

THESIS

SUSTAINING NATURE, TRANSFORMING SOCIETY: RETHINKING SUSTAINABILITY
THROUGH RADICAL ECOPOLITICAL THOUGHT

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ABSTRACT

SUSTAINING NATURE, TRANSFORMING SOCIETY: RETHINKING SUSTAINABILITY THROUGH RADICAL ECOPOLITICAL THOUGHT

Sustainability represents a central idea in environmental political thought that provides a conceptual framework for constructing, discussing, and judging the viability of solutions for ecological degradation. Despite the recent predilection for perceiving sustainability as a powerful discursive construct capable of capturing the pursuit of economic prosperity, societal well-being, and ecological vitality within a unified political project, the definition of the notion remains ambiguous and contested throughout the literature. This ambiguity has resulted in concern over the viability of the sustainability concept to induce beneficial transformation and has led to suggestions that the notion is rapidly losing its meaning as a coherent program for environmentally and socially positive change.

In response to the ambiguity present in discussions of sustainability and the resulting concern over the diminishing meaning and significance of the term, this thesis constructs a typological analysis of sustainability. It divides the concept into three analytic categories—sustainability as a goal, as a human right, and as a need—in order to critically evaluate the multifaceted articulations of the term within reformist environmental discourse. Identifying the common objectives of the typological categories, as well as the clear differences between the three reformist discourses regarding the impetus behind sustainability and the agents and processes involved in the transition to a sustainable condition, this thesis critically challenges reformist conceptualizations of sustainability. It then explores three radical ecopolitical discourses—ecocentrism, social ecology, and ecofeminism—in order to examine their potential

to re-imagine sustainability and establish coherent conceptual boundaries for its realization. The final chapter of this thesis evaluates the feasibility of the radical ecopolitical paradigms by discussing potential openings for each position to enter into the existing conversation regarding human-nature interactions and to fundamentally restructure the objectives of sustainability, as well as the agents and processes involved in its pursuit.

TABLE OF CONTENTS

ABSTRACT.....	ii
CHAPTER 1-INTRODUCTION: CONCEPTUALIZING SUSTAINABILITY.....	1
CHAPTER 2-LOCATING SUSTAINABILITY WITHIN ENVIRONMENTAL POLITICAL THOUGHT: A TYPOLOGICAL ANALYSIS.....	13
Introduction: Identifying Core Meanings of an Ambiguous Concept.....	13
Sustainability as a Goal.....	20
Sustainability as a Right.....	24
Sustainability as a Need.....	27
Concluding Thoughts: Sustainability in Reformist Environmental Thought.....	31
CHAPTER 3-RETHINKING HUMANITY’S PLACE IN NATURE: TOWARDS ECOCENTRIC SUSTAINABILITY.....	35
Main Tenets of Ecocentrism and a Critique of Sustainability within Reform Environmentalism.....	36
Ecocentrism’s Critique of the Anthropocentric Ethic in Sustainability Discourse.....	37
Role of the Self in an Ecocentric Approach to Sustainability.....	41
Struggle and Resistance in Ecocentric Sustainability.....	45
Reconstructing Sustainability: The Imaginative Potential of Ecocentrism.....	48
Impetus behind the Transition to Sustainability.....	49
Objectives of Ecocentric Sustainability.....	51
Agents and Processes.....	56
CHAPTER 4-RECONSTRUCTING SOCIETIES, REGENERATING ECOLOGIES: TOWARDS SOCIAL ECOLOGICAL SUSTAINABILITY.....	64

Main Tenets of Social Ecology and a Critique of Sustainability within Reform	
Environmentalism.....	66
The Origin of Ecological Degradation in Social Arrangements.....	67
First and Second Nature: Society’s Capacity to Transform the Natural World.....	71
Social Ecology’s View of the Ecosystem.....	76
Reimagining Sustainability: Sustaining Nature by Reconstructing Societies.....	80
Impetus behind Social Ecological Sustainability.....	80
Objectives of Social Ecological Sustainability.....	83
Agents and Processes.....	87
CHAPTER 5-COMBINING THEORY AND LIVED EXPERIENCE: TOWARDS	
ECOFEMINIST SUSTAINABILITY.....97	
Main Tenets of Ecofeminism and a Critique of Sustainability within Reform	
Environmentalism.....	100
Gender and Nature.....	101
Logic of Domination as a Logic of Exploitation.....	105
Building Movements: The Transformative Capacity of Ecofeminism.....	108
Re-imagining Sustainability: An Inclusive Project for Transformation.....	112
Impetus behind Ecofeminist Sustainability.....	113
Objectives of Ecofeminist Sustainability.....	115
Agents and Processes.....	119
CHAPTER 6-CONCLUDING THOUGHTS: CONSTRUCTING THE BOUNDARIES OF THE	
SUSTAINABILITY CONCEPT.....126	
Rethinking Sustainability.....	126

Evaluating Ecocentrism.....	128
Evaluating Social Ecology.....	129
Evaluating Ecofeminism.....	132
Political Openings for Ecocentrism: The Precautionary Approach.....	133
Political Openings for Social Ecology: Radicalizing Rights.....	135
Political Openings for Ecofeminism: A Framework for Movements.....	137
Concluding Thoughts and Avenues for Future Research.....	138
REFERENCES.....	140

Chapter One

Introduction: Conceptualizing Sustainability

Sustainability represents a prevailing concept in contemporary ecological thought that has been posed as an optimal, politically feasible solution to environmental degradation. The concept is articulated as an effective mechanism for uniting the economy, society, and the environment under a common political project that seeks to mutually benefit the three interlocking systems. However, due to a paucity of systematic analysis of sustainability and a lack of agreement on the term's meaning and appropriate implementation, sustainability is most often defined retroactively through practice (Kates et. al. 2005). Additionally, despite the general consensus over sustainability's usefulness as a program for balancing economic prosperity, societal well-being, and ecological vitality within a single conceptual framework, sustainability holds a multiplicity of meanings throughout the literature.

The concept of sustainability within conventional environmentalism is articulated as a malleable construct with the potential to create mutually beneficial interactivity between society, the economy, and the natural world. Various programs for achieving sustainability have been implemented into existing production practices, resource extraction techniques, and consumption activity, while remaining ambiguously defined and uncritically accepted as the ideal mechanisms for inducing ecologically-oriented transformation. Existing literature and practice severely lacks a critical, reflexive engagement with the objectives of the notion—failing to question exactly what is being sustained in the widespread pursuit of sustainability (McLaughlin 1995, 89)—as well as with the agents and processes necessary to achieve a sustainable condition.

The definitional ambiguity regarding the precise meaning and appropriate implementation of sustainability does not necessarily imply an ineffective framework for solving ecological problems, however. Instead, the malleability of the concept can open up the potential

for deliberative contestation regarding the ideal implementation of sustainability. The lack of discursive congealment around a single agreed-upon definition can allow for fluidity and variety in the construction of meaning, can foster ongoing debate regarding the pursuit of environmentally and socially equitable human operations, and can encourage a flexible form of sustainability that differs depending upon the community or ecosystem in which it is practiced. Despite the potential of sustainability to construct a coherent framework for environmental political action, the lack of clear definitions coupled with a paucity of critical evaluations of the objectives, processes, and agents involved in the realization of the envisioned sustainable condition results in a sustainability concept that lacks substance and the possibility of invoking widespread change.

Sustainability, in this sense, becomes an all-encompassing and, therefore, meaningless rhetorical category that describes all programs for economic, societal, or environmental benefit as manifestations of the idea (Norton 1992). While sustainability can viably exist as an ambiguous construct with multiple meanings and a process of continuous contestation, coherent thinking and practice requires critical engagement with the various descriptions and practices of the concept. It also necessitates the construction of theoretical boundaries to determine the appropriate components of sustainability and provide a standard for deciding what constitutes unsustainable practice. This can be achieved through an examination of the objectives of the paradigm, the impetus behind the pursuit of sustainability, and the mechanisms and agents involved in the transition.

In order to critically explore the articulated meanings of sustainability, my thesis lays out a series of theoretical arguments that examine the various conceptualizations of sustainability within existing environmental political thought, while also attempting to fundamentally rethink

the concept within different radical ecological frameworks. First, following Connelly's (2007) theoretical analysis of plural understandings of sustainability, this thesis highlights the presence of shared core meanings of sustainability despite significant ambiguity, suggesting that the various articulations all promote the objective of sustaining perpetual human development. Therefore, Chapter Two begins by reviewing the main components of the term and exploring the shared interpretations of the idea. Second, a typological analysis of sustainability discourse is pursued to systematically organize diverse positions regarding the meaning and practice of sustainability into concise categories that can illuminate both the variations and similarities among the different conceptualizations. Finally, after exploring existing discussions of sustainability, this thesis analyzes the conceptual flaws in reform-oriented environmental thought and seeks to redefine sustainability within three radical paradigms in the following chapters.

In order to systematically categorize and explore the "plural understandings" (Dobson 1996, 403) of sustainability, Chapter Two is devoted to identifying three predominant streams of thought regarding the meaning of sustainability and subsequently constructing an analytic typology to capture the basic tenets of each position. This research argues that sustainability has been classified as a goal, as a fundamental human right, and as a need throughout environmental politics literature with the different classifications resulting in variation among the agents and processes involved and the impetus driving the proposed transition. This typology is constructed in response to Dobson's (1996) suggestions for adequately determining the meaning and conceptual boundaries of sustainability in contemporary environmental politics. Dobson argues, first of all, that sustainability represents an inherently ambiguous concept that resists a single, agreed-upon definition. Attempts at creating single definitions unnecessarily limit the scope of sustainability and ignore the complexity of its multi-faceted meaning. Secondly, Dobson

suggests that a typological analysis represents the ideal mechanism for exploring the inexorably plural conceptions of sustainability without artificially confining the idea into a single definition that oversimplifies its meaning. The typological approach necessitates that the “components of the concept under study be made explicit” (Dobson 1996, 402) in order to facilitate systematic understanding and encourage critical comparison of the various conceptualizations of sustainability.

With these guidelines in mind, this thesis organizes theories of sustainability within three categories—sustainability as a goal, sustainability as a human right, and sustainability as a need. In an attempt to make the boundaries of the categories concise and identify the similarities and differences between the three frameworks, I discuss the impetus behind the transition to a sustainable society, the objectives of sustainability (i.e. what is being sustained), and the agents and processes involved in achieving the envisioned condition. The explicit articulation of these components allows for a comparison and systematic evaluation of the different conceptualizations of sustainability, while avoiding confining the term into a strict definitional category that cannot capture the ambiguity and plural understandings of the idea.

This thesis argues that the three categories within reform environmental thinking have been unable to adequately address the ecological component of sustainability, instead prioritizing either the economic aspect of the term by touting the potential profitability of industrial efficiency or the societal implications of resource concerns by linking environmental integrity with social well-being. While definitional ambiguity does not necessarily diminish the meaning of an idea, in the case of sustainability, the concept has lacked both an established definition and a consistent theoretical framework for analyzing its complexities. This lack of a coherent framework has diluted the concept’s capacity to inform an ecological program for

transformation, instead relegating sustainability to a focus on greening techniques for profitability and development rather than for the overall integrity of human and natural systems. In this sense, sustainability has become both “everything and nothing” (Connelly 2007, 260) in contemporary environmental thought, representing a discursively empty construct that attempts to describe all efforts to preserve the environment, increase efficiency, or promote social justice as tangible manifestations of sustainability. A typological analysis can assist in illuminating the complexity and tension present in discussions of sustainability and can begin to construct theoretical boundaries for the concept. These boundaries, in turn, can prevent all efforts to promote efficiency, increase equity, or preserve natural resources from being perceived as genuine instances of sustainability.

Thus, Chapter Two lays out the typology and describes the basic tenets of each category. Beginning with sustainability as a goal, this thesis identifies bodies of literature, such as ecological modernization theory, that posit industrial efficiency and a detachment of human well-being from ecological limits as the primary objective of the concept. Scholars in this category perceive sustainability as a goal, identifying the notion as a beneficial pursuit for industry to achieve profitability and simultaneously benefit the environment by reducing waste and limiting egregious resource consumption. In this sense, sustainability does not represent a vital need for continued human survival or a right that promotes widespread well-being through environmental policies, but is instead perceived as a valuable endeavor for industry to pursue.

In contrast, the needs-based category articulates sustainability as a basic necessity given the extent of environmental degradation, the rise of population levels beyond the biophysical capacity of the Earth, and the anti-ecological practices characterizing modern society. This category is labeled the needs approach, since it views sustainability as an unavoidable necessity

for preserving the survival and well-being of humanity. In contrast, the rights-based discourse identifies an emerging literature in environmental politics that perceives sustainability and sustainable development as fundamental human rights necessary to construct a system in which all individuals have equal access to the environmental resources required for the full realization of potentialities. Chapter Two outlines each of these categories, discussing the different conceptions of sustainability and highlighting the similar objectives advocated by all three paradigms despite significant differences in other aspects of the idea.

After outlining the predominant categories of sustainability within reform environmentalism, this thesis seeks to rethink the term within radical ecological positions. While the reformist perspective has forwarded multiple conceptualizations of sustainability, it does not provide an adequate framework to pursue the concept. Existing environmental political thought significantly prioritizes the economic and social aspects of the sustainability paradigm. Even though balancing the three systems—economy, society, and environment—represents the objective of sustainability in principle, a review of the literature suggests that ecological concerns are often subsumed under a preoccupation with societal or economic concerns (particularly development). Nature, therefore, is commonly viewed in instrumental terms, perceived as a resource for use or as a biophysically limited system that constrains human behavior. In this sense, the full meaning of sustainability as an ecopolitical program with the potential to alter inequitable, dominating, and anti-ecological social and economic relations and to facilitate ecological regeneration has not been thoroughly addressed in existing discussions. This gap, however, can be filled by exploring the potential of radical paradigms to fundamentally rethink the idea. Radical ecopolitical thought perceives nature beyond its instrumental worth, critically examines the links between the structure of society and ecological integrity, and

proposes concrete solutions for simultaneously addressing issues of social justice and environmental degradation.

This theoretical analysis distinguishes between reform environmentalism and radical ecopolitical thought by utilizing the typical definitions of the two categories forwarded in the literature as the foundation for rethinking sustainability. According to Adams (2005), reform environmental thought promotes incremental transformations occurring within existing social, political, and economic processes with the purpose of minimizing environmental degradation. The position additionally perceives the natural world as ontologically separate from society, posing solutions to ecological destruction that primarily entail increased human control over natural processes. Moreover, the reform tradition—in its attempts to construct a politically viable conceptualization of sustainability that balances economic, societal, and environmental vitality—tends to prioritize the economic and social aspects of the idea by positing solutions that emphasize the profitability of increased efficiency and the social justice components involved in environmental decision-making.

Radical ecopolitical philosophies, on the other hand, suggest that meaningful change and efforts to regenerate the environment must occur outside of current societal operations. The philosophies argue for transformative action that dismantles existing institutions, value systems, and ideologies in order to rebuild societies along ecological lines. The radical viewpoint rejects the detachment of humanity from the natural realm, instead suggesting that human well-being and ecological integrity remain interdependent and mutually reinforcing (Adams 1995, 95). As a whole, radical ecopolitical thought challenges the constraints of existing social systems, patterns of beliefs, and established values, while also forwarding a view of humanity and nature as inseparable and constantly interacting. Given this differentiation between reformism and

radicalism in the academic literature, my thesis will argue that sustainability articulated within reform environmentalism upholds the social structures, power relations, institutions, and value systems that perpetuate widespread anti-ecological behavior. It will subsequently explore the potential of radical ecopolitical positions to reimagine sustainability and decouple the concept from a reformist framework that emphasizes incremental changes within existing social structures and values.

Radical ecological paradigms that focus on power dynamics, institutions, and embedded ideologies that perpetuate ecological degradation and resist deep transformation can play a critical role in reconceptualizing sustainability. My thesis will focus specifically on three prominent radical ecopolitical discourses—ecocentrism, social ecology, and ecofeminism—and will analyze their theoretical capacity for rethinking the impetus behind the pursuit of sustainability, the objectives of the concept, and the agents and processes required in the transition to a sustainable condition. Chapter Three discusses ecocentric critiques of reformist environmental thought and examines the position’s potential for re-envisioning sustainability. Chapter Four explores the main principles of social ecology, emphasizing the theory’s predilection for dismantling and reconstructing institutions, societal structures, and power relations contributing to ecological degradation and social inequity. Chapter Five introduces ecofeminist theory and discusses the paradigm’s capacity for redefining sustainability as a mechanism towards a non-dominating, non-exploitative relationship between humanity and the natural world.

Specifically, Chapter Three outlines the main principles of ecocentric theory and evaluates its potential to redefine the boundaries of sustainability by critically engaging with anti-ecological, anthropocentric human-nature interactions. I begin with an exploration of

ecocentrism because of the theory's broad scope and expansive prescriptions for eliminating environmental degradation, evidenced by its central focus on the deep ontological and axiological assumptions underpinning the human-nature relationship. Ecocentrism represents the broadest critique of reform environmentalism due to its prescriptions for the rejection of the current dominant worldview that perpetuates anti-ecological behavior and the subsequent construction of fundamentally new personal connections with the natural world. The position poses significant challenges to reformist conceptions of sustainability by rejecting anthropocentric interactions and by proposing a complete reconstruction of the relationship between the self and the natural world based on an axiological system that recognizes the intrinsic worth of both humans and nature. The chapter explores ecocentrism's ability to articulate a coherent sustainability program capable of dismantling the dominant ethical framework guiding human-nature relations and instead prescribing the adoption of an alternative philosophy that takes into consideration an expanded notion of worth.

Despite ecocentrism's capacity for critiquing the role of human-nature interactions in ecological degradation and prescribing deep changes in personal philosophy and culture to mend the detachment of modern society from nature, the broad scope of the position does not allow for a coherent discussion of power relations and anti-ecological structural forces. With this in mind, social ecology is examined in Chapter Four as a response to ecocentrism. An evaluation of social ecology follows logically from the exploration of ecocentrism, since the discourse presents a more narrow conception of transformation that focuses predominantly on institutional change and the elimination of hierarchical, unjust, and environmentally degrading societal arrangements.

Lastly, ecofeminism will be discussed in Chapter Five, as it strikes a balance between the personal/cultural transformation advocated by ecocentrism and the structural/institutional

changes required by Bookchin's social ecological perspective. Ecofeminism represents a conceptually rich theoretical orientation that posits domination—particularly gender domination—as a lens through which to examine and solve environmental problems. Viewing the oppression of marginalized groups and ecological degradation as linked, ecofeminist theory forwards definitive prescriptions for the transformation of the ontological and axiological underpinnings of human-nature interactions, as well as promoting grassroots movements capable of inducing ecologically beneficial transformation.

The final chapter discusses potential political openings for the three radical paradigms discussed above to enter into existing environmental political dialogue, engage with reform environmentalism to critique its conception of sustainability, and forward a unique interpretation of sustainability that transcends current definitions. Given the fluidity and contestation of sustainability, the final chapter explores various avenues by which radical ecopolitical thought can influence the meaning and practice of the concept. The concluding chapter begins by exploring the weaknesses of each of the three radical ecopolitical theories, specifically focusing on their potential to re-conceptualize sustainability, place coherent discursive boundaries around the idea, and initiate meaningful political action capable of imagining sustainable societies and acting towards the envisioned condition.

In reference to ecocentrism, the concluding chapter argues that the theory leaves out a crucial discussion of power and structure in its vision for sustainability. Addressing the necessity of inducing broad transformations in the human-nature relationship in order to induce widespread, ecologically-oriented societal change, ecocentrism prioritizes the deep ontological transformations of the self, the abandonment of modern culture that celebrates anthropocentric values, and a fundamental rethinking of human communities and their interactions with nature.

However, the theory focuses explicitly on issues of personal philosophy and cultural conceptions of nature without analyzing the power arrangements or structural components of society that partially constitute anti-ecological axiologies and behavior.

Social ecology fills the gap left open within ecocentric thought by critically evaluating hierarchical social arrangements, institutions that embed inequitable power relations and perpetuate domination, and structural forces that condition individuals into a system of social and ecological exploitation. Illuminating the innate connections between fractured societal relations and pervasive environmental degradation, social ecology proposes a radical vision for institutional transformation that moves beyond a focus on culture and deals with the structural foundations of unsustainable activity. However, in terms of the capacity to articulate a coherent framework for sustainability, social ecology scholars have increasingly focused on the philosophical aspects of the paradigm at the expense of proposing concrete, tangible solutions for political transformation.

Ecofeminism—the final theory discussed in the concluding section—strikes a balance between the personal philosophical aspects of ecocentrism and the institutional focus of social ecology by emphasizing structural, cultural, linguistic, and institutional linkages between societal domination and ecological exploitation. Viewing the two concerns as inextricably interconnected and mutually constitutive, ecofeminist thought focuses dually on social vitality (including economic prosperity, social justice, and equitable power relations) and ecological integrity. Further, ecofeminist theory is unique compared to ecocentrism and social ecology in its conceptualization of the agents and processes required to achieve sustainability. It prescribes grassroots mobilization and social movements as the primary mechanism for eliminating the structural causes of domination, critiquing the ideological/discursive aspects of oppression, and

locating conventionally exploited groups—particularly women and the natural world—within the political sphere. In this sense ecofeminism, provides concrete mechanisms for achieving sustainability that encapsulate the ontological and axiological aspects of exploitation expressed by ecocentrism, as well as the institutional forces and power arrangements emphasized by social ecology, into a common theoretical framework.

Finally, the concluding chapter briefly explores potential openings for the radical paradigms to influence ecopolitical thought, policymaking, and environmental movements. Despite the theoretical shortcomings identified above, each position holds the unique potential to alter existing articulations of sustainability and construct definitive conceptual boundaries around the idea. I suggest that ecocentrism can find potential openings in emerging discussions of the precautionary principle in environmental decision-making practices—a principle that challenges the superiority and axiological priority granted to human well-being and development. The final chapter also argues that social ecology can create linkages with the existing rights-based conceptualization of sustainability in order to further radicalize the notion of human rights and social justice, expanding the scope of the concepts to include an explicit concern with the interconnectedness between ecological degradation and unjust power relations. Lastly, ecofeminist theory can embrace and inform political movements that seek to overcome the logic of domination underlying social injustice and environmental exploitation in both its ideological and structural forms.

Chapter Two

Locating Sustainability within Environmental Political Thought: A Typological Analysis

Introduction: Identifying Core Meanings of an Ambiguous Concept

Sustainability has garnered widespread acceptance in environmental political theory as an optimal conceptual and practical mechanism for encouraging mutually beneficial interactivity between three distinct systems—the economy, society, and the environment (Connelly and Smith 2003, 6; Dryzek 2005, 155-156). Sustainability holds a central position within environmental political thought, articulated as a socially, politically, and economically viable project for the amelioration of pervasive ecological degradation and the accompanying societal consequences. Despite the widespread articulation of sustainability as the optimal paradigm for restructuring human systems, the environmental politics literature lacks a critical engagement with the various manifestations of the concept and provides a multiplicity of vague definitions intended to function as prescriptions for political change (Clark 1998, 226). Due to the definitional ambiguity of sustainability, a systematic analysis of the concept will be presented through the construction of a typology that identifies three main streams of thought guiding the discussion of sustainability throughout reformist environmental discourse.

My thesis will explore the foundational tenets of sustainability and will situate the notion within the broader body of environmental political thought through the construction of a typology, which outlines three predominant modes of thinking—sustainability as a goal, as a human right, and as a need.¹ Each position will be explored separately with emphasis directed towards the objectives of sustainability identified by each perspective, the agents and process required to achieve a sustainable condition, and the impetus behind advocating for ecologically-oriented transformation. The typology constructs a framework for critically evaluating the

¹ See table below for a summary of the typology.

conceptualization of sustainability within the reformist environmental tradition and for systematically categorizing the relevant environmental politics literature. It additionally lays the groundwork for analyzing the capacity of radical ecological theories—specifically ecocentrism, social ecology, and ecofeminism—to reconstruct the discursive boundaries of the sustainability concept beyond the scope of existing literature.

Sustainability, although advocated throughout a vast body of environmental politics literature as the optimal process to manage human-induced ecological degradation, represents an ambiguous concept that embodies a vast array of meanings depending on the particular discourse articulating the idea. While outlining the premises of reformist environmental discourses in this chapter, sustainability and sustainable development will be used interchangeably based on Adger and Jordan's (2009) suggestion that the two concepts represent synonymous ideas, since both terms are defined as attempts to maintain the development of human systems within the boundaries of the natural world (Adger and Jordan 2009, 4). As a whole, the concepts deal with the capacity of humanity to attain continuous advancement within a system in which "growth [is] redesigned to respect ecological parameters" (Hunold and Dryzek 2005, 82). The discursive synonymy of sustainability and sustainable development will later be challenged through the discussions of radical ecopolitical theories.

Despite the definitional ambiguity present in discussions of sustainability and prescriptions for its attainment throughout the literature, a systematic exploration of the various articulations of the concept can extract core meanings of the term as it is discussed within the reformist tradition. Connelly (2007) describes sustainability as inevitably vague and contested—a discursive condition that makes the term resistant to theoretical and practical consensus over the appropriate objectives, agents, and processes involved in the transition to a sustainable

society (Connelly 2007, 261). This lack of definitive agreement over the foundational meaning of the term renders the ecopolitical project susceptible to cooptation by anti-ecological interests and has made political progress towards a coherent vision of sustainability extremely problematic and insufficient (Connelly, 2007 261-262). However, this conceptual ambiguity, while partly attributable to the inherent contestability of the sustainability concept, can be partially accommodated through a recognition and discussion of the multiple presentations of sustainability within environmental thought and the “widely accepted but vague core meanings” (Connelly 2007, 262) that allow the idea to be articulated in diverse, often competing, ways.

