

February 2019

The Case for the Green Kant: A Defense and Application of a Kantian Approach to Environmental Ethics

Zachary T. Vereb
University of South Florida, zvereb@mail.usf.edu

Follow this and additional works at: <https://digitalcommons.usf.edu/etd>



Part of the [Ethics and Political Philosophy Commons](#), and the [Other Philosophy Commons](#)

Scholar Commons Citation

Vereb, Zachary T., "The Case for the Green Kant: A Defense and Application of a Kantian Approach to Environmental Ethics" (2019). *USF Tampa Graduate Theses and Dissertations*.
<https://digitalcommons.usf.edu/etd/7980>

This Dissertation is brought to you for free and open access by the USF Graduate Theses and Dissertations at Digital Commons @ University of South Florida. It has been accepted for inclusion in USF Tampa Graduate Theses and Dissertations by an authorized administrator of Digital Commons @ University of South Florida. For more information, please contact digitalcommons@usf.edu.

The Case for the Green Kant:
A Defense and Application of a Kantian Approach to Environmental Ethics

by

Zachary T. Vereb

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor in Philosophy
Department of Philosophy
College of Arts and Sciences
University of South Florida

Major Professor: Martin Schönfeld, Ph.D.
Toby Svoboda, Ph.D.
Alexander Levine, Ph.D.
Michael Morris, Ph.D.
Joshua Rayman, Ph.D.

Date of Approval:
November 30, 2018

Keywords: Kantian Ethics, Environment, Climate Change, Sustainability

Copyright © 2019, Zachary T. Vereb

ACKNOWLEDGEMENTS

First and foremost, I thank Martin Schönfeld for his guidance and support throughout this entire project. This work would not be possible without him. I am incredibly thankful for the helpful comments, suggestions, and feedback from my advisors. I thank Toby Svoboda for inspiring me to pursue this project. His engagement with my project and his constructive criticism are deeply appreciated. I thank Alex Levine for his continued assistance and warm encouragement in the face of stumbling blocks. I thank Michael Morris for challenging my ideas and inspiring me to explore Kant's philosophy of history. Finally, I thank Joshua Rayman for his meticulous comments and endless support throughout my graduate tenure. I am also indebted to Roger Ariew, Doug Jesseph, and Greg Herbert for their general support. I would like to thank my family and friends, Andrew Winters, Jon Hendricks, and Laith Abdel for the stimulating conversations and emotional support they have provided throughout. My colleagues at University of South Florida, including John Walsh, Wilson Underkuffler, Simon Dutton, Dwight Lewis, and Raman Sachdev have created a wonderfully supportive environment and this would not be possible without their friendship. I especially thank Laura for her support, understanding, and patience.

TABLE OF CONTENTS

List of Abbreviations	ii
Abstract.....	iv
Introduction: The Case for the Green Kant.....	1
Chapter One: Kant and the Environment: The Old	9
The Traditional Interpretation of Kant apropos of Nature.....	10
Environmental Ethics and Kant’s Invidious Humanism.....	19
Chapter Two: Kant and the Environment: The New	44
The New, Environmental Interpretation of Kant	45
Reframing of the Green Shift in Kant Literature: Climate Change	63
Chapter Three: Kantian Ecology: The Early, Dynamic View of Nature.....	68
Kant’s Early Ontology of Nature and Natural Science.....	71
Environmental Holism and Kant’s Early Ontology.....	96
Moral Framing and Environmental Praxis: Pre-critical to Critical.....	111
Chapter Four: Kantian Holism and Aesthetics	122
Kantian Beauty and the Environment.....	125
Reconsidering the Critique of Teleological Judgment.....	128
Sublimity from an Environmental Perspective	135
Chapter Five: Kantian Anthropology: Blueprints for Sustainability	146
Overview and Context of Kant’s <i>Idea</i> and <i>Conjectural Beginning</i>	155
Climate Ethics, Kantian Anthropology, and the Heroic Incentive	173
Kant’s Holistic View of Humanity: Antidote to Liberalism?.....	183
Conclusion: The Fate of the Green Kant	200
References.....	204

