Nannie copes with her humor, Garnett is finally beginning to take her beliefs about the fragility of ecosystems seriously.

Although Mary Edna’s role in *Prodigal Summer* is minor, her cynicism about pests affects almost every character and represents the pervasive attitude toward species that are not directly beneficial to humans. Almost always this attitude results in the animals’ extermination—Lusa jokes that if Cole’s roving cows “had got over in Mary Edna’s garden one more time it would’ve cost him his manhood” (Kingsolver 165)—but fortunately for Lusa, the county’s surplus of goats remains unscathed. As Nannie describes her encounter with Mary Edna about the bees, Garnett remembers that Mary Edna had once “called him up to tell him that having goat projects in 4-H was giving young people an undue opportunity to think about Satan” (Kingsolver 337). Kingsolver uses a humorous approach to expose a prevalent attitude in our culture: if a species isn’t directly beneficial to humans, or if it is even slightly annoying, it should be eradicated.

Like the underappreciation of bees in the Zebulon community, the abundant goat population is also disregarded as worthless, but Lusa recognizes their unseen value. Because Lusa has missed her chance to farm tobacco, the county’s most profitable crop, she has the idea to farm and sell goats to sell to her relative who is a butcher in New York and sells a huge quantity of goats at escalated prices during the Islamic holidays (Kingsolver 164). Little Rickie tells Lusa about Zebulon’s surplus of goats that are a huge nuisance to community members. He tells her, “They’d think you were a city gal

with her nose in a book and not one lick of sense in her head” (Kingsolver 166), but Lusa proves her savviness as she tracks down Garnett to find out the history of the goat project and then places an ad in the local paper offering to haul them away for free. When Garnett questions Lusa’s ability to distinguish a buck from a doe, she laughs, “Mr. Walker, I’m ignorant, but I’m not stupid,” to which he replies, “Well, of course not. I just meant . . . you *are* from Lexington” (original emphasis, Kingsolver 211). Again, widespread opinions about Lusa’s outsider status insult her, but now her cultural knowledge about the demand for goats in New York’s Muslim community gives her an economic advantage in Zebulon County.

Lusa’s understanding of diverse cultures brings much-needed perspective to the majority-white population of Zebulon County. Suzanne Jones contends, “Kingsolver shows the importance, indeed the necessity, of human variety in an ecosystem when Lusa takes over the [Widnener] farm” (86). Because Lusa has a racially and religiously mixed background, as well as a higher level of education than anyone else she meets in the novel—besides Deanna, who she does not encounter directly, but Kingsolver hints has met in graduate school (169)—she is of a different mindset than many of the community members. Peter Wenz points out that Lusa exhibits another type of knowledge in her restraint to sell the lumber on her farm and “by raising goats organically in order to kill only fifty animals, instead of the fifty thousand she would kill if she farmed with chemicals” (118). Still, Jones argues that Lusa toes the line of a dangerous arrogance; she is at fault for allowing herself to feel above the other community members, and this ego does result in minor consequences, such as when she romanticizes the invasive honeysuckle that ultimately takes over her barn. In the end, though, Lusa finds her

identity as a farmer and feels a part of her surrounding community. Jones writes, “Lusa proves herself in ecological terms to be more like the Asian daylilies that bloom throughout Appalachia in July than the Japanese honeysuckle that engulfs the barn—she is non-native, but not invasive. Indeed her arrival, like that of the coyotes in the nearby national forest, begins to right an imbalance in the ecosystem” (90). Also like the coyotes, Lusa’s appearance in the county is not at first appreciated by the community, but they begin to understand her value as she demonstrates her dedication to the Widener family and farm.

Deanna is Lusa’s direct counterpart, living in solitude on Zebulon Mountain, almost free of human interaction besides an occasional hunter, until Eddie Bondo appears. Beyond humble, Deanna wants no prestige or acknowledgement from the public for her education, only to hold her position as a wildlife manager with the liberty to conduct her studies of the mountain’s ecosystem. She withholds information about the natural world that she has gained through her extended living conditions, such as when she tells Eddie that more rain is on the way. He asks how she knows, and she thinks, “How? About six different ways: first, a wind just strong enough to make the leaves show their white undersides” (Kingsolver 94). But she doesn’t tell him; instead she just says, “I don’t know,” and thinks to herself “This might be the one man she’d met since her father died who would be interested to hear all six” (94).

Unlike Lusa, whose father was a scientist, Deanna’s father was a lifelong farmer, but she understands the power of the wisdom he had developed through his fieldwork, and this education gap is one of the ways that Kingsolver presents diversity in the novel’s racially homogenous population. “I can’t even describe how my dad was,” she tells

Eddie. “If you spent a hundred years in Zebulon County just watching every plant and animal that lived in the woods and the fields, you still wouldn’t know as much as he did when he died” (Kingsolver 170). Deanna does not require others to have a formal education as a prerequisite for her approval of their knowledge, a characteristic that would benefit Lusa’s understanding of farming wisdom. Jones argues, “Throughout *Prodigal Summer* Kingsolver is at pains to point out that some things in life can be known from experience, without the abstract knowledge of scientific theories” (89). Kingsolver herself has acknowledged her deliberate characterization of the high intellect of rural people. She has said, “I was stunned to discover the world knows almost nothing about ‘hillbillies’ and respects them even less. An undercurrent of defensiveness about this has guided my writing and my life, I think, as I’ve tried to seek out the voices of marginalized people” (Kingsolver qtd in Snodgrass qtd in Wagner-Martin 190). Education is associated with class, and Kingsolver’s method of displaying the intelligence that is gleaned from real-world experience is one of many ways that she brings forth the significance of class in intersectionality, a concept that has become prominent in ecofeminist theory in recent years. In her 2017 article, “Intersectionality and the Changing Face of Ecofeminism,” A. Kings writes, “. . . ecofeminist intersectionality recognizes that women are likely to be amongst those most affected by environmental degradation, with those at the margins of society often experiencing these effects earliest and to the harshest degree” (71). While Zebulon County is comprised of a low-income population, the wisdom that Kingsolver highlights is rooted in communal knowledge, passed through generations.

Though Kingsolver highlights this wisdom, she also portrays Deanna, a native to Zebulon County, as a highly educated scientist whose graduate studies concentrated on coyotes. The coyotes that are beginning to appear on Zebulon Mountain, Deanna's dwelling, are a vital predator species whose natural introduction into the ecosystem will reduce the uncontrollable growth of prey species and bring equilibrium to its biodiversity. Shortly before Deanna discovers the coyotes' appearance on the mountain, Eddie Bondo appears, and she soon finds that his timing is not coincidental. Eddie is a hunter of predators—the opposite of Deanna, an ecologist whose work has focused on replacing a predator species into the mountain's ecosystem. The importance of biodiversity on the mountain's ecosystem relies not on the thriving of all species but on an equilibrium among them. Wenz explains that Deanna's "holistic concern includes ecosystems as well as species. Accordingly, individual animals that threaten whole ecosystems should be eliminated" (108). He cites examples such as her willingness to eat a wild turkey with Eddie Bondo because it is naturally a prey species, as well as her statement: "If a feral cat wandered up here from some farm and started wrecking nests and killing birds and having babies in the woods? I'd trap it and drown it in the creek. . . . [Cats] can wreck a habitat so fast, overrun it in a season, because there's no natural control. If there were still red wolves here, the place could hold its own against a stray cat. But there aren't" (Kingsolver qtd in Wenz 108). The wolf population that once controlled the ecosystem's balance has long since been extinguished from the region because of overhunting. Eddie's role as a hunter conflicts with Deanna's as a conservationist. Kingsolver does not vilify Eddie, but she does use Deanna's knowledge of the importance of predators, even those like coyotes that society considers pests, to oppose his hunting as sport.

Kingsolver's focus on ecosystems is her main objective for writing *Prodigal Summer*. Linda Wagner-Martin points to Kingsolver's webpage where she has written, "This is the most challenging book I've ever given my readers . . . My agenda is to lure you into thinking about whole systems, not just individual parts" (123). The systems that most readers are drawn to involve the human narratives of Lusa, Deanna, and Garnett, but those of the plants and animals studied by them are equally important to the novel's goal. Wagner-Martin writes, "By focusing on only the human characters of *Prodigal Summer*, as readers and critics have tended to do, they ignore Kingsolver's own directive that the novel is 'not exclusively—or even mainly—about humans'" (126). In fact, *Prodigal Summer* takes both animals and plants into account as Kingsolver narrates the efforts of Garnett Walker to restore the American Chestnut trees to the region.