A typological analysis of sustainability, therefore, represents a useful method for adequately capturing the necessarily “plural understandings” (Dobson 1996, 403) of the term. Dobson (1996), along with Connelly (2007), highlights the construction of analytic typologies as a beneficial method for understanding sustainability, since such typologies can systematically examine existing categories of definitions while simultaneously opening up the theoretical space to imagine and evaluate alternative conceptualizations of the idea (Dobson 1996, 402-404). Following Connelly’s (2007) depiction of the inherent ambiguity and contestation involved in constructing a sustainability paradigm, in this chapter I will utilize a three-fold typological analysis to categorize the diverse definitions of sustainability and organize the various meanings into a coherent framework. The construction of a typology with distinct conceptual categories can assist in attaining definitional coherence of sustainability as it is expressed throughout existing literature. It can additionally provide a framework for critical engagement with reformist environmental political discourses that opens up the theoretical space for consideration of radical re-conceptualizations of sustainability.

Several foundational shared meanings of sustainability can be identified throughout existing literature despite disagreement over the exact definition and appropriate implementation of the concept. For instance, the ultimate objective of sustainability is generally defined as the process of maintaining perpetual, long-term human development without undermining the natural conditions that provide the foundation for human existence and well-being (Adger and Jordan 2009, 4). In this sense, all objectives of sustainability articulated within reformist environmental thought revolve around sustaining both the natural and social capacity required for continual human development. With this shared objective in mind, a variety of core themes can be extracted from the environmental politics literature that appear within the three discourses—sustainability as a goal, sustainability as a human right, and sustainability as a need.

In general, the sustainability paradigm attempts to combine human systems and the natural world into a mutually beneficial relationship in which the integrity of each dimension can be maintained (Dryzek 2005, 146). Sustainability thus emphasizes a tripartite focus on society, the economy, and the environment as interacting forces, since the purpose of sustainability in its ideal form revolves around constructing a mode of development capable of enhancing societal and economic well-being, preserving natural resources, and limiting human-induced environmental harm. As a whole, the concept seeks to attain a “restoration of all living systems” (Milani 2000, xv) and revolves around the primary objective of preserving and regenerating environmental resources coupled with the goal of eliminating underdevelopment and pervasive inequalities experienced by human communities for current and future generations (Dryzek 2005, 145; Kates et. al. 2005, 11).

Another commonly articulated core meaning that appears throughout the three positions centers on the construction of a political project that seeks to make adjustments to existing

economic, social, and institutional arrangements in order to allow for the long-term viability of human systems operating within the broader confines of the natural world. Thus, streams of thought in the reform environmentalism tradition perceive modern ecological crises as global problems and define human development as a universal process (Kates et. al. 2005, 10). The sustainability concept within the reformist environmental politics literature attempts to restructure human activity within the confines of scientifically known and theoretically projected natural limits. Altering societal activity represents a necessary undertaking, as evidenced by sustainability's foundational purpose of constructing an unrestricted space for human systems to flourish either by transcending environmental limits through technology and ingenuity or by recognizing definitive ecological constraints and adjusting the scale of anthropogenic systems to fit within the confines of the natural world.

Due to the significant definitional ambiguity related to appropriate mechanisms and processes to induce societal transformation, sustainability prescriptions can be classified on a spectrum ranging from weak to strong conceptualizations (Connelly 2007, 260). Weak manifestations of the concept focus on establishing economic incentives to encourage innovation and the adoption of technical solutions, making industry increasingly efficient and compatible with maintaining environmental vitality (Hjerpe and Linner 2008, 236). Strong forms of sustainability, on the other hand, necessitate deeper structural change and a restructuring of existing human systems with the purpose of better aligning anthropogenic institutions with the limited capacity of the broader ecosystem. This form grants equal priority, in principle, to social and natural systems (Nilsen 2010, 457). Therefore, a fundamental tenet of sustainability operating within reformist environmental discourse centers on the granting of equal political consideration to human systems and the natural world (Connelly 2007, 263-264; Dryzek 2005,

153). Sustainability as articulated throughout the reformist tradition focuses on constructing human-nature interactions that allow for perpetual societal development (Adger and Jordan 2009, 4) in a way that does not significantly degrade the broader environment and, consequentially, inhibit the ability of future generations to flourish (Kates et. al. 2005, 10).

The literature displays widespread agreement over the objectives of maintaining continued human development and reforming anthropogenic practices to better conform with environmental limits—aspirations that provide evidence for the reformist mindset currently guiding discussions of sustainability. However, the agents involved in inducing sustainable practices coupled with the exact processes required for the transition towards a sustainable society remain highly contested within the various positions. The widespread acceptance of sustainability as a beneficial normative undertaking has occurred without a corresponding acceptance of a set of definitive meanings and discursive boundaries guiding the transition towards the imagined sustainable condition. This ambiguity has resulted in diverse accounts of the conditions fueling the transition towards a sustainable society and the appropriate mechanisms required for its attainment. A systematic, critical evaluation of the dominant streams of thought articulating sustainability as a desirable—or, in some cases, necessary—future condition will assist in exploring the diversity of manifestations shaping the sustainability concept and will establish the groundwork for comparing sustainability within reformist environmental thought with the potentiality of radical ecological discourses.

Despite the shared meanings of sustainability (particularly the objective of sustaining the natural, economic, and social conditions necessary for human development), three distinct positions associated with these common assumptions can be identified—sustainability as a goal, sustainability as a fundamental human right, and sustainability as a need. The varying positions

structure the definition of the term, shape the objectives of a sustainable society, and prescribe the specific set of agents and processes involved in the attainment of the envisioned relationship between humanity and nature. While each of the analytic categories of the typology discussed below represent diverse perspectives regarding the conceptualization of sustainability, as noted above, the three discourses operate strictly within a reformist framework. This is evidenced by the primary focus on making incremental adjustments to existing anthropogenic practices in order to allow current human activity and modes of development to perpetually function within the bounds of overarching biophysical limits. As suggested earlier, the three discourses share a general agreement of the objectives and core meanings of sustainability, but display significant differences regarding the appropriate agents and processes required to attain the objective, as well as the impetus and reasoning behind the pursuit of a sustainable human condition.

Table 1: Typological Analysis of Sustainability

	Impetus for Transition towards Sustainability	Agents	Processes	Objectives
Sustainability as a Goal	Mutually beneficial opportunity to increase industrial efficiency and reduce ecological harm, recognition that current practices are ecologically unsustainable in the long-term	Government, industry, experts	Increase efficiency in production in order to detach human activity from ecological constraints	Include ecological concerns within existing praxis, reform human practices through efficiency and waste reduction to allow for perpetual human development
Sustainability as a Right	Interconnected existence of ecological	Individuals as the holders of rights, transnational	Address unequal distribution of environmental	Transform social systems to ensure

	degradation, social inequalities caused from unjust distributive ethics, and a generalized lack of human well-being	governance bodies, non-governmental entities, states	benefits and harms, facilitate freedom by removing social and ecological barriers to the full realization of potentialities	equity within a finite ecology, allow for the flourishing of individual capacity, create conditions for continued human development
Sustainability as a Need	Impending ecological crises due to the expansion of human systems beyond immutable biophysical limits that threaten ecosystem vitality and human survival globally.	Experts/environmental scientists, the state, individuals as contributors to ecological degradation	Recognize the incompatibility between human activity/population growth and finite natural limits; deliberately seek sustainable solutions in order to make the inevitable transition to sustainability less difficult.	Align human systems with definitive biophysical limits, control population to ensure ecologically benign long-term human development

Sustainability as a Goal

Environmental thought that views sustainability as a goal and defines incremental reforms to industrial processes as the primary mechanisms for attaining sustainability represents the most reform-oriented manifestation of the concept within the proposed typology. This is evidenced by the literature’s predilection for perceiving the goal of sustainability as being primarily isolated to industrialized states with the economic, technological, and political capacity to reorient industrial productive and consumptive practices. The paradigm centers on increasing the efficiency of human operations and minimizing waste with the ultimate objective of limiting the environmental effects of industry and development in order to free anthropogenic activity

from the confines of a finite ecosystem (Schlosberg et. al 2008, 254-255). The main objective revolves around the construction of efficient/sustainable practices through the employment of advanced technologies (Mol et. al 2009, 20), separating human activity from the constraints of natural processes and resulting in an increased standard of well-being.

The goal-oriented category does not problematize the notion of economic and population growth as potentially significant challenges to ecological integrity, but rather prescribes incremental, reformist changes to human practices. Increases in efficiency and an elimination of waste that contributes to environmental degradation would allow for the continued well-being of human communities and would meet the objectives of resource preservation without necessitating the critical evaluation of existing anthropogenic systems and development trajectories (Mol 2001, 56; Schlosberg et. al 2008, 256). Thus, sustainability is perceived as a valuable goal due to its dual economic and environmental benefits through a recognition that greening industry through efficiency can lead concomitantly to enhanced profitability and the limiting of excessive resource consumption.

This goal-based discourse captures the ecological modernization literature—a significant body of thought in environmental political theory—which perceives sustainability as an optimal method for realigning human systems to operate within a finite natural condition. Contrary to those positions viewing sustainability as a need and as a fundamental right, this orientation rejects an overt focus on impending ecological crises and threats to basic human survival. Embracing the ecological modernization perspective, the goal-based paradigm instead emphasizes the mutually beneficial potential of adopting ecologically neutral industrial practice for the well-being of both present and future generations, for environmental integrity, and for continued economic vitality (Dryzek 2005, 167). Moreover, the state and industry represent the

primary agents involved in the societal transition, since the process articulated to achieve sustainability revolves around the creation of incentives to encourage technological advancements in an ecological direction coupled with the elimination of unnecessary waste and pollution undertaken by individual industries (Christoff 1996, 477).

A goal orientation towards sustainability presents several theoretical inconsistencies that hinder this discourse's ability to adequately envision an altered, ecologically and socially viable human-nature relationship. Importantly, it overemphasizes the social and economic pillars of the tripartite conception of sustainability by perceiving the pursuit of efficiency as a mechanism driving socially-beneficial and profitable transformation of production practices. Failing to equally consider economic, societal, and environmental concerns renders the theory myopic in its vision of an alternative social arrangement. In this respect, the goal-oriented perspective remains unable to capture the central consideration granted to environmental factors by sustainability. The perspective instead views the transition towards sustainability as a process by which “various institutions and social actors attempt to integrate environmental concerns into their everyday functioning, development, and relationships with others, including their relation with the natural world” (Mol et. al. 2009, 4).

The discourse is fundamentally reformist, as evidenced by its focus on incrementally incorporating consideration of the natural world into existing practices, structures, and values. In this respect, it fails to problematize the potential tension between perpetual growth—both for economies and populations—and continued ecological integrity and instead describes sustainability as the process by which human systems can avoid natural limits through endless technological advancements that facilitate ever-increasing efficiency and the reduction of environmentally harmful waste. As a whole, the perspective advocates for the attainment of a

sustainable system of production that would allow anthropogenic activity to operate external to an immutably finite natural condition by developing closed-loop production processes.

Additionally, the goal position presents a limited view of the agents involved in the process towards a sustainable society. In particular, it isolates the potential for achieving sustainable practices to the industrialized world, since solutions of increased efficiency, the minimization of waste and harmful pollutants, and the overall management of productive activity to encourage environmentally benign growth requires a thriving industrial sector, a government capable of effectively implementing regulatory policy, and access to knowledge in order to design ecologically neutral production processes. The overt focus on advanced industrialized regions eliminates the potential of exploring universal solutions to environmental problems, revealing the narrow purview of the goal-oriented paradigm, since the discourse displays a conceptual incapacity to discuss large-scale transformations associated with pervasive global ecological degradation.

By underemphasizing the ecological dimension of sustainability, the goal-based discourse overlooks the possibility of impending environmental crises and implies that humans remain in ultimate control, possessing near-perfect knowledge of the ecosystem. In particular, humanity is perceived as inherently capable of changing industrial and societal practices to preserve—or even regenerate—degraded natural systems without altering the fundamental structure of social relations, questioning the long-term viability of human development and growth, or accepting the idea of finite natural limits insurmountable by human adaptability and ingenuity (Dryzek 2005, 167-168; Mol et. al 2009, 24). Incremental transformation of human processes represents the mode of transition leading towards a sustainable society—a notion that makes the idea of ecological limits meaningless, since humanity possesses the capability to transcend externally

imposed constraints on perpetual development through technology and adaptation. Consideration of insurmountable environmental limits is not discussed in this position, since the objectives of a goal-based sustainability entail the adjustment of human activity to transcend external constraints on society's potential for perpetual advancement and the construction of production systems capable of operating outside the boundaries of a finite ecology.

Sustainability as a Right

Viewing sustainability within the discourse of fundamental human rights addresses issues of equitable distribution—of the benefits of development and resource consumption on the one hand and of the accompanying negative environmental consequences, such as pollution and depletion, on the other. This orientation posits sustainability as a universal project requiring widespread participation with the purpose of balancing environmental, economic, and societal well-being within a broader system of equity. From this viewpoint, all individuals possess the equal right to thrive and reach their full potential unhindered by issues of ecological degradation, lack of resources vital for development, and exposure to contamination that affects well-being (Anand and Sen 1994). In this sense, the experience of environmental problems can be primarily attributed to an unequal social condition that hinders the ability of certain human populations to flourish, implying that the solution to ecological degradation rests in addressing social inequality and removing structural barriers inhibiting the equal flourishing of all individuals on a universal scale (Anand and Sen 1994).

A discussion of the transition to a sustainable society as a fundamental human right opens up the definitional space of the sustainability concept and allows for a discussion of the interrelations between achieving widespread social prosperity and sustaining long-term environmental vitality. Embedding the pursuit for sustainability within the well-established

discourse of fundamental human rights extends the conceptual boundaries of well-being to accommodate the interrelations of social systems and the natural world, while perceiving the transition to a sustainable society as embedded within a larger discussion of rights, ethics, and equity (Nicholson and Chong 2011). The rights-based discourse attempts to locate “inequities and injustice at the center” (Nicholson and Chong 2011, 126) of environmental political thought, transforming discussions of the potentiality of achieving sustainability into an ethical imperative (Nussbaum 1997, 273-274). This imperative necessitates alterations in human systems in order to recognize unequally distributed, finite natural resources and ensure a future condition in which the inequitable experience of ecological harm is minimized.

In this way, sustainability as a fundamental human right entails the restructuring of existing social practice to facilitate the realization of individual potentialities and to limit ecological degradation for present communities and future generations, combining intergenerational justice and “intragenerational equity” (Anand and Sen 1994) into a comprehensive political project. The rights paradigm constructs linkages between environmental integrity and overall well-being, suggesting that the ability for human communities to function and develop within a vital, sustainable natural system represents an immutable right for all individuals (Nicholson and Chong 2011, 126-128), both for present and future generations. This discourse emphasizes the necessary intersection between social justice regarding environmental concerns and the pursuit of sustainability.

Conceptions of environmental politics grounded in a paradigm of rights constructs a multi-faceted definition of sustainability as an ideal condition that combines ecological vitality, issues of social justice, and the ability of individuals to flourish unconstrained by societal inequalities and environmental limits into a unified political project (Barry 2006, 24).

Sustainability, based on this notion, becomes absorbed as a necessary component within the broader right to perpetual, equitable development in which individuals remain capable of exerting autonomy and transcending barriers—both environmental and social—to full self-realization and ultimate freedom (Nussbaum 1997, 286-288; Sen 1999, 37). Linkages between ecological sustainability and environmental justice are articulated through a discussion of the ability of human communities to function and flourish within a broader context of natural constraints that directs emphasis primarily to the social dimension of the sustainability concept. Ecological integrity within the paradigm simultaneously represents a means towards achieving greater social equity and ultimate freedom, as well as an end partially achieved through the reconstruction of society. Environmental vitality and human freedom are perceived as caught in a cyclical relationship in which facilitating thriving anthropogenic systems and regenerating the natural world cannot be discussed as distinct objectives.

The rights-based orientation towards sustainability possesses several conceptual weaknesses that inhibit the position's ability to adequately discuss and pursue its envisioned sustainable condition. The discourse critically challenges existing social relations, recognizes the interconnections between unequal societal arrangements and environmental degradation, and attempts to reorganize social operations with the purpose of creating stronger global equity. However, the paradigm advances a relatively static view of the natural world and fails to critically evaluate the human-nature relationship that partially contributes to both social inequities and pervasive ecological degradation. Sustainability, while articulated as intricately bound with human well-being, is discussed primarily as a mechanism for achieving anthropogenic prosperity with the process to achieve sustainability focusing foundationally on the social aspects of environmental degradation.

This narrow view of nature can be evidenced through the paradigm's primary objective of equalizing social relations and preserving an element of natural integrity capable of sustaining an equitable, flourishing human condition in the present, along with the continued development and realization of individual potentiality in the future (Anand and Sen 1994). Nature represents the encapsulating framework that can either facilitate perpetual human development given equitable social arrangements or can function as a source of constraint on developing full human potentiality through its limited resources and through the unequally distributed consequences of environmental degradation. Based on these assumptions, the rights discourse suggests that achieving sustainability requires changes in social relations in a way that would grant human communities the ability to develop without irreparably harming the broader ecology, particularly the natural resource base that supports continuous societal advancement. Emphasizing the social pillar of sustainability, failing to problematize the overall human-nature relationship, and ignoring a critical discussion of the power relationships leading to unjust distribution, limits the theory's ability to provide an adequate framework for pursuing sustainability.

Sustainability as a Need

The notion of sustainability as an unavoidable need can be identified throughout the branch of environmental politics literature that highlights the presence of definitive, although not necessarily knowable, biophysical limits that constrain human activity and development. This orientation suggests that environmental degradation, pervasive inequalities between human communities, and an overall loss of generalized well-being can be attributed to the incompatibility between the current scale of human systems and the finite physical capacity of the natural world. The stream of thought positing the attainment of sustainability as a need to ensure human survival and maintain ecological functionality articulates the inherent

interconnection between environmental degradation, egregiously scaled economies, and a lack of universal societal well-being as interacting problems requiring global solutions (Meadows et. al. 1972, 22-24).

The attainment of a sustainable society, within this position, represents a fundamental need due to the growing expansion of human systems—particularly economic activities and population growth—beyond the immutable limits of the natural condition in which they operate. According to this perspective, achieving a sustainable human practice that better aligns with the finite capacity of natural systems represents a fundamental necessity in order to maintain human well-being and continued development on a global scale without inducing significant ecological damage that threatens the vitality of the natural world and human survival. The primary objective of the discourse centers on transforming anthropogenic social and economic systems in order to allow for continued development within biophysical limits. The threat of reaching the natural world's immutable capacity would induce significant declines in population growth, production of resources, and the ability of industry to meet the basic needs of humanity (Meadows et. al. 1972, 23).

The reasoning behind the pursuit of ecological sustainability lies in the necessity of constructing human systems capable of creating a sense of equilibrium with the limited processes and finite boundaries of nature (Meadows et. al. 1972, 24). The urgent need to restructure societies represents a necessarily global experience, since advanced industrialized regions currently participate in unsustainable societal practices that hinder perpetual development and long-term environmental functionality, while the underdeveloped world suffers pervasive poverty, inequity, and resource degradation that threatens basic survival (UN World Commission on Environment and Development 1987, xi-xii). Based on the recognition of global

environmental problems, the needs-based discourse posits sustainability as a universal undertaking, since the appropriate solution to ecological degradation must match the existing scale of the problem.

The discussion of agents and processes involved in the attainment of universal sustainability remains firmly within the reformist tradition, embracing mechanisms to incrementally transform human communities through political measures that regulate industrial practices in order to operate within the confines of the overarching environmental capacity. The limits-to-growth literature, which serves as an example of the needs-based discourse, discusses the transition towards sustainability as the process of constructing a society that is “far-seeing enough, flexible enough, and wise enough not to undermine either its physical or its social systems of support” (Meadows et. al 1992, 209). The state and economic elites possess primary agential power to transition towards a sustainable condition in order to prevent humanity from reaching the planet’s capacity and destroying the conditions of its own existence, illustrating the notion that general populations “have no agency; they are only acted upon” (Dryzek 2005, 40). The universal project entails the construction of human systems that facilitate continued development in a manner that does not threaten the integrity of natural resource supplies and the environment as a whole. The impetus to transition towards a sustainable human condition stems from the direct linkages between environmental degradation and a reduced sense of well-being experienced by the global population—a suboptimal condition that holds the potential to eventually endanger the survival of the entire human species.

The notion of sustainability as a fundamental need for human survival and environmental vitality shares with the other two typological categories a common view of the relationship between humanity and nature. Humanity is perceived as situated within the natural world and as

constrained by immutable biophysical limits that restrain societal behavior and partially shape the construction of human systems. Positing ecological degradation as a global crisis that necessitates anthropogenic transformation in order to avoid environmental collapse and to maintain human survival, the needs-based discourse highlights the necessity of harnessing humanity's capacity to adapt to a changing ecosystem. Sustainable practice is pursued in order to avoid uncontrollable ecological catastrophe that threatens the overall well-being and long-term survivability of the human species. The position perceives either eventual collapse or the attainment of sustainability as inevitable outcomes of the disconnect between the scale of human activity and the confines of the natural world—a belief evidenced by the rejection of technical fixes as the sole solutions to impending ecological crises. Instead, the theory argues that advanced technology must occur in tandem with significant constraints on population growth and consumption (Meadows et. al. 1992, 198-200).

Sustainability cast as a fundamental need for human survival appears to represent the least reformist perspective of the three typological categories. This can be evidenced through the literature's emphasis on drastic processes for achieving sustainability—solutions such as deliberate measures to control population and encourage significant reductions in both production and consumption. However, even though the theory appears to propose radical solutions to ecological instability and the impending environmental crisis utilized as a backdrop in the literature, the needs-based paradigm articulates sustainability as ultimately inevitable. The discourse advocates intentional transformation towards an ecological society in order to avoid the inevitable collapse of ecosystems, environmentally-induced decreases in population, loss of vital resources, economic collapse, and an overall reduction in the scale of human systems.

Within the needs-based framework, this outcome is perceived as unavoidable given the incompatibility of current development trajectories and the finite boundaries of the ecosystem in which humanity operates. In this sense, the discourse remains fundamentally reactionary. Sustainability, cast in this perspective, represents a normative undertaking that should be deliberately embraced in order to make the inevitable transition to an appropriately scaled human condition more equitable, gradual (rather than induced by sudden ecological collapse), and less catastrophic for society and the environment. Since a significant rescaling of human activity represents an unavoidable process, the attainment of sustainability is a vital human need required to ensure long-term survival, allow for continued societal development, and facilitate an intentional transition and restructuring that “can be natural, evolutionary, and peaceful” (Meadows et. al. 1992, 192).

Concluding Thoughts: Sustainability in Reformist Environmental Thought

As a whole, the analytic typology systematically categorizes various environmental discourses, highlighting the core meanings of sustainability articulated within reformism. It outlines the general consensus regarding the objectives of the concept while also revealing key differences in the agents involved in promoting societal change. The focus of all three orientations centers on constructing social arrangements that either adjust the scale of human activity to make it more compatible with ecological boundaries or transcend these boundaries through increased efficiency. In this sense, reformist environmental thought discusses sustainability as an avenue for perpetual human development without causing irreparable environmental harm. The three dominant positions in the reformist tradition possess significant flaws open to challenges by radical ecopolitical thinking. The discourses conceptualizing sustainability as a goal, a human right, and a need all articulate a common objective of

maintaining the natural and social capacity necessary for continued development without questioning the viability of sustaining perpetual development within a limited ecological system. Evidenced through the discursive synonymy granted to the terms “sustainability” and “sustainable development”, the reformist tradition uncritically accepts the integration of human development and natural integrity within an unproblematic, unified project.

While the three reformist orientations share a common vision of the objectives of a sustainability paradigm, the discourses fail to coherently examine the relationship between the proposed mechanisms and the envisioned objectives of a sustainable human condition. Therefore, the reformist tradition remains theoretically incomplete due to the lack of attention given to critically examining issues of agency, power, and mechanisms involved in the transition towards sustainability. Additionally, although the rights-based position recognizes the unsustainability of current inequitable social relations, none of the three discourses questions the existing relationship between society and the natural world and its contribution to ecological degradation and lack of social well-being. Consequentially, the articulation of sustainability within the paradigms of goals, rights, and needs remains conceptually closed to the possibility of envisioning alternative interactions between humanity and nature. Each of the typological categories uncritically accepts the view of humanity as being situated within the natural world and being constrained by biophysical realities that restrain behavior and partially shape the construction of anthropogenic systems. Moreover, ecological problems, based on all three conceptions of sustainability, stem from the expansion of human systems beyond the physical capacity of nature. This assumption implies the requisite of restructuring human activity—either through increasing efficiency, scaling back population, or altering unequal social relations—to

better conform to definitive limits or to make the presence of limits meaningless by detaching human practice from a reliance on an ever-decreasing supply of natural resources.