LIST OF ABBREVIATIONS

Kant's writings will be cited according to volume:page number in the *Gesammelte Schriften*, Ausgabe der preussischen Akademie der Wissenschaften (Berlin: de Gruyter, 1902-). Unless otherwise noted, all translations are from *The Cambridge Edition of the Works of Immanuel Kant*, as these are generally the most accepted translations in Kant scholarship. For individual works, the following abbreviations will be used:

LF	<i>Gedanken von der Wahren Schätzung der Lebendigen Kräfte Und Beurtheilung der Beweise Derer Sich Herr von Leibnitz Und Andere Mechaniker in Dieser Streitsache Bedienet Haben, Nebst Einigen Vorhergehenden Betrachtungen Welche Die Kraft der Körper Überhaupt Betreffen</i> (1746-1749), <i>Thoughts on the True Estimation of Living Forces</i>	1:1-181
FE	<i>Die Frage, ob die Erde veralte, physikalisch erwogen</i> (1754), "The question, whether the Earth is ageing, considered from a physical point of view"	1:193-213
ND	<i>Principiorum primorum cognitionis metaphysicae nova dilucidatio</i> (1755), <i>A New Elucidation of the First Principles of Metaphysical Cognition</i>	1:385-416
PM	<i>Metaphysicae cum geometria junctae usus in philosophia naturali, cuius specimen I. continent monadologiam physicam</i> (1756), <i>Physical Monadology</i>	1:473-488
UNH	<i>Allgemeine Naturgeschichte und Theorie des Himmels</i> (1755), <i>Universal Natural History and Theory of the Heavens</i> .	1:215-368
CPR	<i>Kritik der reinen Vernunft</i> (1781, 1787). <i>Critique of Pure Reason</i>	A/B pagination
E	<i>Beantwortung der Frage: Was ist Aufklärung?</i> (1784), <i>An Answer to the Question: What is Enlightenment?</i>	8:33-42
<i>Idea</i>	<i>Idee zu einer allgemeinen Geschichte in weltbuergerlicher Absicht</i> (1784), <i>Idea for a Universal History with Cosmopolitan Aim</i>	8:15-31
<i>Groundwork</i>	<i>Grundlegung zur Metaphysik der Sitten</i> (1785),	4:385-464

Groundwork of the Metaphysics of Morals

CB	<i>Mutmasslicher Anfang der Menschengeschichte</i> (1786), <i>Conjectural Beginning of Human History</i> . Sometimes I rely on Lewis White Beck's translation in <i>Kant: On History</i> (2001)	8:107-123
CPrR	<i>Kritik der praktischen Vernunft</i> (1788), <i>Critique of Practical Reason</i>	5:1-164
CJ	<i>Kritik der Urteilskraft</i> (1790), <i>Critique of Judgment</i> "First Introduction" Usually I rely on Werner S. Pluhar's translation in <i>Critique of Judgment</i> (1987)	5:165-486; 20:195-251
LE	<i>Vorlesungen ueber Ethik, Lectures on Ethics</i>	27:1-732
TP	<i>Ueber den Gemeinspruch: Das mag in der Theorie richtig sein, taugt aber nicht fuer die Praxis</i> (1793), <i>On the Common Saying: That may be correct in theory but it is of no use in practice</i>	8: 273-313
<i>Religion</i>	<i>Religion innerhalb der Grenzen der blossen Vernunft</i> (1793-1794), <i>Religion within the Boundaries of mere Reason</i>	6:1-202
PP	<i>Zum ewigen Frieden: Ein philosophischer Entwurf</i> (1795), <i>Toward Perpetual Peace</i> .	8:341-386
<i>Pedagogy</i>	<i>Paedagogik</i> (1803), <i>Lectures on Pedagogy</i>	9:437-499
MM	<i>Metaphysik der Sitten</i> (1797-1798), <i>Metaphysics of Morals</i>	6:203-494
<i>Anthropology</i>	<i>Anthropologie in pragmatischer Hinsicht</i> (1798), <i>Anthropology from a Pragmatic Standpoint</i> .	7:117-334.