Again, cultural diversity and biodiversity converge as Garnett works to cross species of American Chestnut with Chinese Chestnut to produce a blight-resistant variety of the trees that were paramount to his family's legacy. The American Chestnut trees have long since been taken down by a blight non-native to the region, and through his restoration efforts, Garnett hopes to produce an American Chestnut that will again stand strong in the Appalachian Mountains. For all his efforts to restore this singular species, though, Garnett does not understand the detriment of exterminating pests, especially as through his anthropocentric mode of thinking, he considers all forms of life to be subservient to human need. As he confronts Nannie in a letter about the possibility that she has been spreading rumors about his encounter with the snapping turtle—she hasn't—and her tendency to set free the salamanders that are sold in the local store, he

remarks, “If one species or another of those muddly little salamanders went extinct, who would care anyway?” (Kingsolver 187). In response, Nannie Rawley writes to Garnett:

Of all things, I'd never expect you, Garnett Walker III, to ask, “Who cares if one species is lost?” The extinction of one kind of tree wreaked pure havoc on the folks all through these mountains—your own family more than any other.

Suppose some city Yank said to you, “Well, sir, the American chestnut was just one tree—why, the woods are full of trees!” You'd get so mad you'd spit.

(Kingsolver 215)

In her counter-argument letter, Nannie uses her own spiritual beliefs to relate her opinion to Garnett that human dominion does not reign over God's creation of other species.

Using biblical scripture, Nannie appeals to Garnett as she argues, “If God gave Man all the creatures of this earth to use for his own ends, he also counseled that gluttony is a sin—and he did say, flat out, “Thou shalt not kill.” He didn't tell us to go ahead and murder every beetle or caterpillar that wants to eat what we eat” (Kingsolver 216). As their relationship progresses through the novel, Garnett warms to Nannie and begins to understand her rationale, even if he is not entirely convinced.

Although the analogy between biodiversity and cultural diversity is strong in *Prodigal Summer*, it is even more pronounced in Ozeki's *All Over Creation*. Some critics have challenged the overwhelming parallels between humans and nature while others have embraced Ozeki's metaphors. Ursula K. Heise considers Ozeki's illustration of the GMO debate “rather predictably drawn” and criticizes her analogy between biodiversity and cultural diversity (397), which she considers overused by authors of ecological fiction. Heise writes,

Of course, it would be unfair to single out Ozeki alone; the direct associations between biological and cultural diversity that many environmentalist writers and thinkers make—i.e. those that are driven by metaphor rather than the more materialist arguments I mentioned earlier—provide a relatively easy trope for configuring in narrative an ambivalent perspective on global connectedness. (400)

Other scholars disagree with Heise, such as Spencer Shaffer who writes in his aptly-named “A Response to Ursula Heise”: “Analogies between species diversity and cultural difference were fundamental to the North American environmentalist rhetoric of one of the first and most successful environmentalist interventions” (407). Continuing, Shaffer cites many instances of public opinion and social change occurring from metaphors such as Ozeki’s between humans and nature.

A fledgling seed popping up through the earth introduces readers to the world of Liberty Falls, where the Burbank potato reigns over farming families struggling to make a profit in an increasingly dismal market. Through an interweaving narrative structure, Ozeki’s *All Over Creation* explores hybridity through her continuous use of seed metaphors. Yumi Fuller, the daughter of Lloyd and Momoko Fuller, is born of Caucasian and Japanese descent. Momoko married Lloyd in his time as an American soldier located in Japan. Ozeki employs the potato seed as a literal symbol of biodiversity as she explores the monoculture of agrarian Idaho. The seed metaphor persists through throughout the novel; besides their own obvious role as plants, seeds take the shape of Yumi’s hybrid children and an anti-GMO activist group called the Seeds of Resistance. By promoting the importance of biodiversity to plants in a monoculture farming

community, Ozeki implements the idea that cultural diversity is vital to a monoculture society.

In the present-day narrative of *All Over Creation*, elderly Momoko is mentally deteriorating with Alzheimer's disease, a condition which brings her daughter Yumi back from Hawaii to Idaho to care for her dying parents. Despite the loss of her cognitive capabilities, Momoko maintains her gardening skills; she and Lloyd run a successful exotic seed business. Momoko cultivates the plants, hand-pollinating, harvesting, and sometimes crossbreeding them. Themes of crossbreeding and hybridity persist throughout the novel, as Momoko and Lloyd create their Japanese and Caucasian daughter Yumi; she, in turn, has three children by three different fathers, all of slightly different racial makeup.

While predominantly White communities such as Liberty Falls do not typically have much cultural diversity, Ozeki demonstrates that even conservative citizens such as Lloyd Fuller can achieve an open mindset when confronted with the benefits of inclusion. For the seed business, Lloyd writes a newsletter addressing the anti-exoticism infiltrating the farming and gardening communities. Lloyd calls anti-exoticism "explicitly racist," and compares it to the other methods of pest control used by farmers and supported by Agribusiness (Ozeki 67). While disavowing the harms of anti-exoticism, he exemplifies its benefits, supporting his argument with biblical scripture. A fundamentalist Christian, Lloyd is radically pro-life. Because of his severe reproach of Yumi's abortion at only fourteen years old, she runs away in rebellion, returning only after decades away in which she births children of her own. Lloyd's pro-life beliefs are not limited to human life, however, and in his late-in-life activism, he extends his rhetoric to plants and their rights.

Anahita Rouyan aligns beliefs of Lloyd and the Seeds of Resistance with Puritan visions of an agrarian America, representative of “independence and freedom” (152). She points to Thomas Jefferson’s statement, “Those who labor in the earth are the chosen people of God” (qtd in Rouyan 152) as evidence of Lloyd’s, and even the Seeds’, fundamentalism. Under this idea, the activist work done by Lloyd perpetuates conservative American ideals rather than a progressive approach expected from such a tribe as the Seeds of Resistance.

Ozeki often uses seed and plant discourse to prove their importance in community. Lloyd finds letters of gratitude written to Momoko by past customers, one of which thanks Momoko for cultivating his grandfather’s seeds, the family’s “only legacy from the old country” (Ozeki 114). Ozeki uses the heartwarming letters to appeal to her readers’ pathos and provide evidence of the community bond created through agriculture. Even though Momoko is a transplant in her Idaho town, she brings her gardening skills to the U.S. and nourishes plants of species both native and exotic. Occasionally, Momoko intentionally crossbreeds her squash plants, creating hybrids that reflect her hybrid daughter and grandchildren. She points to the children and tells Yumi that the squash are, “Like them. All mixed up” (Ozeki 118). The biodiversity of Momoko’s garden is reflected in her own maternal lineage, and she is pleased by the eclectic results.

The most significant theme of *All Over Creation* is its unwavering parallels between plants and people, what Donna Haraway calls “naturecultures.” Susan contends, “Juggling multiple opinions across and within its many characters, the novel as a whole shows how decisions about using Bt potatoes are indelibly linked to global belief systems, especially stories of technological and biological creation” (McHugh 30).

Cynaco, the corporate giant of Agribusiness based on the real-life company Monsanto, has patented the NuLife potato seed which has pesticides spliced into its DNA. Residents of Liberty Falls have experienced the dangerous effects of pesticides, implied in the rampant cancer of which Lloyd is a victim and the infertility experienced by Yumi's childhood friend Cass. Desperate for a solution but unwilling to risk a season of crops on expensive organic farming methods, Cass's husband Will agrees to farm a small crop of the NuLife potatoes. By naming the potato NuLife, Ozeki plays on its dangerous potential, but it is also a spoof of Monsanto's GMO NewLeaf potato. Rouyan explains, "Confronting her characters with the NuLifes, Ozeki not only manages to embrace the complexity of interests that cross at the cultivation of GM crops but also pinpoints the convention that governs the utopian representation of agriculture advocated by the Seeds of Resistance" (150).

While Yumi and her family represent otherness in rural Idaho, the Seeds of Resistance, a group of nomadic food activists, are another example of the intense response cultural difference elicits from the community. After discovering a copy of Lloyd's newsletter, The Seeds enter Liberty Falls with the express purpose of finding Lloyd who is, in their eyes, "a prophet of the Revolution" (Ozeki 140). The Seeds themselves are "strange and exotic in Idaho" (138). They are rejected by most of the townspeople not only for their vocal outcry against Cynaco and monoculture farming but also for their unusual appearances. At first, Lloyd is offended by their earthy appearances, but he quickly is comforted by former psych nurse Y's soothing presence. Lloyd's ability to accept the foreign appearances of the Seeds indicate the open-minded perspective that Ozeki hopes to harness from her readers.