Radical ecopolitical paradigms—specifically ecocentrism, social ecology, and ecofeminism—can envision alternative conceptions of sustainability. The three theories perceive human activity and natural processes as inherently interconnected and, therefore, hold the potential to articulate sustainability as a fundamentally political issue that requires significant societal reconstruction. The transformative theories can accommodate the ambiguity of sustainability by constructing definitive boundaries around the concept within a normative framework, while still allowing for the conceptual flexibility of the term. The construction of these boundaries responds to the concern in the literature that sustainability has become an all-encompassing, meaningless rhetorical device that perpetuates greenwashing and other environmentally harmful activities under the guise of an ecologically beneficial program (Norton 1992, 98). These boundaries can provide certain normative, ontological, or ethical conditions that must be met in order to achieve a sustainable condition, narrowing the meaning of the concept in order to avoid the risk of rhetorical emptiness and anti-ecological cooptation.

The next three chapters of my thesis, therefore, seek to extend and rethink the notion of sustainability by exploring the potential of different radical ecological discourses to open up the space for an alternative conceptualization of the concept. Ecocentrism, social ecology, and ecofeminism represent critical paradigms capable of critiquing present definitions of the impetus, objectives, agents, and processes involved in the proposed transition to sustainable societies throughout reformist environmental political thought. The radical ecological discourses can challenge existing conceptions of the human-nature relationship, examine the power dynamics that play a crucial role in shaping society-nature interactions, and can problematize the

unequivocal acceptance of human development and growth as compatible with the pursuit of ecological integrity. Sustainability is not explicitly articulated in the radical streams of thought, since the term has primarily arisen and gained meaning within reformist environmental thinking. However, the foundational tenets of ecocentrism, social ecology, and ecofeminism can be extended to a discussion of sustainability in order to critically examine current articulations of the idea and to re-imagine the transition to an ecologically sustainable human condition.

The following chapter will discuss the foundational principles of ecocentric thought, the theory's critique of reform environmentalism, and its potential to rethink sustainability. Ecocentrism is explored first since it represents the broadest critique of current manifestations of sustainability by directly addressing the ontological and axiological components of the human-nature relationship. Applying ecocentrism to a radical rethinking of sustainability raises several concerns with reform environmentalism and posits an alternative form of sustainability, in which the ultimate objective revolves around sustaining ecological integrity as a whole. Primarily, an ecocentric analysis challenges anthropocentric valuation present in existing discussions of sustainability, as evidenced by the focus of reformist environmentalism on sustaining nature for perpetual human development. Ecocentrism challenges this instrumentalization of the natural world and instead forwards a vision of holism that highlights the inherent complexity and interdependence of human systems and the ecology, examining the limits of human knowledge of, and mastery over, nature. Further, the paradigm critically evaluates the dominant worldview in modern culture and its perpetuation of anti-ecological value systems, including the need for an altered personal ethic as a central component of an ecologically effective sustainability program.

Chapter Three

Rethinking Humanity's Place in Nature: Towards Ecocentric Sustainability

Ecocentric theory represents a rich body of thought encapsulating a variety of narrower paradigms such as deep ecology, transpersonal ecology, and other deep green ethical standpoints. Due to the diverse discourses operating within the ecocentric framework and the theory's predilection for multi-faceted solutions to ecological degradation, the position has significant potential to critique the reformist tradition and reconstruct the definition and practice of sustainability. An ecocentric approach to sustainability prescribes a complex political project that expands the agential capacity beyond reform environmentalism's vision by necessitating a deep transformation of personal ethics that results in changes in governing institutions, the organization of communities, economic relations, and societal interactions. Taking into consideration the multiplicity of theoretical paradigms operating within the ecocentric framework, the foundational principles of ecocentrism as a whole can be identified and critically evaluated for their potential to envisage an alternative form of sustainability.

Sustainability emerged within the reformist tradition as the optimal framework for creating the conditions for perpetual human development within a finite ecological context, making the definitions, discussions, contestations, and applications of the term deeply embedded within a reform orientation and governed by the principles of conventional environmentalism. Additionally, although ecocentric theory implies a focus on ecological sustainability as an ideal condition, it rarely explicitly defines sustainability and explores the concept as a viable mechanism for ameliorating environmental degradation. Despite the significant lack of an explicit definition and engagement with sustainability in ecocentric theory as a viable mechanism for realizing the overall vision of the paradigm, ecocentrism holds vast potential to

simultaneously critique existing conceptions of sustainability and re-imagine the concept as a fundamentally ecological project.

The gap in ecocentric thought regarding the evaluation of sustainability necessitates an analytical extrapolation of the paradigm's foundational principles in order to imagine a theoretically coherent, politically plausible vision for an ecocentric form of sustainability. This chapter seeks to engage the main arguments of ecocentrism, apply the basic principles of the theory to a critique of sustainability within reform environmentalism, and to reimagine the sustainability concept using the foundational tenets of the approach. It begins by outlining the central principles of the paradigm and forwarding a critique of reform environmentalism's myopic (and occasionally contradictory) view of a sustainable condition. This chapter then seeks to re-conceptualize sustainability by critically engaging the impetus behind the anthropogenic transition, the processes employed and the agents granted power in the achievement of a sustainable condition, and the ultimate objectives of the envisioned human-nature relationship. It will demonstrate that ecocentrism possesses the theoretical capacity to redefine sustainability, transcending reform environmentalism's emphasis on human development, and that the sustainability concept represents a viable concept to pursue the ecocentric vision of interdependent, mutually beneficial human-nature interactions. Principles of ecocentrism will be applied to a deconstruction of the three typological categories discussed above and to the reconstructive project of envisioning sustainability through the ecocentric perspective.

Main Tenets of Ecocentrism and a Critique of Sustainability within Reform Environmentalism

Ecocentrism represents a complex approach to ecopolitics that prioritizes a re-orientation of human-nature relations capable of engendering societal well-being, environmental regeneration, and cooperative interactions between social and natural systems. Regarding the

concept of sustainability, the theoretical paradigm possesses three identifiable aspects that compose the discourse and can be applied to a rejection of environmentally degenerative practices and the creation of an ecologically sustainable society. First, the theory revolves around the anthropocentric/ecocentric distinction, engaging in critical discussions of the dualism and advocating a political program based on a nature-centered approach and a holistic interpretation of the ecology. Second, ecocentrism necessitates deep changes in the notion of the self. It seeks to expand the conception of the self to include interactions with nature, blurring the hard distinctions between humanity and the natural world articulated by reform environmentalism. Third, ecocentric thought possesses a critical component that embraces political struggle and widespread collective resistance to the dominant anti-ecological ethics and ideologies. Each of these principles will be explored further and applied to a reconceptualization of sustainability.

Ecocentrism's Critique of the Anthropocentric Ethic in Sustainability Discourse

The various streams of thought constituting ecocentrism attempt to decenter humanity from a privileged ontological and axiological position, illuminating the fissure between anthropocentric ethics and the ecocentric position that shapes environmental political discourse (Curry 2006, 42). Various branches of ecocentrism—particularly deep ecology—have been critiqued as misanthropic and philosophically flawed for their rejection of inherent human ascendancy over other beings and their promulgation of a vision of profound equality between humans and the natural world (Breen 2001, 36). Anthropocentrism argues for recognition of an inexorably differential system of valuation due to humanity's sole capacity for assigning meaning to objects and processes, placing worth in nature, and coherently acting upon a

subjectively constructed system of value (Katz 2000, 17-18).² While arguments conceiving anthropocentric valuation as inevitable given the unique consciousness, use of language, and moral capacity of humanity abound throughout the literature, ecocentrism responds to these critiques by differentiating between trivial and substantive forms of anthropocentrism.

Ecocentric thought critically examines anthropocentric valuation of nature by partially accepting trivial forms of anthropocentrism while fundamentally rejecting substantive manifestations of the term (Eckersley 1992, 55-56; Fox 1995, 20; Rolston III 1988). Accepting the notion that value remains ineluctably embedded in processes of human construction, expressed through language, and applied to anthropogenic practices, ecocentrism allows for recognition of humanity's agential capacity to perceive the worth of the natural world and act upon constructed value systems. However, ecocentrism completely rejects substantive anthropocentrism—a term implying that the worth of nature remains contingent upon the process of valuation conducted by humans and articulated through language (Connelly and Smith 2003, 33; Rolston III 1988, 32). Ecological worth instead operates independently of the moment of anthropogenic valuation—a process that does not necessarily *assign* meaning or value, but simply *interprets* an existing sense of value intrinsically present in the natural world. This critically distinction suggests that substantive manifestations of the concept perpetuate the “unjustified privileging of human beings, as such, at the expense of other forms of life” (Curry 2006, 43). Therefore, ecocentrism argues against forms of anthropocentrism that translate differences between humans and natural entities into evidence of human ascendancy over other beings and as a mechanism to ethically justify the exploitation of natural resources (Curry 2006, 42-44; Fox 1995, 20-22).

² See also Ferry (1992) for a discussion of the ineluctably subjective, anthropocentric process of assigning value.

While recognition of humanity's position as an interpreter of value and meaning represents an ineluctable element of coherent environmental political theory, ecocentrism rejects exploitative forms of anthropocentrism that elicit human exceptionalism and "introduce a hierarchy of moral worth" (Eckersley 1998, 173) with humanity positioned at the pinnacle of the axiological system. Although values and an overarching sense of ethics are unavoidably filtered through human consciousness and subjective processes, this recognition does not dilute ecocentrism's adherence to an expanded axiology or rejection of environmentally exploitative practices justified based on the inferiority of natural elements. It instead seeks to illuminate the philosophical notion that nature possesses intrinsic value that cannot be constructed, but only measured, interpreted, defined, and contested on an ethical level by individuals and on a political level by societies (Rolston III 2003, 144). Humanity's agential capacity in interpreting value and creating moral systems does not by necessity justify exploitation of the natural world. However, a strong tendency exists within substantive anthropocentrism to subsume the vitality of the natural world under a concern for human interests by utilizing humanity's ability to interpret value and deliberately alter the natural world as appropriate grounds for axiological superiority and control over nature.

The myopic view of value within the reform tradition, which remains entrapped within an anthropocentric paradigm, can be evidenced throughout the literature's definitions and discussions of sustainability. The goal-based discourse emphasizing sustainability's concomitant benefits for environmental preservation and industrial profitability is firmly grounded within an anthropocentric ethical system. Prioritizing economic development and the construction of environmentally neutral industrial practices through human ingenuity and advanced technology, the goal-based paradigm holds the ultimate objective of freeing human activity from the

constraints of a finite ecology. Adherence to the notion of perpetual advancement detached from the confines of a limiting natural condition, coupled with the discussion of efficiency as the sole mechanism to achieve the continued viability of industrial processes, reveals the paradigm's embeddedness in an anthropocentric ethic.

Sustainability, under this discourse, does not require significant restructuring of human activity, but can instead be defined and pursued in a manner amenable to existing economic and social relations. By focusing solely on efficiency and waste reduction in production processes, industry and economic elites are located as the dominant stakeholders in the transition to sustainability and are granted with the political power to define the meaning of sustainability and implement practices based on the constructed definition. Nature becomes subsumed under a discourse of efficiency, profitability, and mutual benefit for the environment and the economy—a discussion grounded in the anthropocentric assumptions that human ingenuity holds the potential to make environmental concerns infinitely solvable and that sustainability necessitates deliberate steps to transcend natural limits.

Similarly, sustainability located within a discourse of human rights displays the priority of sustaining social systems and the conditions for development by depicting the natural world as a collection of vital resources necessary for human advancement, the attainment of freedom, and the achievement of individual potentialities. Positioning environmental degradation and the exploitation of resources in the realm of social justice, the rights discourse locates sustainability in broader discussions of inequitable societal relations and environmental justice. It perceives degradation of nature as simultaneously stemming from and causing unequal social interactions and places the elimination of inequity at the center of the sustainability program. Thus, the pursuit of sustainability as a right necessarily entails equitable resource distribution and is

posited as a mechanism for leveling out opportunities for qualitative development and the realization of full potentiality. The rights-based perspective remains entrenched within an anthropocentric mode of thinking due to its focus on ameliorating environmental depletion and creating the conditions for long-term resource sustainability as necessary avenues towards justice and the elimination of structural barriers to equitable development. It possesses a narrow view of nature as a compilation of resources required to maintain continued human prosperity and well-being, discussing the overall value of nature as synonymous with the utility of natural resources for societal advancement.

The impetus guiding a pursuit of sustainability within the needs-based paradigm for humanity's perpetual survival and development similarly reveals the discourse's anthropocentric axiological foundation. Sustainability represents a necessary reaction to the urgency of climate change and other forms of environmental degradation, responding reactively to ecological problems that threaten to destroy the natural resource base and overall environmental conditions supporting human survival. Although advocating significant changes in anthropogenic activity—particularly the scale of economies and populations—in order to create balance between social systems and the surrounding environment, the needs-based approach to sustainability places humanity at the center of value and defines the worth of nature in relation to human needs. Transforming society in a more environmentally sustainable direction represents an imperative to continued survival and well-being given the presence of immutable limits that constrain behavior and isolate human activity within a biophysically supportable scale.

Role of the Self in an Ecocentric Approach to Sustainability

Related to the rejection of substantive anthropocentrism that justifies environmentally exploitative human practices, ecocentrism additionally problematizes and challenges the

perception of nature coupled with the links between self and ecology within reform environmentalism's discussions of sustainability. Specifically, ecocentrism argues that reform environmentalism conceptualizes nature either in instrumental terms as the resources necessary for human use or as a finite system that constrains society's potential for growth. For instance, the goal-oriented approach to sustainability conceives of nature as a set of biophysical limits that confine anthropogenic activity. It seeks to detach human development from ecological constraints through technological ingenuity, decreases in waste, and an infinite increase in efficiency until industrial production becomes a completely self-sufficient, closed-loop process. The rights-based discourse presents a view of the environment as the external context in which social systems operate and as an embodiment of the resources required for the realization of potentialities, the well-being of all individuals given a condition of equitable distribution, and the overall functioning of communities. Sustainability articulated within a paradigm of basic needs similarly posits nature as a resource base necessary for long-term human survival and development, arguing against practices that degrade the environment and threaten to undermine humanity's condition of existence.

Ecocentrism, on the other hand, embraces a complex conceptualization of nature, defining the broader ecology as a holistic entity comprised of the interactions between human and natural elements. While reform environmentalism forwards a mechanistic view of ecology, subdividing nature into independent—and often competitive—elements with humanity possessing the evolutionary capability to operate relatively independently from the environmental context, the ecocentric approach posits a holistic perspective that views social systems and natural systems as overlapping, interacting, and mutually constitutive (Fox 1995, 29-30). In this sense, humanity and nature do not represent distinct, independently identifiable

spheres of existence, but instead acquire form and identity only through a series of unique and complex interrelations. The detachment of human systems and the natural world articulated throughout reform environmentalism represents an artificial separation resulting in ecological degeneration, egregious exploitation of resources, and alienation from nature. In response to this separation, ecocentrism prescribes an ontological expansion of the self as a crucial ameliorative mechanism capable of mending the fractured relations between humanity and the natural world, healing inequitable social interactions, and remedying the pathological adherence to ecological exploitation for continued human development.

The expansion of the self and extension of personal identity to include interconnections with nature occupies a central position in the ecocentric approach to sustainability, necessarily preceding institutional shifts and transformations in political processes. A broadening of identification and overall re-orientation of the self through “inward direct action” (Devall and Sessions 2007, 194) that seeks to alter personal ethical relations with the natural world represents an aspect of a holistic ecological program severely neglected by reform environmentalism’s discussions of sustainability. This omission present throughout traditional environmental politics can be evidenced by the reformist tradition’s overt prioritization of production processes, industrial practices, and policies to induce greening within certain economic sectors and is symptomatic of the paradigm’s overall ontological myopia. Reform environmentalism prescribes the implementation of greening techniques to make a specific moment of human-nature interactions (usually industrial production or the distribution of natural resources) more environmentally benign and, occasionally, more socially conscious. The focus on adopting sustainable practices within isolated moments of the society-nature relationship constructs an

incomplete ecopolitical project that ignores critical engagement with the role of the individual self in both ecological integrity and social vitality.

Recognizing that the individual self operates within a complex system composed of multi-faceted interactions, the ecocentric approach prescribes systemic thinking in order to solve environmental problems (Naess 1993, 21). Sustainability located within ecocentrism consequentially requires a focus on the interrelations between personal ethics, societal action, and the natural world. Anti-ecological behavior on the individual and social scale has become ingrained within the dominant ideology guiding interactions—both within communities and between humanity and nature. Despite the widespread embeddedness of anti-ecological ethics and practices resulting in significant resistance to radical forms of environmentalism that reconceptualize society's role in nature, exploitative relations do not represent immutable or natural aspects of interactions. Instead, the dominant system of beliefs can be altered through a concomitant change in personal philosophy and a reorientation of cultural forces fueling anti-ecological practice (Devall and Sessions 2007, 196-200; Naess 1993).

The mutually reinforcing interconnections articulated by ecocentrism between individual philosophy and environmentally harmful activities ingrained within the broader culture necessitates a multi-faceted ecopolitical project, taking into consideration the linkages between individual ethics, politics, social interactions, and humanity's relationship with the broader ecology (Katz 2000, xiii). Ecocentrism highlights the complexity of ecosystems that contain overlapping social and natural systems. The solutions to ecological degradation must take into consideration the full spectrum of ethical, political, and ontological causes of exploitative interactions by prescribing multi-scalar transformation addressing the tendency for personal ethics to simultaneously aid the perpetuation of anti-ecological culture and to be partially shaped

by dominant cultural forces. Sustainability, under an ecocentric paradigm that emphasizes a transformation of the self, would posit individuals as primary agents in both the activities leading to ecological degradation and in the transition to a sustainable condition.

In order to achieve sustainability with the capacity to “serve both the vital needs of persons and nonhumans” (Devall and Sessions 2007, 180), ecocentrism prescribes an expansion of the self beyond the narrow, egoistic conceptualization present throughout conventional environmentalism’s discussions of solutions to ecological degradation. The reformist tradition leaves little space available for an agential public to change individual behavior, adopt new modes of interaction, and embrace an ecologically-oriented existence. Reformism, rather, positions the state and economic elites in the locus of agential capacity with the power to alter structural forces and the actions of the public. Under ecocentrism, on the other hand, all individuals play a crucial role in transforming human practice and inducing ecological regeneration by extending the notion of self-identification to recognize intricate interdependencies with the natural world (Katz 2000, xiii)—a process that makes individuals active participants in the transition toward sustainability. Humanity and nature, in this sense, remain interwoven within a complex web of interrelations, requiring unification through a widening of the construction of the self (Fox 1995, 8; Naess 1993a, 30) and a consequent blurring of the distinction between human systems and the ecology.

Struggle and Resistance in Ecocentric Sustainability

A focus on the ontological expansion of the self and the adoption of a personal ethics that embraces the complex interdependencies between humanity and nature represents a crucial element of ecocentrism. The paradigm critically evaluates the role of individuals and the entire society in both the causes of ecological degradation and the attainment of sustainability—a

discussion that problematizes reform environmentalism's assumptions regarding humanity's position related to the natural world and its knowledge of societal behavior, environmental consequences, and ecosystem functionality as a whole. Reform environmentalism's objective of greening anthropogenic practices in order to make human activities more environmentally neutral implies that humanity possesses complete knowledge and the capacity for deliberately controlling the environmental implications of resource use and other forms of manipulating nature (Eckersley 1992, 51-52; Eckersley 2001, 318). Alterations to industrial, consumptive, or distributive practices represent the key solution to degradation within the reform tradition, overlooking the complexity of ecosystems and the possibility of unintended environmental consequences of human behavior that stem from imperfect knowledge.

All three discursive paradigms outlined in the analytic typology perceive human ingenuity and advanced technology applied to environmentally harmful practices as infinitely capable of providing the conditions for ecological vitality, either by keeping social and economic practices within biophysical limits or altogether transcending limits through efficiency. Traditional environmentalism and the ecocentric philosophy hold contradicting views of humanity and its capacity to fully understand the consequences of altering ecosystems. The ecocentric approach decenters humans, articulating definitive limits to knowledge of ecological functionality by describing the self as an integral part of nature, rather than as an exogenous spectator of environmental processes existing at an evolutionary vantage point separate from the natural world (Dryzek 2005, 184; Fox 1995, 13-16).

Coupled with the expansion of the self and recognition of humanity's limited scope of knowledge regarding the complex ecosystem in which it operates, the ecocentric perspective also holds the theoretical potential to challenge the unproblematic depictions of perpetual

development and environmental vitality as compatible objectives within the reformist sustainability project. Traditional conceptualizations of sustainability posit the concept as the optimal mechanism for achieving beneficial social development for present and future generations without irreparably compromising the environmental conditions required for perpetual flourishing and advancement (Kates et. al. 2005). The literature defines sustainability as a mutually beneficial undertaking that takes into equal consideration the well-being of society, the economy, and the environment, forwarding sustainability as a political program for pursuing environmentally positive change (Dryzek 2005, 153; Nilsen 2010, 457). However, when placed under the critical lens of ecocentrism that resists the unchallenged compatibility of perpetual growth and ecological vitality, reform environmentalism's conception of sustainability represents an economic program for perpetual growth and development unconstrained by ecological barriers and limits (Dryzek 2005, 146). Sustainability, in this sense, exists primarily as an economic pursuit politically positioned within the discourse of an ecological program.

Thus, the ecocentric approach calls for a political project of struggle and resistance against the dominant ideologies governing existing human practice and justifying exploitative interventions into the natural world purely for societal benefit. The process of resistance directly contradicts the reform perspective by describing isolated, technocratic methods for increasing efficiency and making continued resource consumption more environmentally viable as inappropriate and ineffective mechanisms for achieving sustainability. Reformist solutions based on applying advanced technology and human ingenuity to environmental degradation remain entrapped within the anti-ecological discourse promulgated by the dominant culture (Devall and Sessions 2007, 196), forwarding a narrow view of both ecological problems and the potential spectrum of solutions. Conventional environmentalism's pursuit of policy change, economic

incentives for increasing efficiency, and the redistribution of resources only addresses the resulting manifestations of fundamentally anti-ecological practices, while ignoring the underlying cultural causes of ecological degradation embedded within the anthropocentric tendency to ceaselessly pursue growth and development.

Sustainability under conventional environmentalism represents an attempt to limit the negative societal effects of existing degradation of the natural world primarily by taking a single-issue approach that applies available technology to eliminating the environmental symptoms of anti-ecological practice (Devall and Sessions 2007, 196). The ecocentric perspective, contrarily, necessitates a holistic view of ecological crises that takes into consideration the interlocking matrix of human action and the resulting consequences for the natural world—a re-imagining of environmental problems that requires multi-faceted solutions contingent upon sustaining ecosystem integrity as a whole. Ecocentric thought possesses the discursive capacity to establish a comprehensive political project that simultaneously entails a deconstruction of current anti-ecological value systems in the form of political resistance and a reconstruction of the sustainability concept by re-imagining ecological communities and outlining the processes and agents needed to achieve an ecologically-oriented existence.

Reconstructing Sustainability: The Imaginative Potential of Ecocentrism

Existing literature within the reformist environmental tradition severely lacks a critical, reflexive engagement with the objectives of sustainability, failing to question exactly what is being sustained in the widespread pursuit of the concept (McLaughlin 1995, 89). While sustainability can exist as an ambiguous concept within a process of continuous contestation in environmental political thought, coherent thinking and practice requires a sense of reflexivity and critical engagement with the various manifestations of the idea. This can be achieved by an

ecocentric reconstruction of the sustainability concept with the purpose of critically evaluating the objectives of the paradigm, the impetus behind the pursuit of sustainability, and the mechanisms and agents involved in the ecopolitical transition.

Impetus behind the Transition to Sustainability

The primary impetus guiding ecocentrism's prescriptions for societal change in order to construct ecologically-driven practices and reorient political, social, and economic systems to cooperatively interact with the natural environment stems from the ecocentric perspective's predilection for attributing degradation to a fractured relationship between humanity and nature. Structural inequities within society, unsustainable consumption of natural resources, and an overall sense of alienation from nature occurring on both an individual/psychological and a global/political scale represent symptoms of an overarching anti-ecological condition that emphasizes the continued growth and development of human systems. Attempts to transcend limits through the goal of perpetual development enmeshed in contemporary politics, economics, and culture—particularly in the industrialized world—has resulted in an artificial perception of detachment between human systems and the environmental context in which they operate. In this sense, sustainability defined under reform environmentalism is encouraged and pursued as an ideal condition to avoid ecological crisis and maintain perpetual development without irrevocably destroying the vital natural resource base. The varying definitions of the concept throughout the environmental literature illustrate a human-centered impetus for pursuing sustainability that justifies an instrumental view of nature and discusses measures to maintain environmental integrity based on their contribution to human well-being and development (Dryzek 1990, 196).

Ecocentrism, however, argues that the expansive scale and environmentally exploitative operations of human systems have resulted in social inequality, alienation from nature, and an ecologically unsupportable use of both finite and regenerative environmental resources to fuel perpetual development. The primary motivation to pursue a sustainable condition within ecocentrism stems from the realization of the need to heal fractures between humanity and nature in order to restore overall ecological integrity. The impetus driving the transition to sustainability implied throughout the ecocentric paradigm additionally illustrates the holistic interpretation of systems expressed throughout the various ecocentrist perspectives. Contrarily, reform environmentalist conceptions of sustainability perceive systems as relatively autonomous processes composed of a multiplicity of interacting agents. Conventional discussions of sustainability in the reform tradition articulate a layered interpretation of the society-nature relationship, in which human systems rest within the biophysical constraints of natural systems. The pursuit of sustainability requires society to either adapt behavior to better fit within the definitive and immutable confines of the natural world³ or utilize technology, ingenuity, and the market to transcend environmental capacity through efficiency.