ABSTRACT

Environmental philosophers have argued that Kant's philosophy offers little for environmental issues. Furthermore, Kant scholars typically focus on humanity, ignoring the question of duties to the environment. In my dissertation, I turn to a number of underexploited texts in Kant's work to show how both sides are misguided in neglecting the ecological potential of Kant, making the case for the green Kant at the intersection of Kant scholarship and environmental ethics. I build upon previous literature to argue that the green Kant matters for both sides. Rather than a liability, Kant is indeed a conceptual resource. Though many conceive of Kant's philosophy as environmentally problematic, I argue that underappreciated evolutionary, aesthetic, and holistic sides of Kant's philosophy can provide conceptual resources for issues in climate change and environmental ethics. Some aspects, such as the pre-critical view of nature, are quite green and merely require an application, while others, such as Kant's philosophy of history, require a green appropriation to be relevant. The theoretical foundations I develop in these texts will allow Kantians to articulate duties regarding nature and duties for sustainability. This re-thinking of Kant redresses the complaints environmental thinkers hold against Kant. By means of a philosophical interpretation, defense, and application of particular texts from Kant's works such as *Universal Natural History*, *Critique of Judgment*, and *Idea for a Universal History*, I show how the greening of Kant is not only helpful for contemporary issues, but also defensible. This will make the green Kant agreeable to Kant scholars yet all the while relevant for today with regard to environmental ethics and, more importantly, climate change.

INTRODUCTION

THE CASE FOR THE GREEN KANT

Environmental philosophers have argued that Kant's philosophy offers little for environmental issues. Furthermore, Kant scholars have traditionally approached the question of our moral relation to the environment from a narrow interpretation of very specific texts in Kant's works, such as *Groundwork* and *Critique of Pure Reason*.¹ Because the moral and existential impacts of climate change remained a distant concern for mainstream Kant scholars from the 1970s and 1980s, the question of the environment was broached merely with aesthetic appreciation and human interests in mind.² Since then, however, the intellectual backdrop has changed drastically: numerous scholars such as Allen Wood, Paul Guyer, Christine Korsgaard, Holly Wilson, and Toby Svoboda have challenged this traditional interpretation, focusing on the ways in which Kant can be re-read as a moral and theoretical asset for environmental issues regarding non-rational nature. In my dissertation, I take a similar approach and attempt to integrate and build upon these contemporary findings in order to answer the following questions: *What kind of insights can Kant's philosophy provide for environmental ethics? Will Kant prove to be helpful and relevant as a theoretical asset for the climate crisis and the shift toward sustainability? Is the greening of Kant possible?* Besides corroborating these contemporary findings and showing how Kant's thought is indeed relevant for issues in environmental ethics, one of my major

¹ For the citation method of Kant's works in this dissertation, see the Abbreviations section on pages ii-iii.

² By mainstream, I have primarily in mind Anglo-American Kant scholars. One unifying thread of this mainstream approach involves an analytic and historically-inclined orientation.

contributions in this dissertation is to draw from underutilized texts in Kant's works in order to show how climate change is just one—albeit an important one—of the many possible environmental issues for which Kant may be relevant.

My overarching thesis is that, though many conceive of Kant's philosophy as environmentally problematic, the neglected evolutionary, aesthetic, and holistic side of Kant's philosophy can provide conceptual resources for pressing issues in climate change and environmental ethics. On the surface, an attempt to read Kant in this green manner looks misguided since Kant strictly distinguishes rational from non-rational nature, claiming we only have direct duties to the former. I will consider this problem and make the case for the green Kant at the intersection of Kant scholarship, environmental ethics, and climate ethics through an exploration of undervalued aspects and texts of Kant's philosophy. Some aspects, such as the pre-critical view of nature, are already quite green and merely require a defense and application, while other aspects, such as Kant's philosophy of history, require a green re-reading to demonstrate their environmental relevance. My use of the term "green" is intentionally aesthetic, as the aesthetic elements of Kant's thought will help unify his evolutionary and holistic vision. Despite aesthetic appreciation of nature being an "old" concern in environmental ethics, I hope to show how one way to relate Kantian thought to the ethics of climate change involves aesthetic views of nature, since evolutionary and holistic views are essentially aesthetic in the Kantian framework.³