Still, despite their differences from the community, the Seeds are made up solely of Caucasian members, and they embody the inherent privilege that comes with whiteness. Y allows Lloyd to call him by his birth name, Melvin, diminishing his unease of Y's exoticism by using a traditional Western name. While Y can turn to this name when he wishes to blend with traditional society, those with truly atypical names, such as Momoko, Yumi, and Yumi's children, do not have a backup name to turn to. In childhood, Yumi's name is morphed to Yummy by the town, and in her adolescence, she is sexualized by Eliot, her grade-school teacher.

Intrigued by Yumi's exoticism, Eliot seduces her when she is only fourteen years old. Yumi leaves Idaho to find a culture that won't constrain her to the exotic identity of a Japanese-American daughter of a potato farmer. Throughout her childhood and into her teenage years, Yumi is bound to the role of Indian princess in her elementary school's Thanksgiving play; her only line: "Noble pilgrims, my people and I welcome you to our land. We know that your journey has been a hard one, and we will help you. Pray take our seeds and plant them" (Ozeki 7). Even the elementary school's play reiterates the colonial rhetoric that encourages white culture to eclipse foreign culture, all the while highlighting Yumi's outsider identity by typecasting her year after year.

As Eliot enters as a teacher, Yumi is only fourteen, but he fetishizes her and, after the annual play, kisses her. Later as Yumi and Eliot reconnect in adulthood, he insists that he thought Yumi was older at the time of their relationship, but the reader cannot accept his logic. Eliot was, of course, aware of the grade he was teaching at Liberty Falls *Elementary School*. Yumi considers her own responsibility in the relationship as she explains her rebellion to Cass, "Sex was a big part of it. The wildness that was pushing

me . . . No, that's not true . . . It was a way of getting back at Lloyd . . . The only way I had" (Ozeki 241). Yumi professes that her disobedience and running away was a response to her father's distance in her teenage years. Still, she doesn't voice that Eliot enters her life in this time of adolescent vulnerability and offers the affection she craves. She should not hold herself accountable for normal behaviors which were not only encouraged but exacerbated by the inappropriate behavior of an adult in a position of authority.

Eliot's fetishism of Japanese culture does not disappear with maturity; as he speaks with Duncan, his boss and a high-level employee of Cynaco, he explains, "It's . . . potatoes. I just don't feel like I have a connection with them. Rice, yes" (Ozeki 277). Duncan refutes Eliot's desire to relocate to Tokyo, explaining that "The future lies in the Third World. In India. That's where the starving populations are, who need our help" (277). A representative of Cynaco, Duncan voices the company's intention to infiltrate vulnerable and developing countries, just as Eliot did to Yumi in her time of vulnerability. Further, Duncan displays the same fetishism exhibited by Eliot in his idolization of Indian culture: he adorns his desk with Hindi dieties, practices yoga, partakes in spiritual vegetarianism. Yet, again like Eliot, Duncan's behavior is underscored by his desire to pimp India, making the country reliant on Cynaco for food and indebted by its modest capital. Cynaco is the modern colonizer, proving that White colonialism is not past; it has taken a more subtle form in its modern interpretation.

Yumi's fourteen-year-old son Phoenix is treated to worse discrimination by the community than Yumi experienced: a generation removed from his white grandfather and an upbringing in Hawaii increases Phoenix's otherness, and his peers react violently.

When Phoenix is caught carrying a knife to school, Billy Odell, the arresting officer, tells Yumi that Phoenix is suspended for the next school year, and only when she insists they will be gone by then does he release Phoenix to his mother. Simply a promise of the outsiders' departure fulfills Odell and the community's unspoken wish. After Odell leaves, Phoenix voices his reason for carrying the knife: "They want to clean up the school . . . Get rid of everybody. Niggers, Japs, queers, wetbacks, hippie scum, whatever" (Ozeki 237); he reveals that Odell's son "stuck [the gun] in my mouth and said they were going to blow my brains out" (238). The Odell boy's explicit racism combined with his father's willingness to turn Phoenix back over to his mother on the promise of departure enforces the intolerance of foreign identity in Liberty Fall's monoculture community.

When Yumi questions Phoenix about the treatment of her younger daughter Ocean, he explains that Ocean isn't bullied because "She's blond" (Ozeki 238). Ocean "passes" for white, eliminating the threat that comes with foreign identity because her appearance matches her peers'. In "Assembling Asian/American Naturecultures: Orientalism and Invited Invasions," Karen Cardozo and Banu Subramaniam consider the impact of postcolonial ideology on Ozeki's fictionalized Liberty Falls, Idaho. Citing Vijay Prashad, they explain that "under state-managed multiculturalism, cultural essentialism largely replaced biological essentialism, conferring upon ethnicity a species-like genealogy of descent" (Cardozo and Subramaniam 6). Ocean is not subjected to the same violent bullying because she aligns with the looks of the community—biological essentialism—but she also avoids Phoenix's "hippie scum" personality which further violates the town's prejudice.

Ultimately, the Seeds receive the same treatment as other exotic pests as the hired hand of Eliot blows up their RV, killing Charmey. As Lloyd has pointed out, anti-exoticism is “explicitly racist,” and this act is proof of its violent consequences. The town has deemed the unknown dangerous when its own hands are unclean. Although the perpetrator is a member of the community, he was hired by Cynaco to eliminate any problems caused by the activist group. While the police investigate the crime, Geek admits that he feels to blame, a misplaced guilt, because he was trying to fix the propane system before the explosion. The police consider this statement a confession.

In no subtle terms, Ozeki uses the Terminator seed, a potato with a self-destructive gene spliced into its DNA, to demonstrate the self-destruction that occurs in a monoculture community. As Geek tells Lloyd about the newly developed technology, he says, “Crosses the line between genius and insanity. Think what could happen if that gene escapes” (Ozeki 266). The gene’s engineered poison is its demise, just as the poison of racism destroys societies from within. Horrified by Geek’s revelation, Lloyd agrees to ban with the Seeds against Cynaco and host an event in protest of the agri-giant.

As Geek and Will heatedly discuss the dangers of GMO potatoes such as Cynaco’s NuLife, the two sides stand off as neither is willing to back down from his steadfast stance. “Monoculture is weak. You should know that. You’re Irish,” Geek says, to which Will replies, “If you’re talking about the Famine, it was caused by late blight. You’re confusing blight with beetles. Monoculture is efficient. We got six billion humans on the earth, and a lot of them are starving” (Ozeki 272). Both sides are, of course, factually accurate. Within a single scientific study, “Effects of Biodiversity on the Functioning of Trophic Groups and Ecosystems,” researchers detail evidence

supporting Geek's argument – “One of the most pervasive environmental changes of our time is the global loss of this biological diversity” and at the same time supporting Will's theory – “Seminal studies suggested that species loss does, in fact, decrease how productive communities are and how efficiently they capture and consume limited resources” (Cardinale et. al., 989). As Ozeki fictionalizes this debate between Geek and Will, she characterizes both perspectives but, more importantly, demonstrates that both can be scientifically, if not morally, sound.

Here, critics diverge in their opinions of Ozeki's fictionalization of scientific fact; while many appreciate the accessibility Ozeki provides for complex ecological ideas, others reprimand her carefree conceptualization of these concepts without sufficient evidence. Some critics have seen *All Over Creation* as explicitly activist fiction which ignores the limitations of its argument, such as the benefits of genetically modified foods. Molly Wallace decries Ozeki's narrative as unsubstantiated and, worse, reckless for its impact on readers who will not do the hard research for themselves. Wallace posits *All Over Creation* into Lawrence Buell's idea of “toxic discourse”: texts written of which risks have not yet been proven. She says, “Ozeki's *All Over Creation* intervenes in its logic, both directly—in her depiction of the activists' grocery store theatrics—and arguably also indirectly—as the logic of analogy extends to all of the characters' attempts to understand the novelty of GM food” (Wallace 160). However, it is because Ozeki gives a voice to *all* of the characters involved in this effort to consider the benefits and consequences of GM food that relieves the author from the burden of incomplete scientific evidence.