Ecocentrism, on the other hand, rejects the hard distinction between human activity and ecological processes, arguing against the conventional view of anthropogenic systems as operating within the constraints of an exogenous environment. Instead, society cannot be distinctly separated from the broader ecology, since both systems possess internal complexity and intricate interdependencies beyond the scope of current knowledge—a foundational tenet of the holistic perspective implying that humanity and nature can only be understood indirectly and in a relational context (Taylor 2003, 75-76). The effective pursuit of sustainability, in this sense,

³ This is evidenced by the needs-based and rights-based discourses that seek to downscale human activity and equitably redistribute finite resources.

cannot be motivated simply by the layered interpretation of systems that seeks to re-align the scale and scope of anthropogenic activity to fit within a finite capacity. Instead, it must stem from a recognition of human-nature interdependencies in order to concomitantly restore societal well-being and establish the conditions for ecological regeneration.

Reform environmentalism's narrow, technical approach to degradation attempts to isolate specific environmental problems from broader societal forces and the dominant ideology in order to create single solutions through technological innovation and ingenuity. The concept of holism rejects the reformist approach as an ineffective and oversimplified method for inducing sustainability that perceives ecological concerns as independently functioning problems solvable through the narrow application of greening techniques. According to ecocentrism, environmental problems cannot logically be isolated and controlled separately from the broader ecological and social system in which they originate, but instead must be dealt with in reference to the cultural and ethical forces perpetuating environmentally harmful practice. Since "the ecological relationships between any community of living things and their environment form an organic whole of functionally interdependent parts" (Taylor 2003, 78), the ecocentric approach to sustainability must significantly redefine the interpretations of relations between human systems and the natural world. Ecocentrism remains capable of constructing a vision of sustainability contingent upon a re-orientation of anthropogenic activity, prescribing a shift in the ways in which societies utilize interconnections with nature towards a non-exploitative, mutually supportive approach.

Objectives of Ecocentric Sustainability

In critiquing the reformist approach to environmental politics, ecocentrism prioritizes ecosystemic integrity as a whole, while also requiring an inclusive axiology that values the

inherent equality of all components—both human and nonhuman—of the broader ecology. The sense of intrinsic worth granted to all individuals, as well as to the entire ecosystem as a holistic body irreducible to the reductive agglomeration of its interacting components, results in the principle of cross-species egalitarianism. Forwarding an inclusive value system that prescribes awareness of the inherent worth present in all components of a functional ecosystem, the ecocentric perspective resists the anthropocentric tendency to instrumentalize nature and value natural products only in reference to human benefit (Attfield 2003, 40-42; Eckersley 1992, 28).

The holistic framework for perceiving the broader ecology posits environmental elements and humans as inextricably interconnected entities that form a unified ecological totality through interdependent relations, mutually constitutive interactions, and causal responses to the behavior of components within the ecosystem (Attfield 2003, 41-42). An ecosystem cannot logically or ethically be reduced to the value of its interdependent components. Instead, intrinsic worth must be located within the realm of ecological integrity, stability, and functionality as a whole, rather than selectively assigned to individual aspects of an ecosystem based on the presence of certain characteristics, such as sentience or instrumental utility. Within the ecocentric optic, the articulated sense of holism represents a “factual aspect of biological reality” (Taylor 2003, 78).

The sense of holism articulated as a fundamental tenet of the ecocentric approach implies that ecosystems possess intrinsic worth beyond the total value of their constitutive individual parts (Palmer 2003, 23-24) and beyond the instrumental value of natural resources for human well-being and development. Rejecting the atomistic ethical framework present within the dominant streams of reform environmentalism suggesting that value can only be assigned to individual aspects of an ecosystem, the ecocentric approach broadens the optic of sustainability to encompass the objective of ecosystem integrity and functionality as a whole. Ecological

holism, although seeking primarily to maintain an overall sense of integrity and stability, still allows for the recognition of dynamic interaction and evolutionary advancement of the individual components operating within a broader system. The behavior of individual humans, societies, and aspects of nature is not completely predetermined, since all elements within an ecosystem possess partial autonomy and a unique behavioral process that is constantly affecting the actions of other components and the structure of the entire system. Elements within an ecosystem—both human and nonhuman—exist in a continuous state of transformation induced by complex, perpetual interactions.

The notion of holism possesses significant implications for a reconceptualization of sustainability under an ecocentric framework. The objectives of an ecocentric sustainability paradigm, rather than focusing on the maintenance of human development unconstrained by the hindrances of a finite environmental context, centers on the construction of a condition capable of meeting the vital needs of all individuals and ensuring that continued ecosystem integrity and functionality is sustained. Therefore, the primary objective of sustainability can be articulated as the unified effort to sustain harmonious interactions, biological and social diversity, and the overall integrity of an ecology that includes both human and nonhuman processes (Merchant 1992, 74-75). The sustainability project entails an ontological and axiological reintegration of humanity into the natural world by realigning the scale and character of human systems in order to promote action that takes into consideration intricate interrelatedness between elements within an ecosystem. Humanity's dual agential potentiality to either degrade the environment through

exploitative interactions or play a crucial role in a process of regeneration is, consequentially, a necessary component of ecocentric sustainability.⁴

The ecocentric sustainability program necessitates the adoption of eco-conscious interaction that can facilitate the vital functionality of social systems concomitantly with the maintenance of ecological integrity. Ecocentrism shares reform environmentalism's conception of sustainability as a unifying discourse capable of simultaneously achieving economic prosperity, social benefit, and environmental preservation. The position echoes the reformist viewpoint that the vitality of human systems and natural systems represents a codependent political project that cannot be discussed as distinct objectives, but forwards a significantly different approach to defining the ultimate goals of sustainability and pursuing the ideal human-nature relationship. It rejects reform environmentalism's depiction of existing systems as layered with human activity operating within the constraints of the natural world. The layered perspective views nature as confining the potentiality for perpetual development, but also locates humanity at the pinnacle of knowledge, ingenuity, value construction, and the capacity to alter ecosystems to fulfill societal needs and desires.

Reformist environmental politics consequentially favors a form of sustainability that prioritizes economic and social prosperity. Sustainability articulated through the reform tradition utilizes greening processes, techniques for efficiency, and the overall preservation of the natural world as mechanisms to achieve societal benefit—in the form of both economic profitability and social advancement. The objectives of sustainability articulated throughout the reformist literature further solidify the anthropocentric foundation of the discourse that instrumentalizes nature, viewing sustainability as a mechanism for attaining human benefit, rather than as an

⁴ Under ecocentrism, this process would entail both a physical regeneration of natural resources and a social regeneration that encourages harmonious relations.

ecologically beneficial end in itself. With these critiques in mind, sustainability under ecocentrism instead seeks to sustain generalized ecological integrity. The discourse takes into consideration the interlinked social and environmental components constituting the holistic ecology and highlights human prosperity and environmental integrity as inseparable objectives.

Although ecocentrism articulates the primary goal of sustaining ecological integrity, the objective remains vague due to the philosophy's predilection for conceptual openness.

Ecocentrism attempts to outline a "theory of acting" (Devall and Sessions 2007, 180) that establishes the guidelines for individual behavior and the creation of an ecologically centered social ethic in order to reorient the dominant culture and restructure environmentally degrading institutions, but does not provide a specific program to govern the proposed transformation.

Given the complex, flexible composition of the ecocentric discourse, the objectives of sustainability under the paradigm remain relatively fluid and can be partially determined by the agents employed with power in the realization of the sustainable transition, the political/decision-making processes adopted, and the unique composition and needs of the community pursuing the envisioned sustainable condition. In this sense, the sustainability concept and accompanying discourse should be explored as a possible avenue for integrating principles of ecocentrism into existing discussions in environmental politics.

Despite the vagueness present in the objectives of, and specific vision for, the construction of an ecologically oriented society, the ecocentric approach articulates specific standards regarding the agents and processes involved in the transition towards sustainability. The theory promotes deliberative contestation within communities seeking to make human-nature interactions more ecologically and socially harmonious regarding the structure and operations of society. This democratic process can limit the negative aspects of conceptual

ambiguity present in the reform tradition, such as the risk of excluding crucial agents in the solutions to environmental degradation, the potential for pursuing greenwashing strategies for profitability rather than for ecological preservation, and the embracing of a vague program that makes the ecological results of a sustainability project ineffective and meaningless.

Agents and Processes

The specific form of an ecological community, as well as the political processes and agents employed to achieve a viable transition to a sustainable condition, is not predetermined by the theoretical principles of the ecocentric political program for sustainability. Although the ambiguity regarding the exact vision for a sustainable condition can result in a harmful lack of clarity, the vagueness present in the ecocentric discourse can also beneficially open up the agential space for a wide variety of actors to play a crucial role in the reconstruction of communities and can allow for the sustainability concept to be adapted depending upon the needs and structure of existing societies. However, the conceptual ambiguity and potential for adaptation must occur within distinct boundaries conditions of the theory in order to avoid the cooptation of sustainability for purely economic or social interests and to ensure the construction of a fundamentally ecological project. With this in mind, ecocentrism lays out specific mechanisms for change, prioritizing the processes and agents utilized in the transition towards an ecological society over the final composition, structure, and operations of the proposed vision.

While the vision of sustainability remains flexible, it must meet certain conditions expressed throughout the framework of an ecocentric body of thought. Sustainability must entail an elimination of environmentally exploitative practices that instrumentalize nature and consume resources egregiously, an abrogation of social domination and inequities that are inextricably linked to degradation, an attempt to balance individual needs with ecosystem functionality, and

adherence to the objective of sustaining ecological integrity through eco-conscious interaction. Stemming from the foundational principle of holism, the ecocentric approach necessitates significant changes in the scale, scope, and character of human systems. Humanity's utilization of ecological entities—including environmental resources and natural spaces—represents an inherent tendency and absolute necessity for survival and well-being. In this sense, the extraction, consumption, and use of natural products represents a biologically necessary process that does not necessarily entail exploitation of nature and severe degradation of ecological systems (Curry 2006, 82).

Ecocentric thought holds the theoretical openness to recognize the naturalness of human-nature interactions in the form of translating environmental resources to products that fulfill vital societal needs. However, an ecocentric sustainability program, while accepting human dependency on nature and the ineluctable need for interventions into the ecology, must take into consideration the motivation behind interventions into the natural world, the purpose being fulfilled, and the overall form of the human-nature relationship. Resource extraction and consumption pursued in order to meet vital needs in a socially equitable and ecologically non-exploitable method can be accepted under the ecocentric vision of a sustainable condition (Devall and Sessions 2007, 180-182). Society possesses the potential to flourish and provide for the well-being of both current and future populations, but must first limit the egregious character of human systems that unsustainably consume natural products and also must create a process of interaction that is guided by the ultimate objective of ecological integrity.

Ecocentric sustainability represents a complex political project with a broad scope of agency that transcends reform environmentalism's focus on applying technocratic solutions to individual manifestations of anti-ecological practice. The process for inducing the transition

towards a sustainable condition centered on maintaining ecological integrity necessitates a focus on the intrinsic value of the natural world that inherently rejects the pursuit of a ceaselessly higher standard of living by human communities (Devall 1988, 84-85). Instead, ecocentrism emphasizes the attainment of qualitative advancement, social and environmental harmony, and an overall sense of ecological integrity inclusive of the overlapping well-being of humanity and nature (Naess 1993a, 26). Sustainability and sustainable development can no longer be discussed as analogous concepts, since ecocentrism distinctly separates sustainability from growth-based politics and economics through its discussion of human-nature interactions as mechanisms for meeting the vital needs of both systems.

Ecocentrism manifests a "total view" (Katz et. al. 2000, xii)—a normative perspective that takes into consideration the complexity of human-nature interactions and the consequent requirement to construct multi-faceted solutions to interconnected ecological problems. In order to allow for a “liberation from the narrowness of egoism” (Clark 2000, 13) illustrated by the reform environmentalism perspective, ecocentric theory decenters humanity from a superior ontological and axiological position. Ecocentric thought suggests that humans’ ability to control nature, alter ecosystems, and convert environmental resources to widespread societal benefit represents an artificial justification for egregious interventions in the natural world and for claims to innate human ascendancy. A cosmological philosophy that extends agential capacity to a complex, interlocking matrix of actors and that engenders a sense of holism regarding the relations within society, as well as between humanity and nature, represents a necessary element of an ecocentric sustainability program. Sustainability within an ecocentric discourse requires a combination of normative changes in personal ethics on an individual scale and a widespread political struggle against anti-ecological institutions and practices on a larger, societal scale. The

primary process invoked by ecocentrism revolves around the construction of a movement of resistance against dominant ethics and ideologies that inform interactions and provide structurally and culturally embedded justification for anti-ecological practice (Devall and Sessions 2007, 196-200; Naess 1993, 20).

Intermixing changes in individual ethics with the prescription of embracing a widespread, ecologically-oriented political project, the ecocentric approach holds the theoretical potential to outline specific processes involved in inducing sustainability despite the theory's predilection for ambiguity and openness. Critiquing reform environmentalism for its depiction of human knowledge as limitless, the ecocentric paradigm highlights the incomprehensible complexity and unpredictability of the natural world (Eckersley 1992, 51-52; Eckersley 2001, 318).

Sustainability placed within the ecocentric optic necessitates the adoption of a cautious approach regarding anthropogenic alterations to the ecosystem, recognizing the limited nature of human knowledge that results in unintended environmental, economic, and social consequences of intentionally transforming the natural world for human benefit. Moving beyond the reformist mindset of redistributing vital resources or realigning societal systems to conform to the planet's biophysical capacity through a gradual transformation of industrial processes, economic institutions, and social relations, ecocentric sustainability prescribes the construction of alternative communities that embrace ecologically-oriented ethics and politics.

Awareness of the potential unintended consequences of interactions with the natural world coupled with the realization of the unsustainability of the current scale and character of human activity necessitates adoption of a principle of caution and a focus on the fulfillment of vital needs. Sustainability informed by ecocentrism would encourage a cautious approach to anthropogenic alterations to ecosystems and to the use of natural resources, recognizing the

limits of human knowledge and intentionality. The vital needs approach expressed throughout ecocentric thought requires a fundamental divergence with human activities motivated solely by the drive for continued growth and development and instead posits decentralized institutions and politically downscaled communities as possessing the capability to sustain ecological integrity. Ecocentric sustainability can only be viably pursued in a democratic manner that encapsulates a wide variety of agents and embraces deliberative procedures to determine the utilization of the natural world. The focus on the long-term fulfillment of the vital needs of all components of the ecosystem emphasizes the ultimate objective of maintaining overall integrity and functionality. Providing for a “decentralization of power to the lowest practical level” (Eckersley 2001, 317), the democratic project seeks to concomitantly minimize social inequities ingrained in existing power dynamics and limit environmental exploitation engendered by growth-driven ideologies and structural forces.

Theoretically extrapolating the democratic project expressed within the ecocentric approach to the concept of sustainability reveals the necessity of adopting decentralized, participatory politics within communities to develop the capacity to uphold ecological integrity as a whole, while still allowing for the fulfillment of vital needs and self-realization for all constitutive components of the broader system. Society and nature would hold comparable levels of ethical value and consideration in politics in the pursuit of sustainability as a form of eco-conscious interaction. Political, economic, and environmental decision-making processes must take place within a small-scale, but multi-faceted, governing structure that places the locus of power at the localized level. Communities can be responsible for managing the immediate environment in an equitable and non-exploitative manner through the adoption of participatory politics that balance the needs of various social groups with the requisites of continued

ecological functionality (Merchant 1992, 220-221). Based on the principles of ecocentrism, this condition would fuel the amelioration of social relationships contingent upon domination, the elimination of institutionalized power inequities, and the creation of appropriately scaled human systems that can exist perpetually without eroding the natural world (Eckersley 2001, 322).

Communities constructed around ecological principles could additionally induce salutary, restorative effects on the surrounding environment and individual members of society in a politically feasible manner. Since society, as well as nature, represents a holistic entity governed by complexity, interconnectedness, and mutually constitutive activity, the ecocentric approach to sustainability must take into account issues of equity that hinder a community's capacity to interact with the natural world in an ecologically conscious manner. The ecocentric approach possesses the discursive capacity to re-conceptualize the notion of sustainability beyond reform environmentalism and establish the theoretical framework to construct and pursue a comprehensive political project (Naess 1986, 11-12). Ecocentric thought can be applied to the discussion of feasibly transitioning to a sustainable condition by critically analyzing the appropriate processes and agents involved in the construction of a culture contingent upon maintaining overall ecological integrity. Further, the idea of sustainability, which has been ambiguously but enthusiastically embraced throughout reform environmentalism, represents a potential discursive pathway for ecocentric thought to enter into conventional environmental politics dialogue and impact decision-making processes and ethical discussions regarding appropriate human-nature interactions.

While reform environmentalism emphasizes the need to make current practices more environmentally viable and amenable to long-term human development, ecocentrism more thoroughly addresses the transition to a sustainable condition as a crucial aspect of the paradigm

requiring critical discussion. The multi-faceted, complex transitioning process involves a decentralization of governance structures and collective management of natural resources at the localized level. Despite the explicit focus on power decentralization throughout ecocentric thought, small-scale governance, local decision-making processes, and appropriately scaled production and consumption of natural resources must occur as embedded, interacting practices within a network of interconnected communities. Interactivity between localized communities structured around the broader ecosystem must entail the cooperatively governed and ecologically non-exploitative sharing of knowledge, natural resources, and production processes designed to meet the vital needs of individual communities and ecosystems (Eckersley 2001, 322-324). Sustainability pursued with the objective of ensuring continued ecological integrity that includes overlapping social and natural systems necessitates the deliberate construction of arrangements characterized by horizontal interdependence between communities that engenders the conditions for a societally beneficial and ecologically non-exploitative human-nature relationship.

Although ecocentrism addresses political issues, the discussion of structural change is embedded in the transformation of culture and ethics. Ecocentrism addresses the broad scope of human-nature interactions by focusing on abolishing substantive anthropocentrism that systematical devalues the natural world, by fundamentally rethinking humanity's place in nature, and by developing an alternative conception of the self. The theory only briefly discusses the concrete structural changes necessary for pursuing sustainability and lacks a critical discussion connecting the objectives proposed with the processes necessary to realize the envisioned ecological condition. Despite a focus on restructuring the ontological and axiological underpinnings of the human-nature relationship and rejecting the superiority of humanity over the natural world expressed throughout current conceptualizations of sustainability, ecocentrism

fails to adequately consider power relations within society. The paradigm overlooks a crucial examination of inequitable and unjust social interactions that fuel unsustainable practices and present significant obstacles to reconstructing value systems, reconnecting the self with the broader ecology, and altering perceptions of humanity's appropriate place in nature.

Given these criticisms, social ecology will be discussed throughout the next chapter, as it moves away from ecocentrism's expansive theoretical scope that fundamentally challenges human-nature relations as a whole. Social ecology instead presents a more narrow view focused on the structural contributions to environmental degradation. Social ecology articulates an alternative conception of sustainability centered on the dismantling of hierarchical power arrangements and the reconstruction of society in an ecological manner. Directly responding to ecocentrism's emphasis on changes in the dominant cultural values, social ecology suggests that, due to the historical linkages between hierarchical social relations and humanity's desire to exhibit mastery over the natural world, ecological sustainability can only occur in tandem with radical institutional restructuring. Social ecology contradicts ecocentrism's perception of the human-nature relationship by breaking the concept of humanity down into multiple societies and arguing that humans' interactions with the natural world partially depend upon the societal arrangements governing individual behavior and group action.

Chapter Four

Reconstructing Societies, Regenerating Ecologies: Towards Social Ecological Sustainability

Social ecology—particularly Bookchin’s theory—articulates a prescriptive framework for reconstructing power dynamics, embedded institutions, and other societal arrangements resulting in the concomitant problems of social injustice and ecological degradation. The paradigm posits a vision of sustainability centered on restructuring societal and economic systems in order to eliminate hierarchical social arrangements and limit the corresponding exploitation of nature. Addressing unjust institutions and interactions as occurring concomitantly with ecological degradation, the theory exhibits vast possibilities to re-articulate the notion of sustainability by applying the concept to a fundamental restructuring of existing political institutions, societal structures, and economic arrangements that hinder ecological integrity and perpetuate hierarchical relations.

Sustainability represents a vital component of the construction of an ecologically-oriented society within social ecology, as evidenced by the position’s emphasis on creating a non-dominating, non-exploitative social system that concomitantly sustains ecological integrity and human well-being. Viewing sustainability as the ability to form and maintain prosperous communities without degrading the ecosystem, social ecology can be usefully applied to a critique of the reform environmentalist tradition and a re-articulation of sustainability. The paradigm’s focus on the arrangements of structures and institutions as inextricably related to ecological degradation opens up the theoretical space to discuss concrete mechanisms for inducing political transformation (Light 1998, 9; Gundersen 1998, 194)—an opportunity for concise solutions often lacking in the imaginative potential of other radical ecological paradigms.

The overall coherence of the theory and the ability to extract concrete solutions to environmental problems from the philosophy’s framework stems from the theory’s focus on

critiquing institutional forces upholding anti-ecological practices, ideologies, and interactions. Social ecology can re-imagine sustainability as a political concept that addresses the role of societal, economic, and political arrangements in environmental vitality. By emphasizing the institutional aspects of environmental concerns that must occur prior to the transformation of culture and ethics, social ecology locates sustainability in the realm of power relations. Moreover, social ecology removes sustainability from ecocentrism's broad focus on the philosophical aspects of human-nature interactions and argues, instead, that regeneration and human well-being can only occur with concrete changes in power arrangements. While changes in ethics remain a critical component for fostering and maintaining an ecologically sustainable society, the overarching institutions governing individual and group behavior must be significantly altered to allow for meaningful, tenable changes in culture (Bookchin 1991, 340). Social ecology represents an innately political discourse seeking to transform mechanisms of societal interaction and of the human-nature relationship as a whole.

Regarding sustainability, social ecology has the theoretical capacity to envision an alternative political project to solve environmental concerns that greatly expands human agency in constructing and maintaining ecological societies. Advocating decentralized democratic processes that incorporate the entire citizenry into an active and dialogic mode of governance and ecosystem management, the theory presents significant challenges to reform environmentalism's conceptions of sustainability, particular in reference to the limited exercise of power and agency in political decision-making regarding care of the environment. It rejects the reform tradition's focus on seeking solutions within the framework of existing institutions and industrial practices, shifting the objectives of a sustainability program away from perpetual development and into the realm of sustaining the diversity, complementarity, and overall

functionality of natural systems. The body of thought also necessitates reconceptualizing human systems by organizing societies in a democratic, localized manner in order to allow humanity to exert its evolutionary capacity for ecologically beneficial—and potentially regenerative—action.

Main Tenets of Social Ecology and a Critique of Sustainability within Reform Environmentalism

Despite the complexity and breadth of the social ecological paradigm, the political prescriptions regarding the eradication of hierarchies and the reconstruction of societal arrangements in a manner amenable to the long-term maintenance of ecological vitality can be applied to a discussion of expanding the meaning of sustainability. In this section, I identify three basic tenets that inform the paradigm's perception of nature and encapsulate its articulation of sociopolitical solutions to environmental concerns, utilizing the principles as a foundation for re-imagining sustainability. First, social ecology, expressed by Bookchin and expanded upon by later authors, locates the origin of environmental degradation perpetuated by human activity within a flawed social system. Institutions, structures, and patterns of action contingent upon the historically embedded presence of hierarchies between social groups represents the causal factor creating environmental problems and constructing a dominating relationship with nature.

Second, contrary to reform environmentalism which exhibits a predilection for perceiving the ecology either as a compilation of resources or as a limited system that constrains the anthropogenic potentiality for growth (Bookchin 1987, 52), social ecology explicates a complex definition of nature that includes humans, nonhumans, and non-sentient beings as interacting elements that contribute to the formation and functionality of the broader environment. Third, the concept of distinguishable ecosystems plays a crucial role in the social ecological discourse. The notion holds significant implications for the practice of sustainability within the theoretical framework, which would take place through bioregional arrangements designed around

definitive ecosystem boundaries. Social ecology perceives the ecosystem as the fundamental unit of evaluation and the appropriate scale and space to pursue societal reconstruction. The main principles of the paradigm will be applied to a critique of reform environmentalism's perception of sustainability and to a rethinking of the concept's objectives, as well as the processes and agents required to attain the envisioned condition.

The Origin of Ecological Degradation in Social Arrangements

The social ecological perspective identifies ecological problems as fundamentally rooted within the structure and function of societies. Hierarchical relations, domination, and societal inequity play a causal role in establishing environmentally destructive interactions between human systems and the natural world. Pervasive ecological degradation facing modern society represents a situated concern, since its causes rest within the existing social framework and can, therefore, only be solved through radical institutional transformation. Social and environmental issues exist within a complex, mutually-constitutive web of interrelations, suggesting that ecological problems stem primarily from the institutionalization of structures and processes that fuel domination among social groups. Based on the notion that ecological concerns originate in a fractured social condition, social ecology suggests that the historical emergence of dominating forces within society established the groundwork for ideologies revolving around the need to master the natural world (Light 1998, 8).