³ I am not taking a wholly radical position when I make use of aesthetic holism as a guiding thread to Kant's philosophy across his intellectual development. On Yirmiahu Yovel's view, the aesthetic (and in particular the cosmic sublime) undergirds and unifies the entire Kantian philosophy; the aesthetic is the core of Kant's philosophy, pervading the pre- and critical works (Yovel 1980, 130-131); Terry Eagleton also sees the aesthetic in Kant's philosophy to have a central role: "for Kant, the aesthetic holds out a promise of reconciliation between Nature and humanity (Eagleton 1990, 1). Admittedly, these thinkers are not "orthodox" Kant scholars by any means. But, then again, neither is my aspiration of greening Kant.

Each main chapter will show how aspects of Kant’s thought—when interpreted in the context of Kant’s evolutionary and holistic philosophy—have environmental significance or give us reasons to value nature from different perspectives (e.g. ontological, aesthetic, scientific, historical)⁴ and act in accordance with sustainability. To attain this goal, I draw upon a number of Kant’s works, many of which are neglected in the literature with regard to environmental ethics, such as his historical essays and early works. In particular, I focus on two of Kant’s anthropological essays, since Kant’s collective, teleological understanding of humanity can be a resource for climate ethics: *Idea for a Universal History with Cosmopolitan Aim* and *Conjectural Beginning of Human History*. I also rely heavily on *Critique of Judgement* in my discussion for relating aesthetic and teleological judgment to holistic and moral views of nature. Finally, I draw upon many of Kant’s early dynamic works, such as *Universal Natural History*, since they highlight Kant’s focus on systems, naturalism, and aesthetics. As a general rule of thumb, I will either highlight the specific holistic⁵ elements of a given work that have been underappreciated with regard to environmental ethics or utilize evidence from a work to reconstruct a Kantian argument that shows how Kant’s thought is an environmental asset for climate change.

Philosophy and figures from the philosophical canon can help address the epistemological and normative problems presented by climate change. As scientists, engineers,

⁴ Harry van der Linden, as I do, notes the structural affinities of the aesthetic, scientific, and moral in Kant’s philosophy (1980, 140, 323f2).

⁵ Environmental holism is a contentious issue in the environmental ethics literature; typically, it concerns the debate between individualistic approaches in ethics and a moral and epistemic focus on collectives, such as colonies, hives, species, or societies. Unless I specifically discuss it in relation to these debates in environmental ethics (e.g. on Leopoldian holism), I use “holism” in a rather general way to signify elements of Kant’s thought that resist or look beyond the limited purview of discrete individual objects, instead focusing on structures, processes, or systems (where the whole is conceived as greater than the sum of its parts). For example, I will consider what I take to be Kant’s holistic understanding of humanity; in his philosophy of history and anthropology Kant views humanity in terms of the entire species, evolving its predispositions toward morality through many generations of collective, interactive struggle.