Aligned with Wallace's criticism of *All Over Creation*, Ursula K. Heise iterates her belief that Ozeki, along with other writers of environmental fiction, take great liberties in analogizing culture and nature. In "Ecocriticism and the Transnational Turn in American Studies," Ursula K. Heise writes, "The odd implication of Ozeki's plot, that genetic engineering is a danger of the first order while non-native species are harmless, can therefore not be motivated by any aspiration toward ecological accuracy" (399). Heise uses the example of kudzu, a Japanese plant introduced into the American South which has long been believed as invasive and which was mentioned in Ozeki's previous work *My Year of Meats*, to counter the pro-exotic species rhetoric. Interestingly, recent studies have surfaced which provide evidence that kudzu was not nearly as invasive as once expected to be; in an article for *Smithsonian*, Bill Finch reports that kudzu only covers "about 227,000 acres of forestland, an area about the size of a small county and about one-sixth the size of Atlanta" (n.p.). Coincidentally, Finch explains that the myth of kudzu originated in a gardening journal of small circulation. Heise's impression of Ozeki's novel is itself fueled by Buell's idea of "toxic discourse" (qtd in Wallace 158): she doesn't cite evidence of kudzu's invasiveness, save its notoriety, and in her regurgitation of the myth, she is guilty of the very carelessness that she associates with Ozeki. Cardozo and Subramaniam go a step further than Finch in recognizing the benefits of kudzu; they contend that kudzu's "deep taproots, its relationship with nitrogen-fixing bacteria, and its ability to propagate vegetatively through stolons are tremendously useful biological traits for healthy fertile soils and prevention of soil erosion" (10), yet in *My Year of Meats*, Ozeki demonstrates the "relativistic and

interdisciplinary understanding [that] can help manage our ecological systems as well as put food on the table” as well as maintain a balanced ecosystem (11).

Not all critics oppose Ozeki’s parallels between plant and cultural diversity; many approve her illustration not only metaphorically but also scientifically. Spencer Schaffer provides a thorough historical background of the alignment of nature and culture, citing instances of scientific discourse that utilize cultural elements to characterize their studies (407). Schaffer explains that relating cultural diversity to biodiversity is apt, matter-of-factly, because humans themselves are animals and part of the natural world.

The problem arises when culture is analogized in a very simple, non-polytypic way with species. When cultural difference and species difference are compared without attention to polytypic species, culture and species get constructed in relationship with one another. What results is that cultural diversity seems fixed and absolute like species difference, and species difference seems malleable and constructed like cultural difference. (408)

Considering Schaffer’s ideas, the analogies within Ozeki’s novel are not as complicated as the biodiversity of the natural world, yet because she provides such a broad range of characters representing varying perspectives, it seems that she does in fact give voice to most, however “non-polytypic.” Yumi’s heritage, for example, is significant to her identity, but she is further shaped by the constraints of a childhood in Liberty Falls and freed by her life in Hawaii.

As the novel begins to resolve, Yumi uses yet another seed metaphor to explain life after death to Ocean. “They go back to the beginning,” Yumi says, “Of everything. Of life. Where things start” (Ozeki 383). While Ozeki will further explore Japanese

Buddhism in her later novel *A Tale for the Time Being*, Yumi's explanation embraces the traditional Buddhist philosophy of nondualism. Ultimately, *All Over Creation's* use of seed and plant metaphors connect the potatoes with the people of Idaho in a deeper way that some critics are willing to recognize. Ozeki demonstrates that cultural diversity is as complex as a delicate ecosystem, and for it to thrive, diversity must be nourished, as well.

The analogies between biodiversity and cultural diversity inherent in the works of Barbara Kingsolver and Ruth Ozeki expand the parameters of ecofeminism through the integration of social and biological sciences. The resulting fiction encourages readers to understand the repercussions of human behavior, both culturally and environmentally, in instances of homogeneity. Zebulon County and Liberty Falls are benefitted by the entrance of outsiders through the value added by Lusa and Yumi's worldly perspective. Diversity is not only metaphorically healthy; it is essential to the actual health of society as evidently as it is to the soil that sustains plants.

Chapter 3: “A Sweet, Gnawing Ache in Her Belly”: Motherhood, Maternity, and Fertility
in *Prodigal Summer* and *All Over Creation*

While rural farming communities, like those in *Prodigal Summer* and *All Over Creation*, have been depicted in literary texts over time as idyllic pastoral settings, these late twentieth century works by Barbara Kingsolver and Ruth Ozeki relate the anxieties surrounding the detrimental health effects of modern farming practices. In both texts, chemical applications to crops are used indiscriminately, primarily by the male farmers, while many of the women concurrently suffer from reproductive struggles and cancer. Not all women represented in the novels struggle with infertility, however—some are mothers, and some choose not to have children. In yet another example of continued ecofeminist activism, Kingsolver and Ozeki use various female characters, both child-bearing and not, to demonstrate the importance of maternal health on all members of society and motivate readers to take action to increase environmental and maternal health.

At the heart of *Prodigal Summer* is sexual reproduction: Lusa observes the mating patterns of moths and goats, Garnett crosses American Chestnut trees to reproduce stronger genetic variants, and throughout the summer, Deanna observes the life cycle from conception to maturity for coyotes, phoebes, and other animal species on Zebulon Mountain. Deanna does not have children, but her love affair with Eddie Bondo ultimately results in her pregnancy and she plans to return and live with her stepmother Nannie Rawley. Deanna and Eddie’s affair is lust-fueled and passionate—Kingsolver’s example of nature’s reproductive goals. Critics have noted Kingsolver’s attention to

sexual reproduction in *Prodigal Summer*, and Deanna's affair with Eddie is an example of the purpose of lust in nature's reproductive goals. In "Darwin and Ecology in Novels by Jack London and Barbara Kingsolver," Bert Bender explains, ". . . while the novel celebrates and explores Darwin's great theme of the reproductive force in evolutionary biology, it is also a meditation on his inseparable, fundamental ecological insight—that 'all organic beings' are 'bound together by a web of complex relations'" (125-126). Evolution and biology are directly linked to sexual reproduction, and despite Deanna's retreat from people, she does not escape her biological calling to reproduce.

While all three narratives of *Prodigal Summer* are concerned with evolutionary biology, Deanna is the only character who experiences pregnancy during the novel's timeline, but because her own mother died at an early age, Deanna is not privy to the maternal knowledge usually passed on through generations. She misinterprets many of the signs of pregnancy for menopause: insomnia, hot flashes, emotional crying, a "sweet, gnawing ache in her belly" (Kingsolver 326). Deanna is aware of a great change in her body and the significance of the loss of her monthly cycle: "Her body felt full and heavy and slow and human and *absent*, somehow, just a weight to be carried forward without its enthusiastic cycles of fertility and rest, the crests and valleys she had never realized she counted on so much" (Kingsolver 329). When she does understand the root of her body's change, she makes the decision to return to Nannie and raise her child within a familial community.

The familial communities which nurture humans are reflected in the ecosystems that Kingsolver illustrates in *Prodigal Summer*. In "Living with Ghosts, Loving the Land: Barbara Kingsolver's *Prodigal Summer*," Dilia Narduzzi connects Deanna's

pregnancy to the compassion that she holds for all non-human life. The coyotes Deanna has studied at length form families led by females with the male coyotes acting as loners and contributing solely for procreation. Similarly, Deanna's affair with Eddie results in a pregnancy, but she does not inform him of her pregnancy or ask him to play a paternal role. Narduzzi explains, "Through the characterization of Deanna as the alpha female, and in her 'return' to Nannie as she carries her unborn child, the first glimpses of a new construction or conceptualization of the family becomes apparent. There is no doubt: this is a women-centered family group, not a nuclear family structure" (76). By returning to Nannie rather than Eddie for guidance and support, Deanna replicates the power of protection and support provided within the coyotes' matriarchy.

Further supporting the claim that Deanna's actions are directly related to that of the coyotes is the language Kingsolver uses to begin and end the novel. Imagery that could be applied to both woman and female coyote is used in the novel's opening sentence. Referring to Deanna, the novel opens, " Her body moved with the frankness that comes from solitary habits. But solitude is only a human presumption. Every quiet step is thunder to beetle life underfoot; every choice made new for the chosen. All secrets are witnessed" (Kingsolver 1). The novel's concluding chapter replicates the same language in its final sentences as the focalization shifts to a female coyote in the middle of the night: "Solitude is a human presumption. Every quiet step is thunder to beetle life underfoot, a tug of impalpable thread on the web pulling mate to mate and predator to prey, a beginning or an end. Every choice is a world made new for the chosen" (Kingsolver 444). Kingsolver does not reveal if the coyote is the mother of the pack, only that she is "restless and distracted to be this far away from her sister and the

children” (442). Deanna’s solitude has removed her from the human way of life and located her closer to the instinctual pack-mentality of coyotes, but simultaneously she recognizes her fundamental need for her own familial support.