Due to social ecology's focus on the overlapping and mutually constitutive spheres of nature and culture, articulation of the term 'ecology' differs significantly from the reformist notion of the natural world and the aspects of the environment needing sustained. While the reform position describes nature as a static set of processes and products necessary for human survival and development and perceives the biophysical capacity of the Earth as a constraint on

societal behavior, social ecology takes a more holistic approach in defining the ecology. Social action and natural processes are necessarily linked and overlapping since all forms of human activity possess an ecological dimension. Similarly, all environmental concerns have a corresponding social cause, constructing a definition of nature that moves beyond the depiction of the natural world as either a compilation of resources for societal use, or an environmental context existing external to humanity. Nature and society both require similar characteristics to maintain vitality and integrity, such as diversity and symbiotic relations among a system's constitutive components. While complementarity and symbiosis guiding the interactions of organisms represent critical components of a stable natural system, maintaining ecological vitality and resilience similarly requires harmonious, cooperative societal relations (Wheeler 2012, 95).

The social ecological program emphasizes recognition that current societal, economic, and political institutions have resulted concomitantly in a loss of identity and social cohesion among individuals within societies and severe, inequitable degradation of nature (Bookchin 1989, 72). Considering that ecological exploitation stems from hierarchical social relations, policies and other political actions designed to ameliorate environmental concerns should critically analyze issues of power, inequity, and justice in society—considerations that remain strikingly absent in the literature and practice of reform environmentalism, as well as in the ecocentric paradigm. The lack of discussion regarding the relationship between power/domination within society and ecological degradation stems from the embeddedness of conventional environmental discourse and action within existing political processes and economic arrangements. Each of the three perspectives highlighted in the analytic typology of reformist literature presented in Chapter Two displays a predilection for operating within current

political, social, and economic systems—a myopia that social ecology suggests hinders the ability of environmentalism to critically examine the underlying structures effectuating ecological collapse.

Discussions of sustainability located within the discourses of goals and of human rights display a tendency to pursue solutions to isolated environmental concerns, such as unsustainable industrial practices, individual sources of pollutants, overconsumption, and resource contamination unjustly affecting a specific population. The needs-based approach to sustainability differs from the other two discourses due to its proposal of large-scale solutions to eliminate the potential for ecological collapse. However, the position embodies the uncritical notion that humanity as a whole remains primarily culpable for destruction of vital resources and natural spaces, leading to widespread solutions, such as massive population reduction measures, that perceive society as a single unit responsible for ecological degradation. The vision of social ecology rejects both isolated, reformist policies that further institutionalize existing anti-ecological practices, as well as the defamation of humanity as a whole.

A social ecological approach necessitates a broad program of transformation that focuses on growth-driven economic arrangements, the presence of domination and hierarchy in contemporary societal structures, and the institutionalized justification for exploiting nature. It rejects the total defamation of the human species and instead holds responsible certain aspects of society, while embracing the overall potentiality of individuals and social groups—given the appropriate institutions and modes of interaction—to facilitate environmental regeneration and sustain ecological integrity (Bookchin n.d., 3-4). While all ecological problems inherently result from social injustices and poorly functioning institutional arrangements that inhibit harmonious relations between individuals and societies, humanity possesses the potentiality to construct and

maintain an ecological society. The character of the ideal social condition envisioned by the philosophy remains partially flexible due to the varying needs of societies, but must engender a respect for natural processes combined with the recognition of humanity's propensity for constructive creativity and purposive action (Bookchin n.d., 7-8). Anti-ecological institutions, although major factors in shaping societal behavior with the tendency to resist significant transformation, do not represent immutable entities unresponsive to the collective, deliberative restructuring efforts by a unified populace.

Moreover, society cannot be defined as a single entity, although both reform environmentalism and ecocentric paradigms discuss society as an unproblematic concept when examining the relationship between humanity and nature. Interactions between social groups, as well as between humans and the natural world, represent complex processes that can only be adequately understood by disaggregating society and examining its multiple components. Humanity remains divided into multiple societies each with varying roles in the construction of existing institutions, the perpetuation of dominating relations, and in ecosystem alteration. While society as a whole cannot be held culpable for environmental degradation, the social ecological approach seeks to critically evaluate the role of certain facets of contemporary social arrangements—particularly the growth-driven economy, political structures that consolidate power away from the general public through hierarchical relations, and other institutions that perpetuate unjust and exploitative natural resource use.

Social ecology opposes reform environmentalism, which seeks to explore greening measures that fit within existing embedded structures and practices. Furthermore, it rejects ecocentrism's lack of emphasis directed towards the specific organization of societies that plays a crucial role in the scale and severity of anthropogenic ecological damage. Articulating a unified

vision of the human species as primarily culpable for the destruction of nature additionally overlooks certain social groups that suffer domination, powerlessness, and oppression in current societal arrangements and do not share the same responsibility for environmental degradation. Thus, social ecology recognizes the interconnections between hierarchical arrangements that lead to an experience of domination among social groups and the institutions and ideologies that justify exploitation of the natural world. The emergence of ecological concerns from societal systems suggests that ensuring social justice represents an implied objective throughout the social ecological vision of sustainability.

First and Second Nature: Society's Capacity to Transform the Natural World

Nature and humanity remain intricately interlinked through evolutionary processes that have granted individuals and social groups the unique potential to alter ecosystems and the biological and political capacity for purposively reworking nature through human labor. The emergence of second nature—the realm of society—illustrates the historical process by which the human species has participated in natural and social evolution in order to develop a “fully *self-conscious* nature” (Bookchin 1989, 36) with the ability to creatively and deliberately transform ecosystems. Contrary to ecocentrism’s sense of equality between all living beings, social ecology suggests that humans represent evolutionarily unique and advanced beings based on their ability to alter the natural world and make nature more amenable to survival and advancement (Bookchin 1989, 36-38). Additionally, individuals acting within social groups possess the capacity to act purposively, intentionally changing the structure and behavior of ecosystems to facilitate the attainment of a specific objective for human well-being.

Social ecology draws a distinction between first nature, which depicts the perception of ecology as a pristine entity untouched by human activity, and second nature—the broad

depiction of society constructed through the process of forming social groups, organized arrangements, and institutions by altering the realm of first nature (Bookchin 1989, 26-28). Social ecological manifestations of sustainability—due to the complex view of ecology and human-nature interactions—necessitate acceptance that humanity possesses the distinct and ever-changing capacity to alter the natural world in order to make ecosystems more amenable to social well-being. This recognition of humanity's active position within the function of ecosystems must, however, be accompanied by a critical evaluation of the mechanisms utilized to transform the broader ecology, as well as the ultimate social, economic, and political objectives pursued by altering ecosystems.

Sustainability as expressed throughout the reform environmentalist literature and practice presents a myopic conception of the natural world and lacks a critical evaluation of the appropriate use of humanity's ability to alter nature in a coherent vision of sustainability. The goal-based discourse, for instance, seeks to further separate societal activity from nature in order to make the sphere of human praxis independent of biophysical constraints. Similarly, sustainability expressed through the needs-based framework emphasizes the incompatibility of the scale of human activity with planetary limits, discussing humanity's place within nature as relatively static, rather than evolutionary, and characterized by the propensity to destroy the ecological conditions necessary for human survival and prosperity.

Sustainability perceived as a fundamental right embodies a similar conception of nature, discussing the environment primarily in terms of resources and viewing ecological problems as problems of distribution. The rights-based discourse aligns with certain tenets of the social ecological position, such as a shared recognition that ecological concerns cannot be feasibly addressed without considering issues of justice, power, and equity in society. However, the

reformist discourse falls short of a full social ecological program due to its central focus on achieving economic equity through redistribution, the continued development of resources, and the elimination of harmful pollutants for certain disadvantaged groups without critically examining the existing economic arrangements, power structures fueling inequity, and the human-nature relationship as a whole. Despite its shortcomings, the discussion of sustainability grounded in the language of rights represents a potential discursive opening for social ecological prescriptions to enter into established environmental political dialogue.⁵

Sustainability under reform environmentalism perpetuates the notion of human domination and control over an exogenous environment necessary for the provision of resources for continued societal development. Solutions to environmental problems that seek to minimize the destructive consequences of industrial processes operating within the economic imperative of perpetual growth—particularly expressed by the goal-based discourse—do not critically evaluate the purpose of interventions into the natural world or the system of domination governing human-nature interactions. Instead, conventional environmental politics maintains the sources of control over nature and the forces contributing to ecological degradation, such as a growth-driven economy and industry focused solely on maximizing profit, by advocating minor changes in existing practice. Solutions originating within reformism attempt to remedy the negative effects of ecologically degrading human activity without challenging the structures, institutions, and processes involved in the destruction of nature (Bookchin 1991, 22). Traditional environmentalism does not challenge the presence of domination, hierarchy, and power inequities embedded within current institutional frameworks. It instead perpetuates anti-

⁵ The potential for social ecology to utilize the discourse of rights to influence environmental political decision-making and become a viable voice in discussions of sustainability will be more thoroughly examined in the concluding chapter.

ecological modes of practice through the adoption of isolated policy measures designed to preserve natural resources, while further cementing existing industries and economic arrangements as necessary elements of a functional society (Bookchin 1989, 14-16).

While numerous branches of conventional environmentalism, as well as some radical ecological discourses⁶, often seek to preserve certain aspects of first nature—natural space or resources seemingly untouched by anthropogenic activity—, social ecology views this type of environmentalism as perpetuating an artificial separation between the natural and social spheres. Instead, society (second nature) has been formed through deliberate action, particularly human labor, within the realm of first nature (Bookchin 1995, xi-xii). The development of functional societies, rather than representing a growing blight on the formerly pristine realm of first nature, can be examined historically as an innate, evolutionary process originating in the natural world. In this sense, social advancement and human interventions into the environment cannot logically be perceived as antithetical to maintaining ecological vitality, since “social life always has a naturalistic dimension” (Bookchin 1989, 26) and emerged as a “*natural* fact that has its origins in the biology of human socialization” (Bookchin 1989, 26). Second nature, based on the notion of evolutionary development, represents the ever-changing, but natural, process of constructing and shaping societies within the overarching framework of the broader ecology.

This notion rejects the reformist perspective that nature exists as a static entity. First nature, instead, exists as a relatively flexible set of complex systems amenable to transformation by human labor, the application of technology, and other methods of purposively reworking ecological process to meet societal needs (Bookchin 1989, 27-28). Natural evolution and social evolution remain inextricably linked and do not necessarily exist in a divisive relationship.

⁶ This critique extends to deep ecology’s predilection for wilderness preservation, highlighting the philosophy’s distinct separation of nature and society.

Humanity holds the dual potentiality to either employ the evolutionary capacity to change ecosystems in an egregious, anti-ecological, and dominating manner or to utilize the unique ability of transforming first nature in order to construct ecologically-oriented societies guided by principles of cooperation and well-managed ecosystem alterations. In this sense, the partial separation of the sphere of humanity from the natural world expressed through the use of labor to rework ecosystems does not represent an inherently negative aspect of societal and biological development. The ability of humans to distinguish from nonhuman entities within ecosystems allows for the realization of potentialities and the full utilization of consciousness, the ability to assign value and construct meaning, and the “capacity to restructure their environment purposefully according to their own needs” (Bookchin n.d., 5). However, human evolutionary processes are, by necessity, embedded within the realm of first nature, implying that efforts to completely detach anthropogenic systems from the natural world will result in alienation and further degradation.

Although modern society has witnessed the domination of society over the natural world and the consequent destruction of vital ecological systems, the recognition of humanity’s evolutionary advancement to a position capable of altering nature is not necessarily an environmentally harmful development. Distinguishing humans as evolutionarily superior to other elements of nature holds the potential to lead to increased complementarity by recognizing the need for diversity and a variety of agential roles in maintaining ecological and societal integrity. Social ecology rejects the focus of other radical discourses on the anthropocentric/ecocentric divide, suggesting that human superiority as a biological fact does not by necessity perpetuate domination and exploitation. Given this argument, the structure of societies and the institutional

arrangements constructed and embedded into culture through power dynamics determine the character of human-nature interactions.

Social ecology similarly critiques reform environmentalism for its adherence to political measures that implement greening practices into industrial processes, further solidifying existing economic arrangements, industries, and institutions that perpetuate anti-ecological action. A successful ecological program capable of eliminating unnecessary degradation and healing social fractures must focus on reclaiming the positive aspects of society's evolutionary development (Bookchin 1989, 26-28). This includes the ability to utilize human creativity, technology, labor, and other forms of purposive behavior to reconstruct the environment and society in an ecologically sustainable manner.

Social Ecology's View of the Ecosystem

The ecosystem exists as a definitive concept with clear demarcations and an identifiable structure, evolution, "history and inner logic" (Merchant 1992, 144) comprised of complex interactions between society and natural elements. The ecosystem is utilized as a model for constructing ecologically-oriented societies (Bookchin 1989, 172), since the presence of hierarchy and purposive domination—concepts integral to both social injustices and environmental exploitation—cannot logically govern behavior of nonhuman species in the natural world. The emergence of various forms of institutionalized hierarchy represents a specifically human phenomenon that arose gradually throughout societal history, became embedded in interactions, and can be eliminated through deliberative collective action (Dryzek 2005, 206-208). While the presence of hierarchies has been utilized throughout human communities to justify domination of specific groups, as well as exploitation of natural products

and processes to ensure the continued functioning of society, the realm of first nature remains devoid of hierarchical, dominating, or competitive practices (Dryzek 2005, 207).

The realm of first nature simply exists irrespective of human constructs and interpretations, existing as a relatively harmonious, self-supporting system that necessarily operates on the principle of “unity in diversity” (Bookchin 1989, 172).⁷ This notion implies a need for the interaction of diverse components to perpetually sustain the functioning of a complex system. Operating on the assumption that the “good of an ecosystem is in its functional capacities” (Scherer 2003, 342), sustainability cast within a social ecology vision entails the maintenance of ecosystem resilience, complexity, and diversity—characteristics that have been threatened by anthropogenic systems of perpetual growth and the exploitation of nature. Social ecology highlights the agential capabilities of humanity to either initiate the destruction of the ecosystem in which they operate through practices that overwhelm nature’s regenerative abilities or to become a vital, positively contributing component of the broader ecosystem. Humanity represents neither a pathological entity interrupting natural processes through the construction of societal systems (as often expressed by the needs-based sustainability discourse) nor a completely superior body capable of exhibiting total mastery and understanding of the natural world (as articulated by the goals discourse that employs human ingenuity and knowledge to restructure industrial practice). Social ecology conversely argues that human evolution and the construction of societies emerged gradually out of first nature and developed consciousness, self-awareness, and the ability to act purposively to alter ecosystemic constraints to anthropogenic advancement (Clark 1998, 420). In this sense, humans are simultaneously superior to natural beings through their developmental processes and also inextricably integrated with nature.

⁷ See also Bookchin’s (1987) discussion of unity in diversity as a necessary characteristic of functional ecosystems and societies.

Social ecology draws from the depiction of ecosystems as manifestations of complementarity and harmonious interaction in order to inform the ideal structure of second nature—human societies that have evolved within the broader ecological framework. A viably functioning ecosystem is depicted throughout the theory’s literature as an ideal model for the radical restructuring of society. Rather than creating a sense of universality and oneness across species lines, as advocated by the ecocentric position, environmental politics as a whole and the pursuit of sustainability in particular must allow individuals and groups to structure societies around the rational, well-managed, and ecologically-oriented alteration of the environment for societal benefit.

Applying the characteristics of first nature, specifically of ecosystems, to the envisagement of an ideal social condition further illustrates the notion that humanity emerged from within the realm of nature and gradually separated from the natural environment through evolutionary processes. Within social ecological thought, humans exist as the products of a lineage of organic evolution, emerging from within first nature and developing reflexivity and consciousness (Bookchin 1995, 134-136). Humans represent cognitively superior beings due to their ability to form conscious thought and self-awareness, construct ethical systems, and interact purposively both with other individuals and with the broader ecology (Bookchin 1991, 339; Bookchin 1995, 138). Recognizing the evolutionary uniqueness of the human species, while not translating this characteristic into a justification for domination of the environment, opens up the immense potentiality of humanity to alter nature and society in a positive, sustainable manner. It identifies the need for an ethic of complementarity in which diverse aspects of society and nature are valued for their contribution to the construction and maintenance of ecosystems.

Social ecology rejects the reform environmentalist position perceiving the value of natural resources and processes as contingent upon their utility, while also arguing against the ecocentric paradigm's articulation of intrinsic value present in nature beyond the realm of anthropogenic construction or interpretation. Suggesting that value possesses no meaning external to human construction and articulating the idea that humanity holds a unique evolutionary capacity to assign worth and construct meaning, any rights delineated to the natural world remain a product of human choice. Rights for nature are conferred by humanity through the processes of shifting ideologies, specific political actions, the practice of belief systems, and the creation of institutions to facilitate interaction between society and nature (Bookchin 1995, 138). Despite the rejection of the idea of inherent rights for nonhuman aspects of an ecosystem, social ecological discourse expresses the need to celebrate humanity's unique capacity for deliberative valuation and to utilize the ability to assign worth in the construction of a society guided by an ecological ethic. Based on this viewpoint, an ecological program fostering sustainability should focus on designing adequate institutions and forwarding ideologies necessary for the purposive anthropogenic valuation of nature. The type of society constructed and institutional form adopted significantly determines the population's ethical standpoint on assigning rights to nature and caring for nonhuman species.

An ecosystem contains human, nonhuman, organismal, and even non-sentient components necessary to sustain the functionality of the aggregate system. Society plays a crucial role in the formation of ecosystems since the maintenance of a vital, functional social condition requires both humans and nonhumans with distinct roles to interact cooperatively within a larger system in which all elements exhibit relatedness and interdependence. Using ecosystems as a model for the construction of an ecological society, a viable manifestation of

sustainability must take into account the need to sustain diversity and functional interactions among the constitutive components—human and nonhuman—of a specific ecosystem.

Sustainability articulated within reform environmentalist discourse does not engender the continued presence of diversity, but instead perpetuates hierarchical arrangements and the further detachment of humanity from its interdependence with the natural world. Sustainability within conventional environmental thought is often expressed as a mechanism for completely separating human systems from reliance on a limited environment in order to establish the conditions for perpetual growth.

Reimagining Sustainability: Sustaining Nature by Reconstructing Societies

Social ecology represents a critical ecopolitical discourse prescribing the elimination of inherently anti-ecological institutions that have hindered humanity's evolutionary capacity to exist harmoniously and care for the natural environment. However, it can also be defined as a "philosophy of potentiality" (Bookchin 1987, 13). By attempting to apply social ecology principles to the re-articulation of sustainability, this research will highlight and critique the imaginative possibilities of the theory and its ability to offer concrete prescriptions regarding the ideal objectives of sustainability and the processes and agents required in its pursuit. Social ecology removes sustainability from the goal of maintaining perpetual growth, instead seeking alternative mechanisms to realize humanity's full freedom and evolutionary potentiality to form harmonious ecological societies.

Impetus behind Social Ecological Sustainability

The impetus behind the pursuit of sustainability through the construction of an ecological society stems from social ecology's emphasis on the dual power of individuals and humanity as a whole to either initiate a fundamental transformation of structures, ideologies, and dominating

institutions or to perpetuate existing patterns of behavior. The concept of sustainability, as it is currently articulated and practiced through conventional environmental thought, lacks a critical engagement with the underlying causes of an unsustainable, ecologically degrading human condition, such as pervasive overconsumption, production processes based on the principle of endless development, poorly managed resource extraction, and the overarching cultural and economic adherence to perpetual growth as the primary indication of societal advancement.

Reform environmentalism does not possess the discursive or political tools to induce widespread structural and ideological transformation required to achieve a sustainable condition. It instead contributes to ineffective environmental politics by attempting to solve global ecological problems rooted in fractured societal institutions and modes of interaction through minor changes to isolated practices. Incremental reform, by failing to examine foundational structural causes of both social domination and ecological degradation, results in the belief that current societal, political, and economic processes can embrace an ecological program and foster sustainability through minor adjustments and the adoption of greening techniques. From a social ecology perspective, however, reform environmentalism does not challenge the inherent pathologies of existing structures and processes, but instead seeks to ameliorate specific instances of socially unjust or environmentally degrading practices symptomatic of anti-ecological institutional forces.

An additional factor guiding the pursuit of sustainability within social ecology stems from the recognition that the continuation of existing practices—particularly the adherence to economic growth, as well as increased production and consumption—will eventually lead to the collapse of ecosystems vital for preserving human well-being (Bookchin 1980, 64-66). While the potential for severe environmental crises partially stems from the egregious scale of human

systems, the most critical factor causing pervasive degradation results from the construction and institutionalization of systems of domination that justify exploitation of the natural world expressly for the benefit of specific social groups. Ideologies and structures of domination that characterize modern society have functioned as limitations on the natural diversity, self-sustaining capability, and vitality of the broader ecology. Institutions that perpetuate quantitative growth at the expense of qualitative advancement and ecological integrity have become embedded in contemporary culture and perceived as normal components of a functional society.

The imminence of ecological collapse coupled with the severity of the environmental problems faced by present and, presumably, future generations, holds the potential to operate as a unifying force. Environmental concerns could draw together populations within the broader society under a “general human interest” (Bookchin 1989, 69-70; 166), despite ostensible variations in the individual interests of diverse populations and social groups. The pursuit of an ecologically sustainable condition as an alternative to severe degradation, scarcity of natural products, and worsening social injustices stemming from elite control over power and resources represents an imaginative vision capable of unifying divergent populations under the common objective of fundamentally restructuring society (Bookchin 1989). Achieving this sustainable condition requires an elimination of the existing ideologies and modes of interaction penetrating societal relations that emphasize “mastery of nature” (Bookchin 1987, 49) and the fracturing of humanity into hierarchically organized classes, races, and genders that perpetuates domination. The goal of attaining sustainability and limiting ecological degradation can emerge as a unifying concept, creating a common interest and mending the deep fractures separating humanity into unequal, divisive groups and limiting the potentiality for collective action (Bookchin 1989, 169-170).

Objectives of Social Ecological Sustainability

Social ecological sustainability represents the process of sustaining diversity, harmony, and mutually beneficial interactions between humans and nature. Facilitation of the positive characteristics of humanity's evolutionary and political potential to construct and maintain ecological communities capable of ensuring the vital needs of all members of various societies in a just manner, recognizing society's interdependence with the natural world, and forming non-exploitative mechanisms for reworking ecosystems without damaging their overall integrity comprise the primary objectives of sustainability under social ecology. Operating on the assumption that society emerged evolutionarily from the realm of nature, anthropogenic alterations to ecosystems do not necessarily represent ecologically harmful interventions into previously pristine, functional systems. Given the widespread adoption of an ecologically-oriented value system coupled with the implementation of appropriate institutions, humanity holds the potential to develop communities around "a diversity that nurtures freedom, an interactivity that enhances complementarity, a wholeness that fosters creativity, [and] a community that strengthens individuality" (Bookchin 1995, 90).

Humanity plays a critical evolutionary role in the maintenance and transformation of ecosystems. Sustainability under a social ecological program would depart from the reformist focus on instituting political and economic mechanisms to constrain human behavior and limit destructive intervention into nature. Social ecological sustainability would instead focus on designing appropriate institutional avenues for human creativity and purposive behavior. It would implement methods for transforming natural systems and utilizing ecological projects to advance the well-being of human communities. The movement, instead of limiting human-nature interactions, would consider the specific ways in which individuals and groups utilize

environmental resources, as well as the endeavors being fulfilled through alterations to nature. The objective of sustainability, in this sense, revolves around constructing appropriate mechanisms and institutions to facilitate socially non-dominating and ecologically non-exploitative avenues for human-nature interaction. Both the means and ends of altering ecosystems must be transformed beyond the notion of employing natural resources in the objective of attaining perpetual growth. However, the power to rework nature in order to fulfill human needs must not be altogether demonized, since the ecological benefit or destruction gained from interventions into nature remains contingent upon the institutions and governing ideologies guiding the human-nature relationship.

While the social ecology literature takes a historical approach to explicating the transition from organic communities to societies replete with hierarchies and systems of domination that elicit injustice in tandem with ecological degradation (Bookchin 1989), pursuing a sustainable human-nature relationship cannot be achieved by facilitating a return to a past condition. Humanity remains enmeshed in a continual process of evolutionary development, as evidenced by the ability to construct increasingly complex societies and purposively rework ecosystems to conform to an imagined condition. Based on the adherence to an evolutionary theory of human advancement, the social ecological program must embrace a radical form of sustainability that pursues a fundamental rebuilding of society. Sustainability, thus, represents a struggle of social evolution embodied by the need to alter the course of human development in order to meet the ecological and social challenges posed by escalating degradation and hierarchically controlled, dominating political relations.

The social ecological narrative, attempting to locate contemporary ecological problems in a complex genealogy based on the historical emergence of hierarchy and domination, celebrates

a past condition in which organic societies interacted harmoniously with the natural world. However, the historical situation cannot logically be re-envisioned in contemporary society due to processes of human evolution that have transformed the realm of second nature into an ever-changing and completely different system than existed before the emergence of hierarchical forms of governance (Clark 1998, 430; Dryzek 2005, 206-207). Social ecology instead seeks to initiate a total deconstruction of existing institutions and modes of interactions that have embedded inequitable power dynamics and justified the degradation of nature through a global rhetoric centering on the need for economic development, continued growth, and intensive resource utilization to ensure well-being.