and politicians (uncontroversially) play a role in pushing for sustainability, so also (more controversially) I maintain that philosophy has an essential part to play in the paradigm shift of humanity. With regard to this dissertation, it is not the case that I am *simply* applying climate change to Kant, or that I claim there is some hidden, climate-friendly reading of Kant in the text. For the former, I do indeed attempt to think of Kant's thought as being applicable to present climate issues, and for the latter, I avoid such an implausibly misguided approach. I will, however, show that some aspects of Kant's philosophy are more green than initially supposed. If this dissertation is successful, I will have shown that Kant teaches *us* something about climate change, and that climate change in turn teaches us something about *Kant*. Apropos of climate change, I claim that Kant's evolutionary⁶ vision of humanity can be a much needed wake-up call that teaches us how to orient ourselves as stewards for a sustainable, cosmopolitan future. And, by viewing the relevance of Kant for today, I claim that climate change obliges us to reconsider thinkers in the philosophical canon and the transhistorical depth of their genius. In this case, thinkers hitherto have had little reason to investigate the relevance of Kant's holistic vision, especially from works such as the pre-critical and anthropological writings: the pre-critical writings are usually approached by commentators today with regard to Kant's philosophy of science or intellectual development—not for his contemporary moral relevance. In addition,

⁶ Similar to my use of “holism” in a general sense regarding approaches to systems and collectives, by “evolutionary” I do not refer to Darwinian natural selection; rather, I mean developmental (in the sense of *Bildung*) in both its organic (biological and romantic) and cultural (enlightenment) senses. For example, in Chapter 3 I discuss the evolutionary views in Kant's cosmology, where Kant articulates the formation of spiral galaxies as an immanent and natural unfolding process according to laws of nature. And in Chapter 5, I discuss Kant's view of humanity as he sees it evolving on a pathway of perfection toward an enlightened cosmopolitanism. As with before, the context will dictate the sense of this term in the various chapters.

though the anthropological writings are often challenged to problematize⁷ the universal consistency of Kantian ethics, they have been utilized very little for environmental issues.⁸

The first two chapters are preparatory and set the foundation for the project of the green Kant. I review, critique, and integrate findings in the secondary literature of Kant scholarship vis-à-vis environmental ethics. The primary goal of Chapter 1 is to survey the literature in both Kant scholarship and environmental ethics in order to argue that, despite the virtue of previous interpretations of Kant, there remains a need for a re-reading of Kant, to be developed and supported throughout this dissertation. After evaluating “traditional” readings of Kant in the literature of both Kant scholarship and environmental ethics, in Chapter 2, I examine and align myself with contemporary Kant readings to defend the view that Kant is a conceptual resource, rather than an environmental liability. In particular, I look into contributions made by Holly Wilson, Allen Wood, Christine Korsgaard, and Toby Svoboda. I commend them for their strengths and comment on two possible limitations that this dissertation seeks to rectify—first, with regard to the restricted purview of Kant’s work from which they draw and second, with regard to the more pressing concern today with which they fail to grapple, namely climate change. I show that, despite the ubiquity of the traditional reading, a recent shift is happening in the literature. Putting this shift in the context of climate change, I claim, helps the reader to

⁷ For example, Pauline Kleingeld discusses the pressing question of Kant’s racism and sexism that are prominent in the anthropological writings and considers whether they are consistent with his more “neutral” writings (e.g., *Groundwork*). See Kleingeld “The Problematic Status of Gender-Neutral Language in the History of Philosophy: The Case of Kant” (1993) and “Kant’s Second Thoughts on Race” (2007). Though I am aware of Kant’s sexist and racist comments, my discussion of Kantian anthropology is primarily concerned with a constructive reading of Kant’s holistic view of humanity as a *species*, not his idiosyncratic (and lamentable) views of race and women.

⁸ To my knowledge, there is only one exception to this: In “Rethinking Kant from the Perspective of Ecofeminism” (1997), Holly L. Wilson undertakes to show how Kant’s philosophical anthropology can be an asset for environmental issues. She draws from the *Anthropology*, however, and I draw instead from Kant’s more historical writings such as *Conjectural Beginning*.

understand why the traditional reading was plausible, why the new environmental reading is possible, and why this dissertation is a helpful step in facilitating the greening of Kant. It is my hope that the remaining chapters of this dissertation will fortify and contribute to their insights on the green Kant.