Since Rachel Carson’s famous midcentury exposé *Silent Spring*, ecofeminism has challenged the consequences of pesticide use on maternal health. *Prodigal Summer* and *All Over Creation* continue that tradition by illustrating the damaging effects that pesticides have on women’s fertility. From difficulties conceiving a pregnancy to miscarriage to birth defects, the effects of pesticide use on women range broadly and are a consistent source of distress in the novels’ rural farming communities. Ecofeminist theorist Greta Gaard considers the ways modern technology has deteriorated women’s health—especially marginalized women—in “Reproductive Technology, or Reproductive Justice?: An Ecofeminist, Environmental Justice Perspective on the Rhetoric of Choice.” She explains, “A primary emphasis of ecofeminism has been the connection between reproductive cancers and environmental health, and by the mid-1990s a raft of research was published to document this connection” (Gaard 117). Uncoincidentally, both Kingsolver and Ozeki’s novels were published directly following this flux of research. The pillars of science that support each novel are linked to such studies while harkening to Carson’s *Silent Spring*.

Continuing, Gaard cites scientific studies which have revealed the damaging health effects of pesticides, among many other chemicals used in modern farming practices: “Women’s reproductive capacities were the central but not the sole topic of study; these texts also documented reduced sperm counts and feminization among human and animal males” (117-18). Just as the studies conducted analyzed the effects on both

sexes, the ecofeminist novels written by Kingsolver and Ozeki also take into account the ways that the male characters of their novels, such as Garnett Walker, Eliot Rhodes, and Lloyd Fuller, among others, are influenced by the anthropocentrism that dominates their respective communities. (These and other men of the novels are also affected both physically and socially by indiscriminate pesticide use, though the constraints of space do not allow for me to fully examine this here.)

As women in both novels struggle with infertility and birth defects, they are aware of their problems' roots in toxic chemicals, but the women have opposite reactions to the issue: in *All Over Creation*, Cassie is concerned about continued pesticide use but internalizes her worries; while in *Prodigal Summer*, Nannie Rawley speaks out against pesticides since the death of her daughter, uncoincidentally named Rachel Carson, who was born with a heart defect and Down syndrome. Nannie is a direct characterization of an ecofeminist. She is outspoken for organic farming practices and against those which are harmful to the surrounding physical and biological environments; she uses scientific theories to explain her logic to next-door Creationist Garnett Walker; and she is a maternal mentor for Deanna whose own mother passed away at an early age. As discussed in Chapter 2, activism is core to the mission of ecofeminism, and Nannie fully embraces this duty. Melissa Schoeffel emphasizes the significance of activism in fiction by, albeit separately, both Kingsolver and Ozeki. Describing the works of Kingsolver and Ana Castillo, Schoeffel writes,

Their fiction is politically activist not simply because they write to inform and educate their readers on political issues, but also because they use fiction to work for change—to create in story a political urgency to which the reader is (strongly)

encouraged to respond, and to use narrative to imagine alternatives to life as we (and their characters) know it. (Schoeffel17)

The same political urgency that Schoeffel attributes to Kingsolver herself is a dominant character trait of Nannie Rawley. She is a strong proponent of organic farming methods such as natural pest control and a deep believer in the fragility of ecosystems.

Like Earth's ecosystems, the interconnectedness of human action leads to imbalances in reproductive health. Nannie recognizes the importance of relating the use of chemicals not only to their impact on the region's fauna but also on women's health. In her many attempts to convert Garnett to her own way of thinking about the environment, Nannie uses a range of rhetorical appeals to convince him of the negative impact of chemical farming methods like Kingsolver herself employs fiction as a rhetorical strategy to persuade her reader of human responsibility for the environment. Armed with scientific evidence and biblical scripture, Nannie crafts a well-reasoned argument that human respect for Earth's ecosystems are part of God's plan for humanity, but Garnett believes that God has armed humans with technology for their own purposes in defeating nature. In a bitter letter to Nannie, Garnett argues against Nannie's mission to save endangered salamanders as he quotes Genesis 1: 27-30,

'So God created man in his *own* image; . . . and God blessed them and said to them 'Be fruitful and multiply and replenish the earth, and subdue it! . . . Behold, I have given you every herb bearing seed which is upon the face of the earth . . . And to every beast of the earth, and to every fowl of the air, and to every thing that creepeth upon the earth'—such as salamanders, Miss Rawley . . . (Kingsolver 186, original emphasis)

Garnett interprets the passage to mean that all of Earth is human dominion and unconditionally for its own benefit. Peter Wenz acknowledges Garnett's anthropocentrism but rejects Kingsolver's use of it as ecofeminist because, he believes, Garnett is not sexist. Wenz states, "Mr. Walker combines religious conservatism with sexism and anthropocentrism. He rejects evolution and this underpins his anthropocentrism, but Kingsolver does not present his sexism as related either to religion or to anthropocentrism" (121). I disagree with Wenz: Garnett's calls Nannie a "bra-burning Unitarian" and sends brash, argumentative letters to Nannie repeatedly that berate her with scripture. Nannie responds to Garnett's contention in with own letter, a thoughtfully-composed counter-argument outlining both scientific and religious reasons for vigilant care for the environment; she says of his quote from Genesis, "I wonder if you really understand it. God gave us every herb-bearing seed, it says, and every tree in which is the fruit of the tree-yielding seed. He gave us the mystery of a world that can re-create itself again and again. To *you* the fruit shall be food, he's saying, but just remember, to the tree it's a child" (Kingsolver 217). Nannie's responses to Garnett's anthropocentrism consistently challenge his interpretation of the bible, offering a more open-minded reflection on the potential compatibility between science and religion.

Nannie recognizes the responsibility of humanity to protect all components of the ecosystem; while her activism stems from her daughter's suffering, her motives extend beyond human benefit to include all of God's creatures. Garnett recognizes the pivotal moment of Rachel's birth defects as a catalyst for Nannie's activism: "Everything in Nannie's life seemed to turn on the birth of that child, now that he looked back. The woman had probably been normal once. That child had launched her off the deep end"

(Kingsolver 136). Even so, he is not convinced that the chemicals are unsafe. In a moment of candor, Nannie suggests that the chemicals may also have caused Garnett's wife's fatal cancer.

Like Nannie, Lusa Widener is conscious of the Zebulon County's overabundant use of chemicals in its farming methods and their impact on the health of the community on the whole. Lusa does not have children of her own, and she is clear that she has no desire to find another mate after the death of her husband. However, when she discovers that her sister-in-law Jewel has terminal cancer, Lusa offers to take Jewel's children, a son Lowell and a daughter Crys, at first for Jewel's chemotherapy treatments but ultimately in an offer to permanently adopt them in her possible death.

In crafting Lusa's narrative, Kingsolver provides yet another unique perspective of motherhood, completing a three-dimensional view of it that defies the essentialist role of women as mother. While all three narratives feature mothers in some capacity, rather than including a female character who does not fill a motherly role in any capacity, Kingsolver is illustrating the vast range of ways that women can occupy a maternal role that do not necessarily include birthing a child. While Lusa has no children of her own, her behavior towards Lowell and Crys is often maternal. In a conversation with Jewel, the two discuss the children's hard life thusfar, and Lusa says, "Every kid has it tough . . . Being a little person in a big world with nobody taking you very seriously is tough. I can relate" (Kingsolver 232). Later the same night, Lusa is talking to Little Rickie about his father's flirtatious behavior and when he gets upsets, she "regretted her indiscretion; she'd forgotten somehow that this was a child and his father. [She] had no instincts for such things—she wasn't a mother" (Kingsolver 243). Despite the proclamation against

her maternal instincts in this moment, Lusa proves time and again that she is fully capable of mothering Jewel's children as she connects with Crys and Lowell on a foundational level.