Although primarily a deconstructive political theory seeking to dismantle hierarchies and exploitative power structures, the concept of sustainability necessitates that some aspects of the present mode of existence or the current society-nature relationship should be sustained in this process of reconstruction. Despite the propensity of the theory to prescribe the dismantling of institutions and governing processes, the social ecological vision of sustainability does not represent a complete departure from the existing human and ecological condition. It instead critically evaluates the various modes of social interaction and interventions into the natural world, sustaining the aspects of humanity's evolutionary development or second nature that allow individuals to interact in ways that are non-dominating, construct non-exploitative ethical systems, and design institutions that uphold ecological values.

The political and environmental objectives of a social ecological sustainability program are overlapping. The discourse emphasizes sustaining and employing certain elements of humanity's evolutionary capacity, while also advocating deliberative action to sustain the natural integrity, diversity, and harmony of first nature—inherent characteristics of the broader ecology

threatened by current societal structures that reject devolution of power, compromise differentiation in nature and society, and embrace economic growth as the ultimate goal of all human activity. Sustainability and continued human development could be perceived as compatible goals by social ecology, but only if the notion of development is detached from its quantitative, growth-oriented conceptualization and instead manifested as a process of increasing human creativity, complexity, and complementarity with nature.

Sustainability within a social ecological framework must represent a transformative political process that seeks drastic change in the organization of communities and the institutions utilized as mechanisms for interaction between individuals in various societies, as well as between the social world and the ecology. Minor, incremental changes advocated by reform environmentalism to alter industrial practice, initiate economic incentives for environmentally neutral behavior, reduce population numbers, and address inequitable resource distribution policies might possess limited short-term environmental benefit, but are incapable of engendering a complete vision of sustainability. Reform environmental solutions are constructed, debated, and implemented within the discursive and institutional framework of the existing sociopolitical condition, making conventional environmentalism unable to confront the possibility of the presence of fundamentally unsustainable aspects of society. Discussions of sustainability originated within conventional environmentalist discourse, making debates and implementation of the concept enmeshed within the precepts and ideologies of the existing political and economic system (Bookchin 1989, 160-162).

While social ecology explicitly rejects the reform tradition as a viable solution to impending ecological collapse and the accompanying unjust social condition, the imaginative vision of the discourse can incorporate aspects of reformism into its prescriptions. Reform

environmentalism that simply seeks to ‘green’ existing industrial processes without challenging the overarching growth-driven economic framework that fuels overconsumption, unsustainable production, and inequitable distribution impedes the elimination of anti-ecological practices and the development of an alternative societal arrangement. However, disjointed attempts to heal a degraded environment and reduce anthropogenic ecological destruction could be integrated into the larger political struggle for transformed institutions and the total restructuring of societal relations expressed as central objectives of a social ecological sustainability paradigm.

For instance, isolated movements seeking to establish environmental justice for vulnerable communities could be valuably pursued and located within a broader framework acting against institutions and economic arrangements that perpetuate unjust distribution.⁸ In this sense, social ecology does not altogether condemn reform environmentalism’s efforts to ameliorate degradation. The theory views potential in various communities’ struggles against egregious resource depletion, inequitable contamination of natural spaces, and other environmental justice issues. It can incorporate these reform-based movements, as long as the objectives fall within the boundary conditions of a social ecological sustainability program and do not further solidify hierarchical power relations. The paradigm, however, highlights the significant potential for cooptation of environmental movements into the realm of existing governance structures and statecraft, which leads to a perpetuation of substandard solutions to ecological problems implemented hierarchically by the political elite (Bookchin 1989, 161).

Agents and Processes

Achieving sustainability requires a reworking of the meaning of the term, shifting the focus of the concept from its current objective of limiting human interaction with the natural

⁸ This topic will be further explored in the concluding chapter addressing potential political openings for radical ecological discourses to influence environmental politics.

world or minimizing the environmental effects of societal activity to an emphasis on critically evaluating the ways in which humanity intervenes into natural processes and the ultimate ends being pursued through the intervention. Social ecology disaggregates concepts such as humanity and society into their multiple manifestations (Bookchin n.d., 2-3) and seeks alternative modes of operation that preserve certain diverse, harmonious, evolutionary, and environmentally beneficial aspects of human activity while rejecting other forms of existence. The theory seeks to eliminate growth-driven economic systems due to their propensity to instrumentalize both natural products and human labor purely as resources for continued economic prosperity and growth (Bookchin 1980, 64-68).

Moreover, the theory devotes particular attention to the agents and processes involved in the transition to a sustainable society. Social ecology articulates the notion that power, social interactions, and patterns of behavior that influence human-nature interactions become embedded through institutions. Institutionalized political and social processes play a critical role in shaping the vision of environmental programs, the realization of the imaginary, and the shape of the pursued outcomes. The discourse, therefore, articulates a central focus on the processes, agents, and mechanisms through which environmental political decisions occur—a trait shared with the other two radical ecological perspectives—expressed by the idea that environmentally beneficial practices can only occur in the presence of non-dominating social relations. The just organization of the social, political, and economic spheres can consequentially lead to the elimination of institutionalized domination utilized to oppress certain groups, as well as the rejection of ecological exploitation.

Due to the tendency of institutions to become embedded in culture and ethics, social ecology promotes deconstructive transformation, rather than incremental reform that challenges

specific practices but upholds the skeleton of the current system. Stemming from a recognition that cultural practices and ethical systems tend to become cemented into the political processes governing society, social ecology emphasizes the resistant nature of existing structures, institutions, and social relations. The theory prescribes a process of deconstruction that seeks to eliminate unnecessary forms of domination, dissolve hierarchies, and minimize oppression that, in combination, leads to social disharmony and ecological degradation. Current modes of interaction coupled with the institutions shaping political behavior remain resistant to significant transformation due to their historical embeddedness, but are not immutable to collective efforts at change.

Focusing on the construction of small, localized communities designed around the natural demarcations of the surrounding ecosystem and organized democratically according to the needs of individual citizens represents an alternative method of organizing societies. Sustainability that ensures the fulfillment of vital needs—of both human and nonhuman entities in the ecosystem—would allow citizens to fully participate in society and assist in the maintenance and regeneration of the broader ecology. Based on a social ecological perspective, sustainability is simultaneously an ecological and a political objective, since maintenance of a vital ecosystem requires harmonious, non-dominating human relations and the implementation of institutions capable of limiting all forms of exploitation. The process of creating “unity in diversity” (Bookchin 1989, 172) within the movement to pursue sustainability necessitates that agential power and access to appropriate political avenues to articulate that power must be granted to all individuals within a public through a system of participatory democracy. Furthermore, creating ‘bioregions’—societies structured around definitive ecosystemic boundaries—would allow for human activity

to be “tailored to the carrying capacity of the ecosystems in which they are located” (Bookchin 1980, 42).

Structuring human activity around the bioregional unit requires significant devolution of power and the elimination of state-based governing mechanisms—institutions that elicit domination through hierarchical decision-making and grant the citizenry a voice only through representation (Biehl 1988, 1-4). Under social ecology’s vision, the traditional state would be replaced with localized communities capable of governing in a direct democratic form. Political and economic institutions that distance the general population from mechanisms of governance must be eliminated and replaced with small-scale, decentralized networks of democratic participation in order to construct functional, vital communities. Decision-making power would be localized, respecting the inherent agency of all individuals to participate in the construction and maintenance of the society and ecosystem in which they operate. A form of participatory, strong democracy envisioned by social ecology can emerge as a response to impending ecological collapse, since crises with potentially collective effects operate as political openings for coalition building, cooperative action, and the emergence of new forms of citizenship and democratic participation (Barber 1984, 130-134).

While social ecology has been critiqued as logically unsound due to its perpetuation of the notion that decentralized governance would inherently lead to a sustainable society, the discourse can respond to the criticisms by clarifying the centrality of democracy in the ecopolitical vision. Decentralization does not, by necessity, result in societies driven by ecological ethics and practices (Bookchin 1980, 52-54). A strong form of democracy that liberates the citizenry from anti-ecological interactions, specifically economic relations contingent upon growth and over-consumption, and that allows individuals to exercise their full

agential capacity in public dialogue and decision-making is a required element of a successful ecological program. Social ecology does not simply “attempt to expand citizen involvement in the processes of the...State” (Biehl 1988, 10), but seeks to reinvigorate the public sphere as a vital political space with the potential to collectively ameliorate ecological degradation. The theory embraces the unknown potentiality of the human evolutionary condition by prescribing democratic systems, but does not suggest that ecologically beneficial transform will occur by necessity or without deliberative collective action.

Devolving power from the state and separating societies into bioregional communities encourages social cohesion around a common interest in constructing a viable, functional society and solving ecological problems that threaten the well-being of the citizenry (Biehl 1988, 53-54). Individual autonomy and freedom must be embedded within the democratic process, which centers on the ability of a public to structure communities around both the needs of the citizenry and of the ecology. Additionally, in order to ensure full freedom, as well as encourage human activity that cultivates ecological integrity, the process of labor and the maintenance of economies must be critically evaluated and transformed. Social ecology seeks to eliminate large-scale production systems, growth-driven economic principles, and private property. Localized production of goods using materials, technologies, and natural resources provided by the unique bioregional and societal composition in which the community operates represents the ideal form of labor in a sustainable society (Bookchin 1990, 204).

Transforming labor, restructuring industrial processes in an ecologically beneficial manner, and fundamentally changing the composition and interactivity of societies illustrates social ecology’s intent to significantly alter the mechanisms employed for humanity to produce and distribute material necessities (Bookchin 1987, 77-78). While all three reform

environmentalist discourses articulating various manifestations of sustainability seek, in principle, to construct an environmental program that places equal value on three interlocking spheres—the environment, society and the economy—, social ecology perceives the current economy as a hindrance to the achievement of a sustainable condition. The growth-oriented principles of the existing economic system perpetuate the predilection to equate quantitative development with overall human well-being for present and future generations.

Economic ideologies additionally shape the overall objectives of a reformist sustainability paradigm by emphasizing the need to sustain vital resources required to maintain continued development. Conventional environmentalism's efforts to achieve sustainability within a growth-oriented system and to posit perpetual quantitative advancement as an objective compatible with long-term ecological integrity displays the entrapment of the sustainability concept in a growth-driven framework. Social ecology prescribes a deconstruction of current economic relations, which promote greed and unjust social relations, encourage egregious resource consumption unsupportable by biophysical processes, and perpetuate inequalities. Based on this theory, the establishment of the market economy has resulted in an accentuation of the worst traits of human evolutionary processes and has subsumed humanity's potential for creativity, harmony, and complementarity under the constructed need for growth (Bookchin 1987, 78-79). In exchange for the existing capitalist economy, in which discussions of sustainability must necessarily be formulated in terms of profitability and development, social ecology forwards a vision of a "moral economy" (Bookchin 1987, 78).

Focusing on the deep structural causes of ecological degradation and a fractured human-nature relationship, social ecological sustainability can only occur following the elimination of capitalist economic systems. Clark (1998, 431-434) explains that replacing growth-driven

economic systems with the moral economy articulated through social ecological discourse entails localizing production processes and structuring industry, energy extraction, and consumption around the unique characteristics of the given ecosystem. Under a moral economy, systems of community supported agriculture and other cooperative methods of food production and distribution would utilize local technology/knowledge without causing unnecessary degradation of the surrounding environment (Clark 1998, 431-434). A moral economy would consist of the elimination of private property that perpetuates hierarchical, inequitable social relations. Instead property can be designated and controlled by democratically organized local associations invested with the political power to determine the best interest of the community as a whole.

Recognizing that in order to transcend the current growth driven economic system a viable alternative must be envisioned and articulated as a feasible condition, social ecology prescribes replacing large-scale economies distanced from the natural environment with “productive communities” (Clark 1998, 434). These localized communities would cooperatively control production and work within the capacity, available resources, and unique character of the surrounding ecosystem to sustain both human well-being and ecological integrity. The transition to a decentralized type of society, in which political power can be exercised by all individuals and in which production processes are determined communally, will necessarily occur gradually and will require carefully designed and implemented institutions that encourage democratic modes of social interaction and an ecological ethic guiding interventions into nature.

Designing and implementing political mechanisms to engender a sustainable condition requires restructuring social arrangements and structures in order to empower individuals to transition into active members of a democratic public capable of community and ecosystem management (Biehl 1998, 56-58). A necessary objective of social ecological sustainability

centers on engendering full freedom, characterized by the ability of all individuals to engage in a process of social learning, self-management, and the creative potential to construct alternative societies and solve environmental concerns. Transitioning towards decentralized communities with localized production and democratically organized political relations represents a gradual process that requires an educative component to empower citizens with the ability to cooperatively manage their community and ecology. In this sense, the construction of localized, radically democratic processes represents a drastic transition enhancing individual freedom and realizing humanity's capacity for harmonious existence.

Social ecological sustainability as a whole would embrace humanity's unique ability to alter ecosystems and would focus on constructing a society that allows for the assigning of value to natural elements and the preservation of biological (and social) diversity, complementarity, harmony, complexity, and other qualities expressed throughout first nature that have been occluded by anti-ecological processes in contemporary society. A social ecological pursuit of sustainability would necessitate a universal movement that fosters principles of justice and non-exploitative interactions with the natural world, while uniting a disparate humanity under a common vision. However, the decentralized character of the theory's prescriptions allows for the presence of multiple movements to restructure societies through democratic methods. The transition to a sustainable existence does not represent a predetermined, formulaic endeavor. Instead, the social ecological vision can consist of the aggregated and mutually enforcing efforts of individual communities to design a condition that embodies an ethic of complementarity regarding the interactions of social groups and interventions into nature. The exact composition of the future ecological society remains contingent upon an open process of democratic dialogue

that shapes political institutions and activities based on the shifting needs of an agential public (Bookchin 1991, 343-344).

As evidenced by the preceding discussion, social ecology and ecocentrism, although forwarding some similar critiques of reform environmentalism and the practice of sustainability in contemporary environmental politics, hold contrasting views regarding the agents and processes required in the transition towards sustainability, as well as the ultimate objective of the societal transformation. While ecocentrism focuses on altering the ontological and axiological underpinnings of the human-nature relationship, social ecology stresses the institutional aspects of unsustainable practice and prescribes a radical downscaling of human communities, economies, and governance structures. Social ecology, in this sense, rejects ecocentrism's preoccupation with "inward direct action" (Devall and Sessions 2007, 194) that alters the ethical standpoint of the self towards the natural world and instead attempts to posit institutional reconstruction and rescaling as the optimal mode of achieving sustainability.

Given this distinction between the two theories, the following chapter will transition to a discussion of ecofeminist conceptualizations of sustainability. The chapter will explore the potential of ecofeminism to balance between ecocentrism and social ecology in its conception of sustainability by articulating a combination of both perspectives grounded in gender-based analyses of the logic of domination and interrelated logic of exploitation. Ecofeminism simultaneously challenges the ideological, cultural, and philosophical roots of anti-ecological behavior by redefining ethics towards the natural world and the structural/institutional origins of exploitation through its critical evaluation of power relations. Stemming from the lived experiences of women and other marginalized groups, ecofeminist thought possesses significant

potential to articulate tangible solutions for reworking both the cultural and structural aspects of exploitation and to inform political activism directed towards achieving sustainability.

Chapter Five Combining Theory and Lived Experience: Towards Ecofeminist Sustainability

Ecofeminism forwards a complex philosophical standpoint capable of deconstructing existing notions of domination grounded in patriarchal, anti-ecological interactions and conceptual frameworks. The theory possesses a transformative capacity to reconstruct ethical systems and encourage collective movements seeking tangible change. First, ecofeminist discourse envisions an alternative ethic based on nurturing care directed towards human communities and the ecology in order to transcend the dualistic thinking accompanying patriarchal relations that justifies the systematic devaluation of both women and nature. Second, the ecofeminist perspective represents an inherently political paradigm that translates philosophical prescriptions for an alternative ethic into activism directed towards institutions of domination that perpetuate female disempowerment and degrade the natural environment.

Since ecofeminism presents a multi-faceted theory inclusive of a variety of discourses based on the philosophical principles of non-domination and grounded in women's lived experiences, this theoretical analysis will describe the foundational principles of ecofeminism that cross the boundaries between the numerous subfields of the theory. It seeks to apply the foundational tenets of the paradigm to a critique of existing conceptions of sustainability and a fundamental reconceptualization of the idea. In addition to articulating the common features of the various branches of ecofeminism, this chapter will focus primarily on the emancipatory potential of radical/cultural ecofeminism and the structurally transformative capacity of socialist ecofeminism in order to explore the possibility of constructing a feasible ecopolitical program to rethink sustainability. The radical/cultural branch of the theory can be applied to an evaluation of sustainability within the reformist tradition through its focus on both the constructed and empirical connections between the subjugation of women and the degradation of nature. Socialist

ecofeminism, similarly suggesting that gender-related power inequities influence humanity's relationship with the natural world, seeks to eliminate the social production of domination perpetuated through patriarchal, capitalist, and other male-oriented power structures. Explored together, radical and socialist ecofeminism hold the potential to provide a coherent framework to reconceptualize sustainability and envision a transformative ecopolitical movement.

While liberal ecofeminism provides valuable analysis of the connections between gender inequities—particularly the lack of a female perspective in the formulation of the science and politics behind environmental management (Merchant 1990, 100-101)—and unsustainable practice, the discourse prescribes the deliberate inclusion of women within current political and economic processes as the solution to environmental concerns and gender inequality. Viewing the existing economic system and governance processes as adequate tools for ameliorating gender-based injustices and ecological degradation places the precepts of liberal ecofeminism within the reform tradition. The emphasis on incremental change and the lack of critical reflexivity regarding the capacity of current institutions, ideologies, and practices to effectuate a successful ecological program suggests that the liberal branch of the theory, while valuable for illuminating connections between gendered societal relations and environmental concerns, is an inappropriate conceptual framework for radically re-imagining sustainability.

Despite differing prescriptions advocated by the various branches of the theory—diverse solutions including incremental changes within the existing political system (liberal ecofeminism), a radical transformation of culture and language relating to gender and nature (radical/cultural ecofeminism), and the construction of socialist institutions to eliminate unjust power distribution (socialist ecofeminism)—the branches all strive for a common objective. As a whole, the theory seeks to break down the structural and discursive barriers preventing women

from full participation in political, economic, and social processes, while simultaneously regenerating the natural world to ensure the vitality of all beings—both human and nonhuman (Merchant 1990, 105). Prescribing the transformation of existing structures of domination, such as growth-centered economic systems and patriarchal ideologies, ecofeminist solutions to environmental concerns revolve around the adoption of an alternative ethic both on an individual and societal scale.

The ecologically-oriented ethic advocated by ecofeminism stems primarily from women's unique experience, construction of knowledge, and sense of care for other individuals and for the natural world. In addition to promoting an ethic of care, ecofeminist theory explicitly rejects dualistic thinking that separates humanity from the environment, as well as men from women, while positing the innate superiority of one aspect of the dualism. Based on these common elements of the theory, an ecofeminist form of sustainability must remain grounded within the overarching goal of eliminating dichotomies that articulate the idea of female inferiority and create systems that translate dualistic thinking into justification for the domination of women and exploitation of nature. Moreover, sustainability within the ecofeminist discourse must simultaneously address the institutional forces of domination and the ethical assumptions fueling exploitative behavior.

Ecofeminism displays significant potential for envisioning an ecologically sustainable condition based on principles of non-domination, holistic thinking rather than the perpetuation of constructed dualisms, and the empowerment of women to participate in political movements to fundamentally transform human-nature interactions. By focusing on the structures that normalize domination, the theory can propose concrete solutions for deconstructing existing institutions that perpetuate ecological degradation and gendered social divisions. The radical discourse holds

the potential for constructing a political program to pursue sustainability by discussing the ways in which societal arrangements and interactions between social groups, particularly men and women, effect humanity's perception and treatment of nature. Ecofeminism's predilection for dismantling cultural ideologies that embed dualisms into language, thought, and political practice can be applied to an expansion of agents involved in constructing a sustainable society, as well as a reevaluation of the objectives of an effective sustainability paradigm.

Main Tenets of Ecofeminism and a Critique of Sustainability within Reform Environmentalism

Despite the complexity and diversity of perspectives within the ecofeminist paradigm, the foundational tenets of the theory as a whole, as well as the specific principles expressed by radical and socialist ecofeminism, can be coherently applied to rethinking sustainability.

Ecofeminism represents a multi-faceted, inclusive philosophy that examines issues of the cultural and linguistic perception of gender, the constructed and biological relationship of women and nature, the structural forces contributing to gender inequities and environmental degradation, and the overall interplay between social domination and ecological exploitation. The theory critically evaluates the interconnections between societal interactions and the realm of nature. It suggests that the oppression of certain social groups is directly related to society's conceptualization of the broader ecology and its sense of ethics pertaining to human-nature relations.

As a whole, ecofeminist theory articulates three foundational tenets that can be explored as possible avenues for reconceiving the sustainability concept. First, the large body of literature centers on the intersections between gender and nature. Ecofeminists disagree whether the connections between females and the natural world represent linkages embedded in human biology and, therefore, should be embraced as sources of empowerment or are constructed through language and systems of domination that must be challenged. Despite this lack of

consensus, the idea that women and the natural world share a common experience of exploitation and devaluation is a central stream of thought running through most variants of ecofeminism.

Second, ecofeminism discusses the “logic of domination” (Warren 1996a, 21) that translates dualistic thinking into a justification for inequitable relations as inextricably intertwined with a logic of exploitation that posits nature as inferior and promotes human mastery over the natural world. Ecofeminism—particularly radical/cultural versions of the theory—emphasize the role of value dualisms that cast males and females, as well as humanity and nature, in a dichotomous, non-complementary relationship. The unequal worth placed on one aspect of the dualisms is embedded within existing practices and systems of domination that normalize both male superiority and the idea of human control over the broader ecology. Third, the ecofeminist tradition articulates women’s potential to form social movements and participate in political processes in order to decrease environmental degradation⁹, highlighting the transformative capacity of ecofeminism. In this sense, ecofeminist theory holds significant value as a philosophical standpoint explicating the origins of domination and exploring the interconnections between female oppression and exploitation of the environment (Cudworth 2005, 120), as well as operating as a framework for political movements originating in common experiences of oppression.

Gender and Nature

Ecofeminism discusses the domination of women and the exploitation of nature as mutually constitutive forms of oppression that stem from dualistic thinking embedded in cultural practices and institutions. The association of women with nature occurs within an “oppressive

⁹ Along with discussing women’s role in political and social life, ecofeminism also addresses the need to include other traditionally oppressed groups (racial minorities, impoverished populations, etc.) as active agents.

conceptual framework” (Warren 1996a, 20) that posits distinct differences between females and males, as well as between nature and society, and utilize these distinctions to justify the perception of women and the natural world as innately inferior to males and the realm of society. The hierarchical thinking and logic of domination that accompanies the creation of dualisms transforms a simple recognition of gender differences into a justification for oppression and the articulation of superiority. Systematic domination consequentially limits the potential to perceive both aspects of the dualism as complementary and occupying necessary roles to maintain a functional society and ecosystem. In contrast to social ecology, ecofeminism does not seek to explicate a single historical cause of this logic of domination. It instead highlights the necessity of critically examining interconnected forms of subjugation and exploitation that exist in contemporary society in order to structure political movements around the elimination of oppressive institutions and ideologies (Lahar 1996, 5-6).

The connections between gender and nature, while embedded in culture and engrained in shared conceptual orientations, are also visible on an empirical scale (Warren 1996, xii-xiv). On a conceptual level, women have been historically associated with the natural world primarily due to their tangible role in biologically and socially reproductive activities (Roach 1996, 52-54). The female gender has been defined as emotional (rather than rational), nurturing and responsible for caretaking (rather than involved in practices of production), and grounded in bodily experiences grounded in nature (rather than possessing the capacity to participate in intellectual/political life) (Plant 1987, 214; Warren 1996, xii-xiv). The characteristics historically associated with women have become conceptually embedded in a dualistic culture that perceives female traits as innately inferior. Due to the constructed relationship between women and natural

processes, the inferiority and accompanying justification for subjugation and exploitation have been extended to ecological systems.

On a practical level, women—particularly those living in impoverished communities dependent upon a thriving ecosystem for basic subsistence—often disproportionately bear the burden of ecological degradation. In relation to development, Shiva (1989; 2005) argues that, by advocating perpetually increasing growth, Western patriarchal models of development that have been exported into non-industrialized nation-states have resulted in the adoption of technologically advanced mechanisms for resource extraction, food production, and other forms of ecosystem alterations. The universalization of this growth-oriented development model has led to the devaluation of localized knowledge and methods for environmental management—practices that were typically perceived as a valuable form of labor specifically practiced by women, since females represent the main producers of subsistence products in most non-industrialized regions (Davion 2001, 238-240; Shiva 1990). The universal pursuit of technologically advanced, patriarchal forms of development originating in the Western world possesses dual negative consequences. First, the valuation of productive labor has led to a subsequent devaluation of women's subsistence-based and reproductive activities. Second, the development strategies focus predominantly on economic growth and necessitate unsustainable practices that severely deplete resources and compromise the regenerative potential of the surrounding ecosystem.