The meat of this dissertation is contained in Chapters 3 through 5. I draw from numerous, overlooked aspects of Kant's philosophy to make the case that a green reading of Kant is not only possible, but helps Kant out to be an environmental ally. I present Kant's early ontology to develop an ecological view of nature compatible with environmental holism. Then, I draw from Kant's critical aesthetics to develop a teleological view of nature with moral implications for our treatment of flora, fauna, and ecosystems. Finally, I utilize aspects of Kant's anthropology and philosophy of history in order to present a progressive view of humanity in nature conducive to Kantian duties for sustainability. The following outline will help orient the reader:

In Chapter 3, I explore the pre-critical ontology of nature in order to show its environmental relevance and compatibility with environmental ethics. In particular, I examine *Living Forces*, *Physical Monadology*, *New Elucidation*, and *Universal Natural History* with an eye to the ecological potential of Kant's holistic vision of nature. I argue that these texts—which have been largely overlooked with regard to environmental philosophy—can provide an *ecological* view of nature conducive to environmental praxis and compatible with ecocentric views by facilitating scientific, aesthetic, and practical cognition of the environment as a dynamic system. In addition, I claim that an adoption of Kant's dynamic view of nature can be even more helpful than Spinoza's for considering nature in a moral sense through its framing potential, not unlike that of Lovelock's Gaia Hypothesis. When adopted today, the framing

potential of Kant's view of nature can aid humanity in protecting and conserving nature in the face of climate change.

Chapter 4 shifts from the pre-critical ontology of nature to the *Critique of Judgment*. In particular, I utilize Kant's aesthetics and teleology to further emphasize the holistic aspects of Kant's philosophy in order to support indirect duties toward flora and fauna and the cultivation of "moral" views of nature. This chapter shows how Kant's philosophy can be a valuable aesthetic and pedagogical aid for environmental ethics. It is argued that Kantian natural aesthetics and regulative teleology can prepare humanity for appreciating nature morally and fulfilling its duties, promoting protection of flora, fauna, and ecosystems, and grappling with climate change. Focusing Kant's ethical sphere with climate change brings together the aesthetic and scientific in my application of these works, as the natural is tied up with the aesthetic and the aesthetic is always wrapped up with the moral. Thus, by working through the holism of Kantian aesthetics and regulative teleology, it is argued that even Kant's critical teachings have significant environmental implications for us today.

Chapter 5 draws transitions from nature and the environment to humanity and sustainability. This chapter reinterprets Kant's philosophy of history and understanding of humanity as a collective, progressing, evolutionary species to generate blueprints for sustainability. By underscoring the evolutionary side of humanity in Kant's philosophy of history, this chapter shows how Kant's philosophical anthropology can be useful for dealing with the particularly difficult collective issue regarding climate change and future generations; offers much needed hope in an age of ecological despair; helps us cultivate sustainable virtues; and teaches us of our moral vocation as cosmopolitan stewards. It is also argued that Kant's philosophy, when seen from its less-examined historical perspectives, is opposed to capitalist

exploitation. As such, Kantian anthropology can be of assistance in developing social duties for sustainability.

In the final analysis, climate change helps us to understand philosophers, like Kant, in new ways, teaching us the significance of philosophizing as a creative, adaptive process. I conclude this dissertation by highlighting my exploration's relevance for today and pointing to future directions for applied ethics. In a word, I argue that this dissertation is important for distinct yet overlapping spheres: philosophical, ethical, and aesthetic. First, this thesis makes a philosophical contribution to Kant scholarship by unifying and expanding upon the work of other prominent Kant scholars on the subject of the environment by introducing a Kantian dialogue on sustainability. Second, this project underscores the compatibility of environmental ethics with Kantianism and opens the space for a Kantian approach to applied environmental ethics. Kantians no longer need to hold their tongues when environmentalists enter the room. They have ammunition to engage meaningfully in the moral debate. Moreover, an integration of Kant's natural, aesthetic, and moral philosophy provides a clue for how one ought to live in the Anthropocene, namely, with an appreciation of our rootedness in the complex system of nature and our responsibility as its final end. This implies a change in the way we value nature, relate to others, and conceive of ourselves. By framing climate change as an issue of morality—as I have attempted with Kant's holistic and evolutionary thought—this dissertation is a unique take on a burgeoning subject in philosophy. In addition, the fact that it is tied to something as terrifyingly real as climate change makes my project, it is hoped, compelling and relevant. If I have done my job adequately, the fate of the green Kant will be secure.