Lusa's relationship with Crys is especially telling in her ability to fill the maternal role for which she signs on. While Crys's defiance against typical gender roles causes the rest of her family to reject her identity, Lusa supports Crys and fills a mentor-like role by showing her the merits of behavior that isn't considered feminine. Bert Bender says, "Kingsolver . . . arranges for Lusa to take under her wing a tomboy niece who some in the family thought might become 'a little homo' (Kingsolver 123). And in many other ways she shows Lusa learning to negotiate relationships within her new family that might have defeated her—the 'rough and tumble, the sharper edges of family love' (227)" (130). By not just accepting Crys's gender fluidity but going a step farther by pressing family members to recognize and accept it, Lusa proves to herself and to Jewel her capability of mothering the children in Jewel's absence.

Since its inception in the 1970s, ecofeminism has evolved its understanding of motherhood. Feminists have long worked to define the complex role that women serve as we partake in the perceived biological duty of motherhood or, alternatively, when we refuse the role and defy our social responsibility. Lynn Stearney identifies the dangers that occur when women are restricted to maternal roles in her 1994 article "Feminism, Ecofeminism, and the Maternal Archetype: Motherhood as a Feminine Universal." She writes, "While women have struggled to redefine and revalue their identities through the feminist movement, the use of the mother metaphor in ecofeminism returns women to a primary identification as mothers, and reinforces the notion of women's roles and natures

as inextricably connected to their reproductive capacity” (146). Kingsolver and Ozeki often examine themes of motherhood in their works of fiction, and in *Prodigal Summer* and *All Over Creation*, they fully explore maternal identities by providing narratives of not one but many women who are currently mothers, becoming mothers, and suffering through infertility. While *Prodigal Summer*’s Lusa does not wish to bear children of her own, she offers to adopt the children of her fatally ill sister-in-law. Neither novel features a major female character who does not ultimately fill a maternal role, proving that Stearney’s mid-90s contention held true through the decade into the publication of *Prodigal Summer* in 2000 and *All Over Creation* in 2004.

In Chapter 2, I noted that ecofeminism has progressed and become more inclusive to notions of race and class. This focus on intersectionality, widely acknowledged by ecofeminist theorists, has illuminated the disparity in maternal health among races and classes through an imbalance in available resources and unequal power dynamics among populations. As A. Kings explores ecofeminism’s move toward inclusion; she writes,

Ecofeminism explores the twin oppressions experienced by women and nature in an attempt to understand their shared destiny. Inextricably linked to the merged destinies of women and nature is the idea that humanity itself is inseparable from nature as a whole and as such, the damage inflicted upon nature by humans invariably leads to harm being inflicted upon all of humankind and not just women. (71)

While intersectionality is a clear theme of *All Over Creation*—Yumi is a daughter of Caucasian and Japanese descent and her own children are further racially mixed—it is less so in *Prodigal Summer*, and Kingsolver has received much attention from critics for

her chief use of white characters. Kristin Jacobson has said, “Kingsolver’s focus on Anglo protagonists, furthermore, simultaneously centers white experience and works—through her uncanny translocal settings—to decenter white privilege” (qtd in Wagner-Martin 121); Jacobson’s quote emphasizes Kingsolver’s focus on class rather than race as a source of marginalization. Linda Wagner-Martin agrees, “When this latter point is applied to the three strong women characters—all white—of *Prodigal Summer*, it creates a different level of questions about the suitability of power within the various strands of the novel” (121).

To Jacobson’s point, rural populations are often at a disadvantage because of their class status. The women of Zebulon County have experienced the doubled oppressions of intersectionality both through gender and through their rural community’s ever-increasing poverty which prevents them from breaking the cycle of using pesticides that cause fetal health problems and growing tobacco that is a known carcinogen. Likewise, the farming community of *All Over Creation*’s Liberty Falls invests in chemical farming methods that risk community health and wellbeing because their farms will fail otherwise. These health risks are often made by male farmers without input from their wives, but the mothers and babies are the population at highest risk.

When scholars analyze motherhood in the work of Ruth Ozeki, they often turn to her first novel *My Year of Meats* which explores the international meat industry through a dual narrative: that of Jane, a Japanese-American journalist who hosts the TV cooking show *My American Wife!* centered around (and sponsored by) American beef, and Akiko, a Japanese wife whose husband wants her to have a baby and thinks that by cooking recipes from the show, she will conceive. “Fertile Cosmofeminism,” Shameem Black

writes of *My Year of Meats*, “When women want children . . . they find themselves immersed in a discourse of reproduction that situates the intimate workings of the childbearing body within the social politics of public health, family formation, racial mixing, meat eating, and corporate profit” (227). Many of these same themes are mirrored in *All Over Creation* as Ozeki continues to explore corporations that profit from the exploitation of marginalized citizens. While *My Year of Meats* “exposes the collusion between global television and corporate agribusiness in the transnational spaces across the Pacific Ocean” (Black 227), *All Over Creation* delves deeper into the questionable ethics of corporate agribusiness. Transnationalism is again recalled as Yumi’s hybrid identity as a Japanese-Caucasian girl eroticizes her despite her youth. All the while, Cass experiences difficulties conceiving and multiple miscarriages, and though the root of her fertility problems is never verified, she and her husband Will speculate that they stem from the chemical methods used heavily on their own farm as well as the other farms throughout the area.

Like in many farming communities, in Liberty Falls, Idaho, the choice to farm with modern technologies such as pesticides, genetically modified crops, and precision farming (farming with GPS technology), is decided upon and implemented by majority male farmers. The women, mothers, and babies of Liberty Falls have little or no input in the methods used on the farms despite their health being disproportionately at risk from the chemicals treatments used. To ecofeminists who analyze motherhood and maternity across disciplines—including science, literature, and the integration of the two—systemic patriarchy is responsible for the health problems associated with modern technologies.

Later in *Maternal Conditions*, Schoeffel analyzes *All Over Creation*; she considers the influence of systemic patriarchy on the women's pregnancies:

...*All Over Creation* literalizes the conflation of women and nature by exposing how the technological control (elimination) of plant seed reproduction is ideologically linked to the patriarchal control of female reproductive bodies. The fertile body is made to speak (only) through the assertion of its resistance; the inherent diversity in fertility subverts the 'story' that 'resistance is futile' in our technologized world. (Schoeffel 111)

Cass and her husband Will choose to plant the technologically engineered GMO potatoes but not without weighing their dangers. Still, they choose to try the potatoes in hopes that this newly developed alternative, touted by Cynaco as safer, will be able to reduce their use of chemical pesticide treatments.

Greta Gaard considers the implications of new reproductive technologies (NRTs) and the effect they have on a range of women. Gaard calls the NRTs "implicitly antifeminist when it invokes a form of victim-blaming by attributing rising infertility rates to middle-class women who delay childbearing while struggling to launch careers in a working environment constructed to suit the lives of married heterosexual males with stay-at-home wives" (105). Cass and Will chose to hold off having children until their farm was well established, despite her lifelong wish to have a child. Cass does feel the guilt that Gaard suggests, but not directly through blame by her husband or any other individual, but rather as a result of a patriarchal society that places the responsibility of reproduction in the hands of women. Ozeki does not imply that Cass is blamed by her husband for her difficulties getting pregnant; the guilt she feels is mostly internalized.

Not only does Will not blame Cass for her infertility, he experiences his own grief over their childlessness. His suffering reinforces Kings' statement, ". . . the damage inflicted upon nature by humans invariably leads to harm being inflicted upon all of humankind and not just women" (71), is again demonstrated as the interconnections between all characters, regardless of gender, are affected by Cynaco's irresponsible use of farming technology.

The relationships between men and their feelings concerning pregnancy are complicated by male authoritative control over women's reproductive choices. Although Cass is unable to carry her babies to term, Yumi has no difficulty getting pregnant, but the terms of her adolescent pregnancy are dictated first by Eliot, her impregnator, and then her father, who attempts to stop her from having an abortion. As a schoolgirl, Yumi has played a Native American princess in the school's play year after year; her only line declaring, "Noble Pilgrims, my people and I welcome you to our land. We know that your journey has been a hard one, and we will help you. Pray, take our seeds and plant them—" (Ozeki 7). In the year that Eliot, known by the students as Mr. Rhodes, takes a teaching job in Liberty Falls, he is inflamed by the production. He yells at Yumi, "Do you know *anything* about the Shoshone and the Bannock who've lived on this land for thousands of years, before there even was an Idaho?" (22) before seducing her, first kissing her in the classroom, and then taking her back to his one-room house where they sleep together. The irony of his own predatory actions—taking advantage of a girl who, just coming into her sexuality, is too young to know the weight of her actions—is lost on him as he fumes about capitalism's damage on marginalized cultures. Ozeki foreshadows a giant leap in Yumi's maturity as she tells Cass about her experience losing her

virginity: “That was when time did a weird, elasticky thing, like a cartoon slingshot, sending you zinging way out ahead of her in years” (24). The rapid growing-up that occurs in Yumi is unfair; her loss of girlhood is manifested in her actions that follow as she reacts to Eliot and her father’s treatment of her unintended pregnancy.