In this sense, feminism and a concern with ecological sustainability exist as innate partners in the struggle to transcend current institutions, practices, and ideologies that uphold a patriarchal culture (Spretnak 1990, 9). Current human-nature interactions remain entrapped within a system that encourages the mastery of nature by human populations in order to allow for

societal advancement and continued development. Viewing the control over the environment as a crucial indication of human superiority and evolutionary advancement (Spretnak 1990, 9-10), contemporary culture has sought a separation from the natural world through ideologies of mastery, as well as through institutions that decrease humanity's ability to experience nature in a non-dominating manner. The establishment of patriarchal economic systems, governance processes, and modes of thought that value the idea of control and mastery has fueled humanity's estrangement from nature. It has additionally resulted in the widespread perception of the natural world as a set of unpredictable processes that require management and anthropocentric domination in order to extract and utilize environmental resources for human benefit.

Despite shared recognition that women and nature hold a common experience of domination and that females and the natural world have been unjustly characterized as inferior, irrational, and unpredictable, various branches of ecofeminism remain divided on the reality of women's connection to the environment. Radical ecology perceives females as innately grounded in natural systems through biological processes, such as childbirth. It, therefore, seeks to celebrate the unique female embeddedness within nature as a source of unity that grants women a common ability to encourage ecological regeneration. The perspective suggests that women are "unique agents...of history" (King 1990, 120) that have the potential to initiate social and political movements based on concepts of stewardship, non-dominating interactions, and an ethic of care. Closeness to nature represents a source of power and transformative agency.

Socialist ecofeminism, on the other hand, diverges from the cultural orientation by focusing on structures perpetuating dualistic thinking and domination. The discourse suggests that constructed gender differences embedded in institutionalized forms of oppression have been articulated through social structures, economic arrangements, and political processes, rather than

existing as immutable biological facts (Merchant 1990, 103-104). Ecological concerns originate within patriarchal capitalist systems that advocate the objective of attaining endless quantitative growth at the expense of ecosystemic integrity. Consequentially, patriarchal arrangements separate the domestic sphere of labor and social reproduction from the realm of profitable production that drives development, creating distinct gender roles responsible for the maintenance of each sphere of activity. Based on socialist ecofeminism, links between gender and nature are constructed and grounded within these patriarchal institutions and values.

Some ecofeminist theorists, particularly authors operating in the radical ecofeminist paradigm, argue that discussions of humanity's relationship with the natural world remain an integral component of a coherent feminist philosophy and cannot be excluded from the analysis of domination (King 1990, 106-108). Due to a common causal link in patriarchy, the struggle of equity and justice for women, as well as other oppressed groups, is intertwined with political movements seeking to eliminate exploitation of nature. Domination of women and the devaluation of the broader ecology that leads to egregious use of natural resources to fuel continued economic growth both stem from hierarchical social arrangements and oppressive structures that isolate women away from full participation in the public sphere, minimize their agential capacity, and similarly subjugate the natural world. The presence of dualistic thinking that conceptually separates men from women and associates the female gender with the realm of nature plays a crucial role in constructing systems of domination that oppress both women and the environment (King 1990).

Logic of Domination as a Logic of Exploitation

Ecofeminist discourse stresses the central role of conceptual dualisms and the corresponding institutions and ideologies in constructing hierarchical relationships between

males and females, as well as between humanity and nature. However, Warren (1987; 1996a), suggests that the mere presence of dualistic ontologies based on the differential experiences of the genders and the unique capabilities of humanity in comparison to the natural world does not necessarily result in institutionalized exploitation. In order to become a source of oppression, dualistic thinking must not only recognize differences, but must also articulate an oppositional relationship between the two categories (Davion 2001, 234-235). Rather than recognizing complementarity within diversity, oppressive systems invoke dualistic thinking to articulate the inferiority of one aspect of the dichotomy—a characterization that has been historically applied to the female gender and to the natural world. Additionally, the dualisms must be located within an overarching “logic of domination” (Warren 1996a, 21) suggesting that the axiological differences between the two concepts justifies the mastery of the inferior category by the superior one (Warren 1996a, 20-24).

Taking into consideration the cultural and axiological associations connecting women with nature, coupled with the institutional framework that systematically devalues, objectifies, and commoditizes both the female gender and the natural world, a comprehensive sustainability program that does not critically address concerns of gender domination is philosophically incomplete and practically ineffective (Merchant 1987, 5). The domination of women and the exploitation of ecological processes in order to fulfill human needs and maintain a growth-driven economic system can be captured within “the same general framework” (Davion 2001, 236). Women and nature remain subjugated by the same hierarchical institutions that seek to commoditize female reproductive labor and environmental resources within a broader system perpetuating continued economic development. This system of domination devalues women and the natural world by perceiving both entities as objects rather than agential subjects.

Environmental solutions must be posited in response to structures of domination that concomitantly subjugate women and the environment within a patriarchal ideology promoting mastery and subordination.

In order to deliberately challenge the dualisms perpetuating gender domination and ecological exploitation, ecofeminist literature prescribes viewing the male/female dualism as existing beyond biology by recognizing the partially constructed nature of gender and articulating a conception of the environment that is subjective and contextual, rather than static and immutable (Lahar 1996, 10). The ecofeminist project identifies the necessity of reworking political institutions and economic arrangements that instrumentalize nature and measure the value of the broader ecology by the worth of its natural resources for human use. In addition, the theory rejects existing structures and relations that similarly commoditize humans, measuring the worth of individuals in reference to their contribution to systems of production that fuel economic growth. An economic system reliant upon quantitative development as the primary indicator of well-being that embraces growth as the ultimate objective of both labor and interactions with the environment devalues forms of labor traditionally located within the female sphere of activity. Consequentially, the issue of development must necessarily be considered in an ecofeminist analysis of sustainability, since the conceptual and axiological divergence between production and reproduction represents a tangible manifestation of dualistic thinking that further embeds male/female and society/nature dichotomies into social relations.

Within the reform environmentalist tradition, attempts to achieve sustainability have revolved around efforts to increase the efficiency of industrial practices, redistribute environmental resources, and make human activity compatible with the physical limits of the natural world. The ultimate objective of constructing the ecological and social conditions to

allow for perpetual human development is a central component of reformist sustainability. Ecofeminism, however, holds the potential to critique conventional sustainability discourses for their attempts to further separate the realm of society from its dependence on the natural world, specifically through increases in efficiency and the application of advanced technology to decrease reliance on regenerative natural cycles.

The separation of humanity from nature within existing conceptualizations of sustainability fortifies the society/ecology dualism by viewing environmental limits as constraints on human advancement. Defining sustainability as a detachment from biophysical barriers to development, as expressed in the goal-based discourse, furthers the devaluation of reproductive labor and women's role in subsistence activities. Additionally, a central focus on economic growth constructs an ideology that prioritizes individualism, greed, and relations based on competition—a patriarchal axiology that stifles the feminist vision of interactions driven by the complementarity of individuals with diverse experiences, the creation of systems of trust and mutual support, and an ethic of care. The logic of domination that systematically articulates female inferiority and justifies domination based on women's supposedly inferior characteristics directly coincides with a similar logic of exploitation that perpetuates aggressive mastery over natural processes. The “twin dominations of woman and nature” (Warren 1996a, 33) exist in a mutually-reinforcing, cyclical relationship.

Building Movements: The Transformative Capacity of Ecofeminism

Based on the interconnections between women's experience of domination and the exploitation of the natural world, ecofeminism represents an inherently political standpoint. While addressing the philosophical aspects of dualistic thinking and cultural constructs of gender, ecofeminism also emphasizes the practical implications of the paradigm's principles. Not

only have women unequally experienced domination that extends into the realm of perpetuating ecological degradation, they also hold the potential to induce significant political transformation. Ecofeminism argues that women's lived experiences under systems of domination present the female population with a unique standpoint regarding oppression and constructing solutions to social injustice and ecological exploitation (Davion 2001, 239-240). In this sense, ecofeminism promotes political activism and the construction of social movements around issues of environmental concern that affect the natural world and compromise the quality of life experienced by all individuals. Although originating in a common ethical framework that rejects systems of oppression, ecofeminism additionally exists as the product of the personal experiences of women (Lahar, 1996). Since ecofeminism stems from women's lived experiences, the theory has the potential to induce meaningful practical change in the lives of the oppressed as well as in humanity's relationship with the natural world.

Ecofeminism as a political movement has arisen organically from women's shared experiences of domination in response to environmental concerns, such as resource depletion and environmental contamination, often exacerbated by attempts at continued economic growth. Working against "women's exclusion from culture" (Plumwood 2006, 55) and political life due to the conceptual and empirical isolation of females to the realm of nature, ecofeminism mandates the inclusion of women's voices and perspectives in society. However, in order to avoid the criticism of essentialism that describes women as possessing a distinct 'nature' and identical set of characteristics, the theory prescribes that a political arrangement grounded in ecofeminist principles critically considers the multiplicity of female voices contingent upon diverse individual experiences (Cuomo 1996, 48-50). In this sense, there is no single feminist perspective that applies to establishing solutions for ecological degradation and gender-based

domination (Warren 1996a, 32-34). Instead, political movements to eliminate environmental destruction can be constructed around the unique experience of a certain community, while also remaining nested within the encompassing precepts of the broader ecofeminist philosophy.

While ecofeminist theory and scholarly literature deals primarily with philosophically grounded ethical questions regarding the domination of women and exploitation of nature, ecofeminist activism represents a body of practice. Some theorists have suggested that political movements with expressly articulated ecofeminist purposes that formulate explicit connections between women's issues and ecological degradation are rare (*See* Cuomo 1996). Other authors, however, argue that movements capturing any female concern that intersects with environmental issues can be described as part of a broader ecofeminist project (*See* Lahar 1996). Disagreement over whether social movements must proactively identify as ecofeminist activists in order to be considered part of the broader ecofeminist discourse or whether moments of activism that arise organically from a shared concern can retroactively be defined as expressions of ecofeminism represents a prominent contention within the paradigm. Despite this divergence of viewpoints, the theory as a whole possesses a transformative component that encourages women's inclusive participation in political life.

Designing movements that reflect the precepts of ecofeminism displays the potentiality of the theory to challenge the dualistic thinking that surrounds both the cultural perceptions of gender and the interactions between humanity and the natural world. By granting women a sense of agency and the power to invoke societal transformation through deliberative involvement in social/political processes, participation in activism challenges the conventional conceptual location of women in the sphere of nature. Political movements addressing issues that intersect gender relations and ecological exploitation grant females the opportunity to exert agency within

the public realm traditionally dominated by patriarchal constructs (Lahar 1996, 4). Activism, while partially integrating women into the political sphere, also allows them to articulate concerns from a vantage point external to the mainstream, male-dominated governance system by using non-traditional mechanisms, such as non-violent protests and grassroots mobilization, to invoke transformation.

Seeking an ethic of inclusivity that incorporates previously silenced voices into the realm of society and political processes (Warren 1994, 188), ecofeminism promotes a unification of disparate individuals under a common experience of oppression and a shared interest in preserving ecological integrity. Ecofeminist activism creates an inclusive political arena that opens up the field of agential participation for marginalized members of society to present alternative standpoints pertaining to human-nature interactions. Warren (1994) suggests that emerging ecofeminist activism can combine with other movements, such as those related to anti-militarism efforts, community-level environmental concerns, and social justice issues in order to create a transformative project to remove interlocking forms of oppression and exploitation. Movements that undertake single-issue solutions to ecological and social concerns fail to address the overall system of domination and recognize interrelated forms of exploitative praxis (Lahar 1996, 2). Politically and conceptually isolating environmental degradation from social concerns—an occurrence typical of reform environmentalist solutions to ecological crises—limits the potentiality of a sustainability program to discuss the regeneration of nature in conjunction with the construction of non-dominating social systems capable of sustaining a vital ecology.

Re-imagining Sustainability: An Inclusive Project for Transformation

Ecofeminism holds the theoretical potential to critically evaluate objectives of the sustainability project within reform environmentalism, highlighting the fundamental incompatibility of achieving a sustainable condition within existing structures and ideologies centered on maximizing economic development. The discourse draws connections between conventional quantitative development and the prevalence of social injustices, along with increased ecological degradation that heavily affects the devaluation of women. The theory re-imagines the objectives of sustainability, suggesting that an ecofeminist version of the concept revolves around the goal of actively sustaining well-being for human and nonhuman elements of a vitally functioning ecosystem. The objectives of a coherent ecological program must necessarily embrace the deconstruction of hierarchical thinking and challenge embedded systems of domination.

Considering that the ecofeminist paradigm emerged from a combination of theoretical inquiry into the linkages between gender and nature and the actual experiences of women interacting within systems of oppression, the discourse possesses significant potential to offer a philosophical construction of an alternative ethic grounded in the philosophical precepts of the tradition, as well as to present environmentally-oriented political objectives for ecopolitical activism to pursue. Philosophically, the theory explores the historical, conceptual, and institutional roots of gender oppression and its interconnectedness with ecological exploitation. The theory also articulates an experiential component that highlights the transformative potentiality of the paradigm to operate as a political movement, empowering women—and society in general—with the tools necessary for ameliorating severe ecological degradation and deconstructing institutions and cultural constructs that perpetuate gender-based social injustices.

Ecofeminism can envision participatory movements towards a sustainable condition that promote a fundamental reconstructing of political practices and ethical systems, structuring interactions around the notion of care and the ecological concept of complementarity through diversity.

Impetus behind Ecofeminist Sustainability

The impetus behind transitioning towards a sustainable condition revolves around the propensity of ecofeminism to illuminate connections between societal oppression and exploitation of the natural world. While the discourse recognizes that contemporary society suffers from significant ecological concerns that have widespread social effects, such as unprecedented degradation, resource scarcity in certain geographical areas, and excessive pollution predominantly stemming from industrial practice, the discourse emphasizes the increased vulnerability of oppressed communities and populations to ecological destruction. Incorporating issues of social justice into an ecological program for seeking sustainable human-nature interactions, the theory suggests that women and other disadvantaged groups remain particularly susceptible to shifts in climate patterns, concerns with scarcity, and the contamination of vital natural resources (Davion 2001; Shiva 1990). Ecofeminism additionally addresses the issue of the disproportionately, unjustly distributed risks and benefits of development models based on perpetual growth that exploit both the natural world and human labor as resources necessary for continued prosperity and development. Sustainability, under the ecofeminist paradigm, could be constructed and pursued as an alternative to conventional modes of development that would allow for the quality of life of all individuals in a manner that encourages social justice and sustains ecological integrity.

The ecofeminist project for regenerating nature and promoting social justice, while emphasizing the increased vulnerability of historically dominated groups to ecological

destruction, the theory also highlights oppressed populations'—particularly women's—significant potential for embracing conceptions of knowledge and human-nature interactions that transcends the conventional discourse of mastery and control. The ecofeminist paradigm emphasizes that the inclusion of previously devalued perspectives in decision-making processes regarding the management of natural resources and the overall human-nature relationship can fuel the transition to an ecologically sustainable condition. The incorporation of alternative forms of knowledge, such as those often held by women, non-industrialized communities that interact with nature for purposes of subsistence, and other historically oppressed social groups, could move environmental management techniques from the realm of the patriarchal domination of nature and into a relationship guided by an ethic of care and mutual benefit.

Along with the practical implications of an ecofeminist paradigm, such as women's increased vulnerability to the negative consequences of ecological degradation and their potential role in solving environmental concerns, the pursuit of ecofeminist sustainability can also stem from the desire to construct an alternative ethic informing human-nature interactions. The ecofeminist standpoint that can be applied to discussions of re-conceptualizing sustainability identifies distinct differences between the notion of instrumental value and utility value regarding the perception of the natural world. Ecofeminist sustainability can recognize that nature provides an instrumental worth to humanity due to society's partial embeddedness within natural processes and basic need for environmental resources for survival and well-being. However, the theory cannot accommodate the utility-oriented view of nature that perceives the ecology as existing at the control and domination of human requisites, the application of technology to natural resource extraction, and the overall desire for growth that currently dictates the character of human-nature interactions (Cuomo 1998, 47-48; Kronlid 2003, 91-98). The

reconceptualization of value granted to the broader ecology further displays the ecofeminist impetus behind pursuing sustainability, which revolves around constructing an ethical foundation and social arrangements that promote the use of environmental resources in a manner that facilitates nature's innate propensity for complexity, interrelatedness, and regeneration. Human interactions with the environment should additionally support non-dominating, social relationships that allow for equitable human flourishing (Cuomo 1998).

Objectives of Ecofeminist Sustainability

The central objective of ecofeminist sustainability represents the creation of the ecological and social conditions necessary for ensuring that a quality existence can be actively maintained by all individuals, including nonhuman elements vital to overall ecological integrity. Holding overall quality of life and non-dominating, qualitative advancement as achievements that all individuals and social groups should have the opportunity to pursue, ecofeminism grounds the ultimate objectives of sustainability in a broader discussion of maintaining human well-being in a just manner. Both the philosophical underpinnings of the paradigm and the political movements that operate under ecofeminist principles connect the integrity of the ecosystem with human survival and quality of life for all beings (King 1990, 118).

Considering that the primary process being sustained within ecofeminist sustainability is the generalized well-being of all individuals—humans and nonhuman elements of the ecosystem—sustainability within an ecofeminist framework must be situated within an overarching ethic of care extended through society and human-nature interactions. Incorporating a “vocabulary of care” (King, R. 1996, 83) into environmental ethics would capture humanity's potential for an emotional connection and sense of stewardship directed towards other human beings and the natural environment. While the aspect of emotional connectivity to other

individuals and to nature as a whole is conventionally located within the realm of the female experience, the ethic can be adopted by all members of society and utilized to construct ecological institutions and interactions based on the principles of ecofeminist sustainability.

By prescribing the ethic of care as the optimal mechanism for achieving sustainability and ameliorating ecological degradation, ecofeminism shifts the focus within environmental ethical thought from its emphasis on assigning rights to ecological beings comparable to the rights held by humans towards an ethic of nurturing. The ethic of care is more consistent with ecofeminist principles than the notion of deliberately conferring rights to natural elements, since it embodies the principle of respecting differences central to ecofeminist thought (Curtin 1996, 71-72). The notion of nurturing the environment suggests that care and ethical treatment can be extended to nonhuman elements despite fundamental differences from humanity. While assigning rights attempts to equalize the value of human and nonhuman aspects of an ecosystem, practicing an ethic of care respects the diversity and differentiation present within the broader ecology (Curtin 1996, 70-72). In this sense, individual humans and nonhumans do not have to display similar characteristics that make them equal subjects of rights in order to be nurtured, valued, and sustained. Instead, ecofeminism celebrates “uniqueness and difference” (King, R. 1996, 84) of various societal and natural aspects contributing to ecosystem functionality.¹⁰ The discourse recognizes that complementary interactions of diverse components play a crucial role in sustaining ecological integrity and social vitality.

Implicit within the objectives of ecofeminism is the notion that discussions of ecological sustainability must be detached from the notion of quantitative development. Shiva (1998) argues that development, as it is expressed throughout Western society as synonymous with

¹⁰ Also see Cheney (1994) for a thorough discussion of ecofeminism’s celebration of difference.

perpetual economic growth, represents an inherently patriarchal concept. Perceiving development and continued growth as the primary indicators of human well-being and the ultimate objectives of a sustainability paradigm results in a dual form of commodification (Shiva 1989, 23-24). Within this process of commodification, natural resources are perceived only in instrumental terms as valuable products for human consumption and continued growth. Additionally, human labor becomes a commodity necessary for the maintenance of a growth-driven economy—a factor that results in the devaluation of women’s reproductive labor and an inflated sense of worth granted to material production (Shiva 1989). The societal and ecological contributions of the realm of biological and social reproduction are subsequently made invisible by patriarchal economic and political systems (Cudworth 2005, 137; Merchant 1990, 103), since the value of the contributions cannot be quantitatively measured and expressed within a growth-driven economy.

An ecofeminist sustainability program, on the other hand, must recognize that processes of production and reproduction both play a crucial role in maintaining a vitally functioning society, allowing all individuals to achieve qualitative advancement and ensuring the long-term viability of interactions between society and the ecology. Sustainability must be discussed in terms of increasing qualitative development for all individuals, social groups, and natural aspects of a vitally functioning ecosystem. Current trends within environmental political literature and practice that advocate pursuing the concept of sustainable development display reform environmentalism’s entrapment within patriarchal modes of thinking contingent upon perpetual growth. Despite some efforts in the reformist tradition (specifically within the rights-based discourse) to discuss issues of social justice concomitantly with environmental concerns, attempts to locate a program for ecological integrity within the current growth-oriented system

implied by the term ‘development’ further embed existing structures of patriarchy, domination, and inequity within societal interactions and human-nature relations. An effective sustainability program based on ecofeminist precepts must examine the deep structural origins of ecological degradation and recognize the matrix of oppression embedded within the idea of development. In essence, ecofeminist sustainability must examine the potential for qualitative advancement among human communities and the maintenance of a sense of nurturing directed towards the natural world, rather than the pursuit of quantitative development and an ever-increasing standard of living set by the developed world.

Based on the necessary detachment of sustainability from objectives of perpetual quantitative advancement, an ecofeminist sustainability paradigm does not solely seek to achieve an ecological and social condition that can viably exist on a long-term basis. While ecofeminism does not disregard the value of preserving natural integrity for the benefit of future generations, comprehensive sustainability programs must also focus on creating a condition that provides quality of life that can extend across societal boundaries, such as gender, race, and class. The objectives of sustainability, in this sense, deal equally with temporal scale (i.e. sustaining resources and ecological integrity for future generations) and spatial scale by overcoming interlocking systems of domination in order to ensure that all existing communities experience the benefits of ecological sustainability through tangible advancements in quality of life.

Operating within the assumption that female oppression and ecological exploitation remain entrapped within a common framework of domination that includes interlocking agents such as the natural world, women, and other disadvantaged social groups, the objectives of sustainability must revolve around deconstructing the matrix of domination. Sustainability, therefore, must be perceived and articulated as an overtly political movement with the ultimate

purpose of eliminating all manifestations of oppression (Merchant 1987, 18). Considering that various forms of domination remain intertwined within a broader system of axiological dualistic thinking that perpetuates devaluation of certain social groups, as well as the environment, an ecofeminist sustainability program would necessarily seek to revive the notion of complementarity through diversity.

However, in order to avoid falling into the trap of essentialism it also must be recognized that, despite the interconnections between various forms of domination, individual women experience different forms of oppression. In this sense, an ecofeminist movement should not make generalizations regarding a common female experience, but should instead construct a political space contingent upon inclusive dialogue and networks of relations that can accommodate a wide variety of interlocking, but individually unique forms of domination in a single ecopolitical project (Plumwood 1994, 78-80). Ecofeminist sustainability would represent an emancipatory undertaking that incorporates a vast array of female viewpoints and experiences, deconstructing cultural constructs and tangible institutional forces perpetuating a systematic devaluation of women, nature, and other social groups deemed inferior by androcentric modes of interaction.

Agents and Processes

Ecofeminism suggests that a cultural and ethical foundation advocating non-dominating practices and the stewardship of nature remains a necessary component of an effective political movement towards social transformation (King 1990, 114-115). Radical/cultural ecofeminism and socialist ecofeminism can be logically combined to create a unified political movement that takes into consideration the cultural origins of environmental exploitation, perceptions of gender, and social justice issues, while also emphasizing the transformative aspects of the theory by

focusing on the structures and institutional arrangements perpetuating domination. A focus on cultural conceptualizations of the natural world combined with socialist ecofeminism's emphasis on distancing political and economic operations away from a growth-oriented paradigm possesses the capacity to initiate long-term social change in an ecologically beneficial direction.

Furthermore, the theory undertakes critical ethical discussions dealing with the ontological underpinnings of domination, as well as the historical development of environmental degradation and oppressive gender relations. Despite its overt focus on ethical considerations and the establishment of a coherent theoretical framework explicating sources of injustice and the interaction between gender inequities and environmental exploitation, ecofeminism has also emerged as a political movement connected with the philosophical precepts of ecofeminist scholarly discourse. As a critical political movement demanding justice for oppressed populations and the adoption of a caring ethic towards the broader ecology, ecofeminism can create an inclusive sustainability program that provides previously disparate, subjugated voices with the opportunity to participate in the public realm and motivate political action to address environmental concerns. Operating simultaneously as a radical ecopolitical philosophy that systematically examines the roots of oppression and exploitation and as a form of grassroots activism that emerged organically from a common experience of oppression (King 1990, 118; Lahar 1996, 1-4), ecofeminism seeks to articulate the interconnections between social problems and pervasive ecological degradation. Issues of domination based on gender, economic institutions that encourage perpetual growth as the measure of advanced society, the contamination of resources from poorly managed industrial processes, and overall destruction of the natural world cannot be logically perceived as separate concerns. Consequentially, political solutions isolated to ameliorating a single issue should be challenged (Lahar 1996). Instead, the

activist component of ecofeminism seeks to illuminate the linkages between social and ecological problems and necessitates widespread action that takes into consideration interlocking concerns and addresses the system of domination/exploitation as a whole.

Reform environmentalist conceptualizations of sustainability remain inadequate for concomitantly combating the oppression of certain social groups, particularly women, and the destruction of ecosystems. The reform tradition advocates governance solutions that address isolated instances of ecological degradation, pollution, or excessive natural resource extraction through policy measures designed to affect only certain industries or other aspects of society responsible for significant degradation without fundamentally interrupting economic growth. Sustainability cast within the goal-based discourse best reflects the tendency of the reform tradition to encourage small-scale solutions to environmental problems through marginal increases in efficiency deemed as profitable for existing industries. Sustainability within the goal paradigm emphasizes solutions revolving around the application of advanced technology to increase efficiency in industrial processes. Valuing efficiency as the primary solution, the goal-based discourse views environmental concerns as stemming from the ineffective utilization of resources in production practices—a standpoint that illuminates the discourse's myopic conception of the natural world and of the profound societal effects of ecological degradation.

Perceiving sustainability as a basic need to ensure continued human survival and development opens up the possibility for more radical, widespread solutions. However, the literature and policy recommendations falling within the needs-based discursive category do not display a predilection for inclusive solutions and completely lack discussions regarding the interrelations of social justice and ecological vitality. Instead, social justice issues become subsumed under a reactive discourse that utilizes the ideas of necessity and environmental crises

as justification to overlook short-term inequities and injustice in order to sustain ecosystems for the survival of the human species as a whole. Sustainability under the discourse of rights recognizes the interrelations between social concerns and environmental problems, highlighting the increased vulnerability of impoverished societies to the effects of resource consumption and environmental contamination by economically privileged groups. Although the rights discourse represents the most promising paradigm in terms of its compatibility with an ecofeminist perspective, the rights-oriented body of literature fails to include oppressed populations as critical stakeholders and active agents in the process of achieving sustainability. It instead prescribes the systematic removal of structural and environmental barriers to full freedom primarily through economic programs initiated by the developed world, rather than the democratic participation and empowerment of all individuals through organic political movements and activism.

Operating on the notion that the emergence of a growth-driven economic system has resulted in the distinct separation of gender roles into the spheres of production and reproduction, an ecofeminist manifestation of sustainability must seek to heal the fractures between male and female labor processes. Merchant (1990) argues that economies based on endless growth, accumulation, and resource consumption have lessened the historical complementarity of the realms of reproduction—both biological through childbirth and social through processes of education and socialization—and economic production. Since the production of tangible, profitable goods possesses higher value in the current societal arrangement, female labor isolated to the domestic sphere of reproduction lacks measurable value and remains perceived as an inferior aspect of labor that does not contribute to overall growth and prosperity. Given the separation of gender roles and the devaluation of traditionally female labor, a sustainability

program must take into consideration the construction of value and work to disempower institutions that measures worth solely by the ability to induce profitability. Sustainability, as it is currently expressed throughout the reformist tradition, displays an entrapment in patriarchal, growth-driven modes of thinking, as evidenced by its central focus on making environmentally beneficially activities profitable and economically appealing.

Sustainability under the ecofeminist body of thought necessitates the inclusion of previously oppressed voices, particularly those of women, into the democratic process, bringing female concerns and knowledge into the agential realm of public dialogue (Sandilands 1999, 28-30). An ecological program seeking sustainability must additionally detach itself from reformist orientations of increased efficiency in industrial processes and solutions to degradation based on a belief in humanity's technological progress. Instead, diverse forms of knowledge and connections with the natural world must be embraced as legitimate sources of information for resource management decisions and the implementation of practices to regenerate the environment. Expanding on the notion of accepting varying types of knowledge, Code (2006), operating within a feminist perspective, describes the necessity of constructing alternative epistemologies that transcend traditional manifestations of science.

The discussion of recognizing and legitimating diverse systems of knowledge can be applied to the rejection of dualistic thinking in exchange for an ethic that values complementarity through diversity and creates an expanded sense of agency. The ecofeminist paradigm, in order to effectuate sustainability, can combine with the precepts of the expanding field of ecology in order to encourage the replacement of dualistic thinking with genuinely ecologically-oriented modes of thinking. Developing human-nature interactions contingent upon an ecological ethic requires the construction of communities in which all individuals possess agency and in which

various forms of knowledge are valued for their contribution to further understanding the implications of anthropogenic action on ecological processes. This process of the ecofeminist standpoint necessitates that women and other oppressed groups collectively demand the incorporation of their voice and agential power within the political sphere, relocating females solely from the realm of nature and positioning them also within cultural/political activity.

Creating communities that value multiple forms of knowledge and allow for full participation in ecopolitical decision-making fuels the recognition that humanity is “embedded in both nature and culture” (Plumwood 2006, 55), breaking down the constructed barriers between the nature/culture and male/female conceptual dualisms. It allows for inclusive, ecological thinking to take place within societal operations, rejecting hard distinctions between social groups and between society and the environment. Incorporating principles of ecology suggesting that the integrity of a system can be only be maintained by the harmonious interaction of diverse components, ecofeminism (Warren 1997, 315)—by adopting ecologically-oriented thinking—deconstructs divisive perceptions towards gender, perceiving “categories of human difference as particulars rather than as oppositional qualities” (Lahar 1996, 10).

Democratically organized communities must be organized around principles of trust and knowledge-sharing in order to effectively manage the natural world in a socially just, non-dominating, and ecologically beneficial manner based on an ethic of care and nurturing. Rather than attempting to meld the concepts of sustainability and quantitative development into a coherent political project, as articulated by reform environmentalism, the ecofeminist version of sustainability can recapture the concept of development, presented instead as a qualitative form of advancement. Development in this sense would include the maintenance of equitable well-being for all humans and non-humans in conjunction with a respect for the unique set of

knowledge and experience held by all individuals and social groups. Deconstructing conventional science, which forwards patriarchal objectives of establishing perfect knowledge of the natural world and the accompanying mastery of ecological processes, represents a central tenet of the reconceptualization of knowledge and ecosystem management within the ecofeminist sustainability project.

A program for ecofeminist sustainability must recognize the value of diverse bodies of knowledge as valid, appropriate mechanisms for a type of ecosystem management that allows for socially non-dominating relations, ecologically regenerative subsistence practices, and the maintenance of vitally functioning communities. As a whole, an ecofeminist sustainability program can embrace both ecofeminism's philosophical precepts centered on the construction of non-dominating systems, as well as the paradigm's predilection for inducing societal transformation through activism grounded in the lived experiences of women and other oppressed social groups. The formation of political movements around ecofeminist principles represents a powerful mechanism for gradually ameliorating ecological degradation and encouraging sustainable practices, while the philosophical precepts provide a viable framework for the construction of an alternative ethic of interactions.

Chapter Six Constructing the Boundaries of the Sustainability Concept

Rethinking Sustainability

As discussed throughout this thesis, sustainability exists as a highly ambiguous, although generally accepted, concept within contemporary environmental political thought. It has been embraced throughout various environmental theory literatures and political practices as a viable framework to pursue governmental and social solutions to widespread ecological concerns. The notion of sustainability attempts to balance competing demands between three interlocking systems—the environment, society, and the economy—by articulating the interconnections between the spheres of activity and the potential for creating political solutions that ensure the continued vitality of the three interacting systems. Attempts to make economic prosperity, social vitality, and environmental integrity compatible objectives represents a significant undertaking in environmental political thought and practice that has garnered widespread support as the optimal framework for explaining, debating, and solving environmental concerns.

However, despite the principle of granting equal priority to the three systems mentioned above, the sustainability literature tends to prioritize economic and social elements of the idea. Efforts to solve environmental degradation simply become mechanisms for increasing profitability through efficiency, enhancing prosperity by ensuring a steady supply of natural resources for human use, and dealing with issues of equity through discussions of just distribution—a development that has led to concern over the political value of sustainability. The ecological components of sustainability have been subsumed under the ultimate objective of achieving perpetual human development within the physical constraints of the natural world. In response, radical ecopolitical standpoints can challenge the reform tradition's conception of sustainability by re-envisioning the objectives of the concept, the impetus behind its pursuit, and

the agents and processes involved in the transition from current human activity towards a sustainable condition.

After laying out the prominent streams of thought in the reformist environmental tradition and exploring a reconceptualization of sustainability through the lens of the three radical ecological discourses, a concluding discussion is needed to address potential critiques of the radical paradigms that might hinder their ability to pursue the envisioned sustainable condition. In addition to identifying possible weaknesses of the paradigms, this concluding chapter will outline the potential political openings available for radical ecological positions to enter into existing conversations regarding the pursuit of sustainability. Possible rupture points—areas of existing discourse in which the voice of radical perspectives can be inserted to influence the definition and implementation of sustainability—must be explored in order to better understand the feasibility of re-imagining sustainability through alternative paradigms.

To begin, the concluding chapter will forward several critiques of the radical ecological discourses in order to anticipate the theoretical and practical challenges each paradigm might confront when attempting to re-imagine sustainability within the current reform-oriented discursive context. Identifying weaknesses unique to each alternative discourse will allow for a coherent discussion of the theory's ability to re-conceptualize sustainability and produce tangible societal transformation in an ecologically beneficial direction. Second, the chapter will suggest possible political openings—rupture points in current reformist environmental discourse—that could allow for radical paradigms to tangibly influence the objectives, agents, and processes identified in discussions of sustainability.

While the three radical ecological discourses discussed throughout this thesis possess the potential to significantly alter the discursive landscape in which the sustainability concept has

been located, identifying points of entrance or political openings in which alternative paradigms can enter into the broader conversation represents an essential component of the project to re-envision sustainability. This chapter will, therefore, explore the possibility of ecocentrism to join into the emerging dialogue advocating precaution in human-nature interactions, social ecology's partial compatibility with the rights-based discourse that addresses issues of equity and justice in environmental concerns, and ecofeminism's ability to combine with localized movements and provide a coherent ethical framework for a transformative politics.

Evaluating Ecocentrism

Ecocentrism's capacity for envisioning and achieving a re-conceptualized form of sustainability—one that revolves around sustaining ecological integrity and eliminating substantive anthropocentric value systems that systematically subjugate and degrade the natural environment—can be challenged due to its broad emphasis on altering human-nature relations. Ecocentrism emphasizes the need to deconstruct existing ontological and axiological foundations of ecological degradation, but lacks a critical discussion of the institutional and structural changes necessary to embrace an ecocentric ethic and expand the scope of personal identities to include relations with nature. Ecocentric thought leaves out a crucial analysis of the types of institutions, power relations, and societal arrangements that perpetuate anti-ecological values and worldviews, narrowing the purview of the theory and limiting its potential to formulate a coherent program for sustainability.

Similarly, the ability of the paradigm to re-articulate sustainability is weakened by its ontological predilection for discussing humanity as a unified entity and, consequentially, ignoring the structural divisions within society that must be accommodated within a complete sustainability project. In this sense, the discourse focuses on the detachment of modern society

from its foundation in the natural world at the expense of critically evaluating intra-societal divisions, tensions, and sources of domination that contribute to environmental exploitation and oppressive conceptions of value. The claims of misanthropy often leveraged against ecocentric philosophy partially stem from the theory's prioritization of ecological integrity over a discussion of social injustice, inequitable power relations, and other forms of societal harm that result from unsustainable practices. By perceiving humanity as a whole concept, ecocentrism fails to take into consideration the societal fractures that lead to inequality and unequal culpability for environmental destruction.

However, despite the shortcomings of the position—particularly its lack of attention directed towards social processes—ecocentrism still holds significant potential to re-envision sustainability and encourage ecologically-oriented interactions. In order to articulate a coherent sustainability project, the paradigm must first draw explicit connections between the objectives of ecocentric sustainability and the mechanisms for achieving these endeavors. Based on this notion, this chapter later argues that the precautionary principle can provide ecocentrism with a concrete, relatively well-developed mechanism for pursuing a unique form of sustainability consistent with ecocentric ideals.

Evaluating Social Ecology

Social ecology holds vast potential for rethinking sustainability and prescribing environmentally-oriented solutions based on the radical reconstruction of hierarchical, anti-ecological institutions. Despite Bookchin's explicit focus on informing a political movement to dismantle certain societal structures and envision an alternative society, the social ecology paradigm has recently become embroiled in a battle of competing ecological philosophies (Clark 1998, 436-437). Discussions of social ecology, particularly the academic writings following

Bookchin's articulation, have failed to emphasize the theory's transformative potential. While Bookchin defined social ecology as a combination of political philosophy investigating the origins of hierarchy and normative theory intended to fuel drastic change, the majority of debates surrounding social ecology have consisted of criticisms leveraged against the historical accuracy of its genealogy of domination (*See Rudy 1998*) and its overall discussion of human evolutionary processes that privileges society/second nature (*See Albrecht 1998; Eckersley 1998*). Overall, critiques of social ecology and the accompanying responses heavily focus on the philosophical, ontological underpinnings of the theory rather than on its concrete prescriptions for change (Clark 1998, 436).

While the formation of a coherent theoretical paradigm requires a thorough and reflexive articulation of the ontological foundations of the perspective, the academic dialogue discussing the philosophical soundness of social ecology cannot be pursued at the expense of a critical evaluation of its transformative potential. Discussions of the theory's historical accuracy have severely overshadowed critical dialogue regarding the application of its principles to current ecological and societal concerns. Recent scholars in environmental political theory have focused on evaluating social ecology's description of the emergence of hierarchy and its beliefs concerning the evolutionary potentiality of human societies to alter ecosystems¹¹—concepts that affect perceptions of humanity's appropriate place in nature.

However, little academic work has extended the discussion of hierarchy, domination, and evolution to explore the political possibility of a social ecological paradigm to effectuate tangible transformation within societies.¹² As a whole, the body of thought responding to Bookchin's

¹¹ See the multiple contributions in Light's (1998) edited volume.

¹² Biehl's (1998) work attempting to apply Bookchin's notions of decentralization and libertarian municipalism to current political and economic arrangements is an exception to this trend.

theory revolves around the paradigm's perception of humanity's historical and biological place in nature, lacking a discussion of the feasibility of transitioning from the existing political and ecological condition to the societal arrangement consistently envisioned throughout the theory. In order to re-conceptualize sustainability and construct social, political, and economic arrangements based on social ecological precepts, intellectual and practical effort must be directed towards analyzing the possible applications of the radical discourse.

Along with the lack of connection between the philosophical underpinnings of the theory and its ability to influence political transformation that limits the empirical potential of the paradigm, another possible weakness hindering social ecology's ability to re-imagine sustainability stems from its view of change. Social ecologists argue that the reworking of institutional forces represents the primary mechanism capable of inducing transformation towards an ecological society. The discourse grants central consideration to issues of power dynamics that become institutionalized and normalized through political activity and structures. While the emphasis on the role of power in ecological degradation and social justice provides a coherent critique of reform environmental perspectives that often ignore these dynamics, the discourse has been criticized for its inadequate discussion of the relationship between changing institutions and altering individuals' interactions with nature (Gunderson 1998, 199-202). In this sense, although social ecology can respond to the flaws of ecocentrism and reformism by adding a discussion of structural forces and power relations, it does not thoroughly consider the linkages between constructing non-hierarchical institutional arrangements and the cultural/attitudinal transformation required to create an ecological society. This lack of connection between the philosophical underpinnings of the paradigm and its empirical feasibility could result in a

corresponding gap between the vision of a sustainable condition and the mechanisms required to realize the objective.

Evaluating Ecofeminism

Ecofeminist thought displays a divergence between the theoretical conversations regarding issues of domination and the actual practice of ecofeminism emerging organically from women's experiences with oppression and environmental concern. Within the body of theoretical literature, ecofeminist scholars seek to examine the ontological and epistemological shortcomings of the current patriarchal society, discussing the linkages between environmental degradation and the near universal subjugation of the female gender. Outside of the theoretical debate over connections between gender oppression and ecological exploitation, a burgeoning movement has emerged comprised of women united against oppressive institutional forces and excessive environmental degradation that threatens the well-being of their families, communities, and the human species as a whole. However, the organically emerging movements and the philosophical, ethical, and ontological underpinnings of ecofeminist theory have not been adequately interlinked. Thus, ecofeminism is often perceived as an all-encompassing category that can capture a wide variety of ecological critiques and gender-related social movements under its precepts, leading to confusion over the meaning of the paradigm and its appropriate role in political action (Lahar 1996, 1-2).

Current disagreements abound over the exact meaning of ecofeminism. Within this debate, some authors suggest that the ecofeminist category relates to all forms of activism that seek to address gender inequality and ameliorate ecological exploitation, while others suggest that explicit connections between the experience of oppression and the logic of domination must be articulated. Based on this notion, in order for ecofeminism to forward a coherent program for

sustainability, it must work to unite disparate movements claiming ecofeminist principles under a common philosophical and ethical position. The paradigm must be able to create a transformative movement that combines theory and lived experience into a comprehensive ecopolitical project (Merchant 1987).

Without a unifying framework to guide various movements, efforts at pursuing an ecofeminist conceptualization of sustainability can only take place within fragmented movements working within the existing anti-ecological, patriarchal system to induce reformist changes that address environmental issues affecting a specific community. For instance, ecofeminist groups have often successfully accomplished legislative regulation of harmful pollutants within a given community, but lack widespread mobilization linked back to a unified movement with a shared ethical foundation. Despite these shortcomings, I argue later in this chapter that the broad scope of ecofeminist thought holds the potential to function as a middle ground between the philosophical solutions of ecocentrism and the institutional transformations advocated by social ecology and to promote an inclusive, empirically feasible conceptualization of sustainability.

Political Openings for Ecocentrism: The Precautionary Approach

Due to ecocentrism's recognition of the limits of human knowledge, as well as its attempts to reject anthropocentrically-oriented societal interactions with the natural world, the theory can utilize emerging applications of the precautionary principle to environmental decisions in its effort to rethink sustainability. The precautionary principle represents a political approach that prioritizes the minimization of environmental risk over the maximization of human development in decision-making processes (Emerton et. al. 2005, 254). While the concept remains on the fringes of ecopolitical thought and the governance of natural resources, the

academic literature on the subject is expanding. Additionally, it is increasingly being perceived as a viable option in environmental policy processes, especially in the context of international resource management decisions and in situations characterized by high levels of complexity and scientific uncertainty (Whiteside 2006, 146-150). The precautionary approach implies that human activity and ecological vitality are interconnected, as evidenced by its attempts to accommodate the complexity of the natural world and the unforeseen consequences of existing human-nature relations into policy-making and resource management.

An ecocentric manifestation of sustainability can find openings in discussions of precaution, since both concepts challenge the compatibility of continued human development and ecological vitality. As a whole, the precautionary approach directly addresses issues of risk, dealing with the uncertainty of science and the incompleteness of human knowledge regarding the consequences of anthropogenic activity for ecosystem integrity (O’Riordan and Jordan 1995, 207). Ecocentrism similarly embraces the recognition of uncertainty and incompleteness regarding humanity’s capacity for understanding the complexities of the natural world, highlighting the role of unintended consequences in environmental degradation. Based on this notion, advocating the precautionary principle in the environmental policy arena and emphasizing the need to balance ecological vitality with societal interests can provide ecocentrism with an avenue for inclusion in environmental decision-making processes.

Furthermore, due to ecocentrism’s intensive focus on transforming the self and changing the dominant cultural worldview that perpetuates environmental destruction, adoption of the precautionary principle represents a logical addition to ecocentric thought that can provide the paradigm with tangible solutions to unsustainable practice. Focusing on initiating a process of “environmental social learning” (Whiteside 2006, 146) that allows individuals and entire

communities to gradually develop new ways of perceiving the human-nature relationship and alternative mechanisms for environmental decision-making, the precautionary approach necessitates changes in humanity's perception of nature. The process of environmental social learning advocated by the precautionary approach suggests that, given the limited capacity of science to predict the potential of human activity to induce irreparable environmental harm, an alternative conception of risk and value must be implemented into society's perception of nature and into decision-making processes. This promotion of learning provides ecocentrism's prescriptions for changing individual behavior and cultural practices in order to fundamentally re-conceptualize the role of humanity in the natural world with concrete mechanisms for achieving a sustainable condition. By beginning with a discussion of risk, the precautionary principle holds the potential to challenge the ontological and axiological superiority of humanity, question the compatibility of quantitative development and ecological integrity, and radically transform existing conceptions of value. In this sense, the precautionary principle opens up a potential avenue for ecocentrism to insert its voice into current ecopolitical conversations and work towards a new vision of sustainability. It provides a viable mechanism for beginning to realize the broad vision of ecocentric sustainability that requires a radical reworking of the human-nature relationship.

Political Openings for Social Ecology: Radicalizing Rights

In terms of redefining and pursuing sustainability within the social ecological context, the paradigm can utilize certain precepts of the emerging rights-based discourse as a potential discursive opening into discussions of altering social structures, economic arrangements, and decision-making processes in a manner that engenders ecological sustainability and social equity. The rights-oriented sustainability paradigm and social ecology hold several common

assumptions and objectives that result in the partial compatibility of the two positions. Both paradigms hold similar standpoints regarding the meaning of sustainability and the appropriate methods for practicing the concept. First, the rights orientation displays a central focus on the inseparability of society and the natural world, positing that a complete sustainability program must necessarily include a concern with social justice and a reworking of distributive practices, specifically pertaining to natural resources and environmental harms. Second, the rights framework seeks to encourage the development of full individual potentiality and the realization of freedom within a just, environmentally benign social system. Finally, the paradigm emphasizes the agency of individuals as rights-holders, providing a potential opening for social ecology to redesign power dynamics, institutions, and social relations around the inalienable autonomy of the individual.

Using the rights framework as a starting point for rethinking the meaning and practice of sustainability, social ecology could utilize discursive openings created by the rights position. For instance, the emerging concern with the social justice aspects of natural resource depletion and environmental contamination opens up the discursive space for social ecology to articulate the elimination of hierarchical arrangements as a necessary component to initiate full freedom and allow individuals to realize their potentiality. The focus of both positions on the right of individuals and societies to operate without the constraints of environmental maldistribution or overarching institutions that perpetuate domination could allow for a re-articulation of sustainability as a mechanism to balance the requisites of society/second nature with the capacity of the natural world.

However, the rights-oriented framework for sustainability expressed throughout the literature perpetuates a reformist conception by seeking solutions within existing economic

arrangements and structural constraints. In this sense, for social ecology to realize its full potentiality in reconceptualizing sustainability and forwarding a critique of hierarchical structural forces, a radicalization of the concept of rights is necessary. Although the rights discourse provides a crucial discursive opening for the radical ecological paradigm, social ecology must expand the concept of rights in its conception of sustainability to address the institutional constraints hindering political participation, limiting the potential for freedom, and contributing to inequities. The existing rights-based framework, while identifying the need to rethink redistributive policies and provide impoverished communities with the means to achieve a sustainable condition, promotes changes within the current system and does not fundamentally question development and economic growth as beneficial objectives. Social ecology, on the other hand, proposes an institutional critique as a primary element of its articulation of sustainability, arguing that existing structures cannot accommodate the scope of transformation required to pursue a sustainable condition.

Political Openings for Ecofeminism: A Framework for Movements

As identified above, contemporary ecofeminist dialogue has tended to separate the philosophical and ethical aspects of the theory from its practice and foundation in the lived experience of exploited communities. Despite this shortcoming, ecofeminist theory possesses significant potential to bridge the chasm between the philosophical logic underpinning the discourse and its power to invoke transformative action. In order to ensure the theoretical coherence of ecofeminist discourse while still maintaining a sense of inclusivity, Warren (1996) suggests that the paradigm can encapsulate a vast expanse of social movements and political efforts to address the dual domination of gender and nature, as long as the concrete movements are evaluated within a rigid set of ethical “boundary conditions” (Warren 1996, 30). These

boundaries can establish criteria with which to examine existing social, political, and environmental movements and to provide a coherent ethical framework for organically emerging movements that seek to eliminate gender domination and ecological exploitation.

Unlike ecocentrism—focusing primarily on the cultural and ontological aspects of anti-ecological behavior—and social ecology, which emphasizes the institutional arrangements responsible for social injustice and environmental degradation, the inclusive scope of ecofeminist theory incorporates a discussion of both the ideological and structural factors involved in environmental destruction. By perceiving the oppression of women, as well as other traditionally marginalized social groups, and ecological exploitation as inextricably linked under a common logic of domination, ecofeminism calls for a total dismantling of dominating forces. These forces include the use of oppressive language, institutions and power relations that perpetuate female inferiority and exploit the natural world, and dualistic cultural constructs that subjugate one category (particularly women and the realm of nature) under the dominant entity (generally males and the realm of society). More strongly uniting activism with a common ontological, ethical framework would further provide traditionally subjugated voices with a coherent discourse in which to express injustice and motivate transformative political action. In turn, this would open up the channel for ecofeminism to re-imagine and actively construct an alternative conception of sustainability that dually emphasizes eliminating unjust power relations and regenerating a degraded environment.

Concluding Thoughts and Avenues for Future Research

Although the concluding chapter of my thesis proposes that radical ecological discourses can articulate a coherent vision of sustainability and also provides a brief mention of potential avenues for each radical paradigm to influence the conceptualization and practice of

sustainability, future research should more thoroughly explore the feasibility of these paradigms in two ways. First, additional research can be undertaken specifically related to the issue of rethinking sustainability. Second, theoretical analyses of radical ecological thought could move beyond a discussion of sustainability and focus instead on identifying the unique potential of each discourse to reframe a specific environmental concern. This type of theoretical research could further explore shortcomings of reform environmentalism and identify certain ecological problems that have resulted in proposed solutions that border on ecopolitical radicalism, such as the precautionary approach, rights-based rhetoric, and emerging non-state attempts to regenerate the degraded ecology.

Furthermore, this research seeks to propose a unique review of sustainability through a typological analysis of the concept that identifies its objectives, the impetus behind its pursuit, and the agents and processes involved in the transition. Based on Connelly's (2007) suggestion that the construction of typologies can allow for a systematic analysis of ambiguous concepts and can create a structure for conceptualizing sustainability flexible enough to accommodate changing definitions, it is hoped that the typological model used in this thesis can be usefully applied to a continued understanding of sustainability. Additionally, similarly structured typologies can be used to capture the meaning of other vaguely articulated concepts in contemporary environmental political thought that resist a unified definition and explicit guidelines for practice.

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