The affair and pregnancy directly represent the metaphorical relationship between conqueror and conquered. In a direct parallel of the white Pilgrims’ conquest of Native American land, Eliot is guilty of taking what he wants regardless of the consequences for those he damages. Melissa Schoeffel says, “[Yumi’s] otherness, while potentially, a source of resistance, is effectively controlled, since Yumi has no access to meanings other than those that others define for her . . . Likewise, her sexuality is denied, unless put in the service of Elliot’s erotic fantasies of the ‘openness’ of Asian women” (144). When Yumi tells Eliot she loves him, he doesn’t reciprocate the declaration, breaking her heart. She maturely defends herself by correcting his pronunciation of her name: “Not like gummy. Like you. And me” and finally tells him “If you can’t pronounce it right, don’t say it at all” (Ozeki 27). By correcting her name, she begins to retract some of the power in the relationship. Much later in the novel, the narrative flashes back to Eliot taking Yumi to get an abortion, with Cass along for support. The procedure is held in an illegitimate facility by a woman in “stained green scrubs” who “swore [she’d] never do another one of these,” and when he tells her that Yumi is a minor, she “looks at him like she wants to spit in his face” (198). The woman performing the procedure makes Yumi tell her that she doesn’t want the pregnancy, but when Yumi does, her hesitancy shows—“it comes out sounding like a question” (199). After, she insists that she wants the abortion, but all audiences—the woman, the reader, and herself—acknowledge her doubt.

Following the procedure, there is an immediate change in her attitude towards Eliot. As he attempts to embrace her, she pushes him away, saying, “I’m not a fucking baby” (199). Yumi’s rapid maturity is her method of emotional preservation.

Following Yumi’s return to Liberty Falls as an adult, the two reignite their sexual relationship, but Eliot’s memory of the long-ago affair and Yumi’s emotional baggage resurface after they sleep together. She tells him, “I never came . . . I was fourteen years old for God’s sake. A fourteen-year-old kid getting screwed by her history teacher is way too uptight to have orgasms” (212). Eliot doesn’t recall her young age, but Yumi doesn’t forgive his memory lapse. She thinks, “I knew what he wanted to say—*But I was young, too!* And it was true—twenty-three or -four at the most. But I was so much younger” (213). As an adult, Yumi has the deep maturity needed to understand the predatory behavior that Eliot exhibited. She finally tells him, “Generally guys get sent to jail for what you did . . . You were a child molester, Eliot” (214). She is fueled by his reactions, a “new crisis of conscience,” and powers her closure through intercourse with him. “I just wanted to ride his discomfort, hard, until it caught up with mine,” Yumi admits to herself. Her coping mechanisms do not epitomize healthy behaviors, but her ability to come to terms with her statutory rape alone is profound.

When Yumi becomes pregnant, she maintains her decision to abort the pregnancy despite her father’s pro-life beliefs. She runs away from home to live in San Francisco, and later in a letter to Lloyd, explains, “I could tell that your shame was going to fill every crack in the house, seep into every second on the day, and suck the air right out of me . . . You might think that the poison was in me, Daddy, but you’d be wrong. I was just the derailed train car. The shame was yours, and I knew if I stayed, I’d be poisoned by it”

(Ozeki 37). Lloyd holds strong pro-life beliefs, ones which Ursula K. Heise says cause him “mercilessly to reject his daughter after her teenage abortion” (398). After discovering that Lloyd suffered a heart attack in the year following her departure, and she writes to Momoko, “I guess I feel a little guilty, but deep down, I don’t think what I did was so bad. I was just a stupid kid, dumb enough to get in trouble, but smart enough to do something about it. I know he would call that sinful, and maybe you think so, too, but that’s just your opinion” (Ozeki 38). Yumi again demonstrates her newly gained maturity as she acknowledges the difference of opinion between herself and her parents.

After recognizing at a young age that her reproductive decisions are her own, Yumi goes on to have three children by three different men, but on her own terms. She has her first son Phoenix with Paul, a gay man, because “. . . since normal families are so screwed up and dysfunctional we [decided we] might as well try to have an abnormal one” (Ozeki 42). Her next two children, Ocean and Poo (birth name Barnabas), are born by two different fathers of different races, and Yumi’s blended family symbolizes an entirely different world than exists in her homogenous home of Liberty Falls. Her parenting style is also criticized by the community, even by those close to her. Cass deems her aloof and ungrateful for her children; even her own son Phoenix admonishes her for reuniting with Eliot.

While Yumi is empowered by freedom of her reproductive choices, Cass has the opposite reaction to the abortion and blames Yumi for her own trouble conceiving and carrying babies to term. As an adult, she tells Yumi, “Every time I miscarried, I thought of you. Thought of that horrible trip to Pocatello with that teacher” (78). She admits that she feels her problems are a repercussion for standing by Yumi through the abortion:

“Each time I miscarried and saw the blood, it just brought it all back. I felt like God was punishing me for helping you out. Crazy, huh? But if that’s the case, then how come you’re here now with three great kids? You know what I mean? It doesn’t make sense. If anyone deserved to get punished, it was you, right?” (79). The moral implications of Yumi’s abortions extending beyond Yumi’s parents’ disapproval and through her best friend’s misplaced guilt demonstrate the extreme guilt that Christianity inflicts on those who are judged by God as sinful.

Throughout Yumi’s extended stay in Idaho, Cass babysits Poo frequently and develops an unhealthy maternal yearning for the baby to be her own. At first, she simply takes pleasure in finally filling a mother—she “always held her breath, hoping that he’d walk for her first” (Ozeki 129)—but she soon begins to thrive on the attention that she receives as a mother. Cass acknowledges the attention that she receives when she holds him through mothers and non-mothers alike:

She could recognize the mothers immediately from their knowing smiles, and she was surprised at the bond she felt with them. She could tell the women who didn’t have children, too, the ones who looked longingly at the softness of Poo’s cheeks, imagining what it would be like to finger his supple spine or to feel his little paws grip her sweater, like he was doing now, in his sleep. (130)

What begins as Cass’s innocent and understandable longing escalates in conjunction with Yumi’s careless behavior toward her children. One day after Yumi returns from an evidently passionate date with Eliot, Cass decides to load Poo in the car and head north to Canada (215). She premeditates the journey, intentionally packing with an understanding

that she might raise suspicion. She only makes it a little over an hour, all of which Poo spends crying, before deciding to return to Liberty Falls.

In another narrative thread, Ozeki explores the experience of pregnancy as Frankie and Charmey conceive a baby, and she carries and births their daughter Tibet. The narrative is focalized through Frankie who, Charmey tells him, “knocked her up the very first time they did it” (120). He is only seventeen and has recently run away from home to join the Seeds of Resistance. He often shows his naïveté; following Charmey’s pregnancy announcement, they begin to have intercourse and, alarmed, he says, “You don’t think that it’s, like, watching us, do you?” (120). Though naïve, Frankie is an attentive and thoughtful partner; sensitive to Charmey’s concerns and needs, he represents a perfectly supportive fatherly role. Though she is only nineteen, Charmey is knowledgeable, albeit immature, about pregnancy and birthing. She does not “believe in hospitals or the paternalistic power structures of medicine” (192); and she plans to have a homebirth through lessons she and fellow Seeds of Resistance member Lilith have studied on the internet. Complications occur, and Charmey is taken to the hospital by Cass and Will, where medical intervention makes delivery possible. (The doctor calls her hope for a homebirth “medieval” (339) proving the condescension of Western medicine, despite its usefulness.) Frankie is sadly unable to attend the birth of Tibet because he is detained for the Seeds’ actions; even so, upon his return, he displays the utmost exuberance for his daughter.

Following the explosion on the RV that results in Charmey’s tragic death, Frankie asks Cass and Will if they will adopt Tibet. Cass admits to herself that she has considered the idea, has even made herself sick with hope over it. Despite Lilith’s protests against

the idea, she and Will agree to adopt Tibet. In the novel's concluding scene, Cass reads a letter to Tibet, newly nicknamed Betty, from Frank. Enclosed is a photograph of Frank on a skateboard, holding a placard that reads "RESISTANCE IS FERTILE!" (416).

Melissa Schoeffel says that the message,

. . . suggests not only that resistance to structures of domination can be spread from body to body—resistance is fertile in the sense of being reproduce-able in other—but also that fertility itself is a form of resistance to oppression, particularly when oppression is understood as the systematic attempt to erase difference. In other words, the uncontrollable diversity inherent in fertility contains the seeds of resistance to the status quo and the rescripting of the 'same old story.' (110)

Shoeffel's insight suggests a more complex ending to the novel's seemingly neat conclusion. With a solution to Cass's reproductive troubles, the punishment of the vilified Eliot, and the return of Yumi to Hawaii, the year's problems have all found solutions. Still, the connections between fertility and oppression remain, and only through further action by those invested will they ever be resolved.

As Kingsolver and Ozeki explore themes of motherhood, maternity, and infertility, they consider the heightened risk of chemical exposure of mothers in low-income regions. These mothers, like *Prodigal Summer's* Nannie and *All Over Creation's* Cass, are often incapable of affecting change in the chemical farming methods prevalent in their rural homes—decisions that are traditionally left to men. At its inception, ecofeminism considered feminine wisdom to stem from women's maternal knowledge, but over the years of its development, the choice of women not to have children was

acknowledged and the essentialism of a care ethic was challenged. Because Kingsolver and Ozeki represent a variety of maternal choices—to have children or not; to abort or to adopt—they fulfill ecofeminism's efforts to include all women's decisions regarding childbirth.

Conclusion: The Value of Rhetoric through Characterization in Ecofeminist Fiction

At the turn of the twenty-first century, Barbara Kingsolver and Ruth Ozeki published novels that embody decades of growth in ecofeminism. While it is significant that the complex narratives within Kingsolver's *Prodigal Summer* and Ozeki's *All Over Creation* are reflective of the ecofeminist philosophy of the inextricable parallel between the damaging treatment of women and the environment, the imperative connection between the novels is their political call-to-action to the reader. At its core, ecofeminism is a theory that seeks to engage participants and audiences in improving societal treatment of women and the environment, and Kingsolver and Ozeki's novels inspire readers to act against these unjust attitudes and behaviors. Through the fictionalization of the rural settings of Zebulon County, Kentucky, and Liberty Falls, Idaho, Kingsolver and Ozeki illustrate problems that face real everyday farming communities, and they present rhetorical appeals that readers can simulate in real-life scenarios.

In this thesis, I have considered key areas that Kingsolver and Ozeki have identified as immediately problematic in rural farming communities; among them, the lack of diversity in homogenous populations, as well as maternal health risks resulting from exposure to chemical toxicity. By depicting works of activism through fictional characters, Kingsolver and Ozeki offer readers a range of options in personally seeking social change. In *Prodigal Summer*, Kingsolver shows that one-on-one engagement between individual relationships can powerfully influence social knowledge. For example, by informing Eddie Bondo about the scientific reasoning for coyote introduction into the ecosystem as a replacement predator for the overhunted wolf,

Deanna creates a logical argument against his emotional resistance to coyotes. Scientific reason and logic like Deanna's persists throughout the novel, but Kingsolver also illustrates alternative methods of persuasion so that her readers can visualize other methods of argument to convince those resistant to ecofeminist philosophy.

Nannie Rawley's relationship with Garnett also represents the capacity of individual activism, but she must take a very different persuasive approach, using pathos rather than logos. Garnett first resists the logical argument of her thoughtful letters connecting scientific evidence of evolution to the biblical scripture he uses as an opposing argument, but the intimate relationship that he develops with Nannie over time allows him to understand her perspective. Unlike Deanna's logical appeal to Eddie, Nannie's ability to influence Garnett is emotional: she connects with him through a multitude of kind gestures: baking him a pie, saving him from a snapping turtle, revealing the cause of his decades of dizzy spells, and ultimately, providing him with seeds for his project of creating a blight-resistant strand of American Chestnut. Kingsolver's portrayal of this relationship suggests to readers that logic is sometimes not the most effective mode of argument—a personal, intimate approach can have far more impact.

Science-based, evidential reasoning is woven throughout *Prodigal Summer*, but Kingsolver does not discount the deeply-rooted generational wisdom of Appalachia. While Lusa is often pretentious about her scholarly approach to farming, such as when she thinks, “She could even pasture mother and calf together and skip milking altogether . . . (did it take a scientist to think of this?)” (Kingsolver 34, parenthetical original)—she admits that communal legends that seem metaphorical, such as the mountains breathing, are potentially factual. Kingsolver writes, “The steep hollow behind the farmhouse took

up one long, slow inhalation every morning and let it back down through their open windows and across the fields throughout the evening—just one full, deep breath everyday” (31). By the end of the novel, Lusa has come to respect the reasoning for some of the community’s farming methods that she initially resisted, like the eradication of honeysuckle which takes over her barn at the Widener farm.

In *All Over Creation*, Ozeki also presents a variety of forms of activism that her readers can mimic in their personal efforts to raise social consciousness of environmentalism, feminism, and multiculturalism. Through Yumi, she characterizes a woman whose forced maturity stems from early pregnancy and abortion through a relationship with a young adult teacher. Yumi’s choices are not always commendable, but she ultimately stands up to her abuser Eliot, who as a middle-aged man is a corporate representative of Cynaco, a company whose irresponsibility harms poor rural communities for company profits. This complex relationship does not always represent healthy behaviors, but the final result of their interactions—her power over him in their sexual relationship and her definitive refusal of his marriage proposal—signifies the ability of the subordinate player to have power over the dominant on the large scale of the small town against the large agribusiness.

In another, more obvious characterization of activism, the Seeds of Resistance publicly protest the irresponsibility of Cynaco’s genetic engineering of food. Frank joins the Seeds as teenager, ignorant of their ideals but excited by their energy. His attitude towards GMOs represents much of America’s: unknowledgeable and even uncaring. He likes to eat French fries and peanuts, despite discovering the potentially harmful pesticides and GMOs that are involved in their production. By the novel’s conclusion,

though, he has learned the moral implications of Cynaco's treatment of rural farming communities such as Liberty Falls, even though it takes the drastic explosion of his girlfriend to do so. Readers can relate to Frank's inclination to eat more affordable food, but through his final transformation into a more thoughtful and responsible activist, they may too see themselves convert to more socially responsible thought and behavior.

Because the scale of Kingsolver and Ozeki's arguments are large, the scope of this thesis limits my capacity to fully explore each. I did not fully consider the works' intentional inclusion of Darwinism that is most notable in Kingsolver's work. Lusa is frequently seen reading Darwin's *Origin of Species*, while evolution is persistent through Deanna and Nannie's narratives. Bert Bender's "Darwin and Ecology in Novels by Jack London and Barbara Kingsolver" begins the work on Darwinism in *Prodigal Summer*, but I believe that future publications regarding this topic would be valuable to the conversation about the novel. *All Over Creation* does not embody the ideas of evolution as explicitly, but the concept of biodiversity stems from the topic of the strength of genetic diversity through evolution. I believe that this can be unpacked in future work.

In addition to the ecological science of the novels, I consider the feminist goals of each to be vital to their rhetorical messages. Though I begin an exploration of this in my chapter on motherhood, maternity, and infertility, there is room for further work to be done regarding the relationships and power structures between women and men within *Prodigal Summer* and *All Over Creation*. It is noteworthy that feminism works to create equity between genders, and I believe that more attention should be paid to the men of these stories and the way that their masculinity is reflected in the conversation surrounding ecofeminism. While some characters, such as *All Over Creation*'s Eliot and

Prodigal Summer's Eddie, represent toxic masculinity that halts progress toward equity and environmental sustainability, others such as Lloyd and Will's open-minded attitudes reflect a masculinity that is open to progress for women and the environment.

The work of Kingsolver and Ozeki within *Prodigal Summer* and *All Over Creation* is not only relevant but vitally important to the current sociopolitical attitude towards feminism and environmentalism. As ecofeminist scholars continue to seek a fair and equitable society among genders, races, and the environment, they should consider the narratives within *Prodigal Summer* and *All Over Creation* to empower their arguments. The range of rhetorical styles employed by Kingsolver and Ozeki represents the many strategies that real-life readers can learn from and utilize in their own advocacy for feminism and environmentalism. These works embody the pillars of ecofeminism and adds considerable value to the progress toward a socially responsible readership.

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