CHAPTER 1

KANT AND THE ENVIRONMENT: THE OLD

In this chapter, I provide a provisional characterization of what I take to be the mainstream or traditional view of Kant vis-à-vis animal and non-rational nature.⁹ The traditional view can be understood as one of the most formidable impediments to my case for the green Kant. My task in this chapter is to address the traditional view in order that I might, in Chapter 2, comment on four newer Kantian approaches that view Kant as an environmental ally.¹⁰ I shall align myself with these approaches and suggest how this dissertation builds upon and contributes to the growing interest in Kant for environmental ethics by focusing on alternative aspects of Kant's philosophy.

This chapter is divided into two parts. In Part 1, I characterize and evaluate the traditional view of Kant as a staunch anthropocentrist and humanist prominent in both specialist and non-specialist circles including Kant scholarship and ethics pedagogy. The traditional reading of Kant

⁹ For the sake of convenience, I will use "animals" to refer to non-human animals, although it should be clear that I typically do not have humanity in mind unless I explicitly say so. "Non-rational nature" and "nature" will also be used in a rough-and-ready way to refer either to individual non-human animals, collectives such as species, or environments and the land.

¹⁰ Though the literature on a green Kant is quite small, it is nonetheless growing. I address only Wilson (1997), Wood (1998), Korsgaard (2004), and Svoboda (2012, 2015). I limit my discussion to these four for three reasons. First, they present influential and important new readings of Kant. Second, though I take issue with aspects of their readings, I align myself with their views. Finally, I limit myself to these four for the sake of brevity. For other readings that challenge the traditional interpretation of Kant vis-à-vis the environment, see: Matthew C. Altman, "Animal Suffering and Moral Character" and "Kant's Strategic Importance for Environmental Ethics" in *Kant and Applied Ethics* (2011); Scott M. Roulier's chapter, "Kantian Character and the Environment" in *Kantian Virtue at the Intersection of Politics and Nature* (2004); Pierfrancesco Biasetti, "From Beauty to Love: A Kantian Way to Environmental Moral Theory?" (2015); Emily Brady's chapter, "The Kantian Sublime II: Nature and Morality" from *The Sublime in Modern Philosophy* (2013); Patrick Kain's "Duties Regarding Animals" (2010), and Paul Guyer's "Natural Ends and the End of Nature: Naturalizing Kant's Teleology" (2007).

is, unsurprisingly, the dominant interpretation. This reading has much in common with theological and early modern views of non-human nature. Among other things, Kant is thought to deny that we have any reasons for considering the interests of animals or natural systems. Ostensibly, this reading is maintained by the apparent dualisms in Kant's philosophy, especially with regard to Kant's emphasis on the distinction between rational and non-rational nature in the critical philosophy and his denial of direct duties to non-rational nature. In Part 2, I investigate the reception of Kant in environmental ethics, including a lengthy discussion and critique of Christina Hoff's influential objection to Kantianism for non-rational nature. I conclude by showing why the traditional reading has merits given the perspective of the critical view, textual evidence, and historical context. The implications for the greening of Kant on this view are shown to be decidedly grim.

Part 1: The Traditional Interpretation of Kant apropos of Nature

In both Kant scholarship and ethics in general, Kant has been characterized as an anthropocentric thinker of limited, if any, use for environmental problems in both Kant scholarship and in ethics in general.¹¹ Concern for nature from a Kantian perspective is often ignored, presumably because many readings do not accept that Kant is concerned for nature. This mainstream characterization has a number of features that I sketch below under the umbrella term of the "traditional" or

¹¹ Onora O'Neill unapologetically asserts that Kant's moral philosophy is indispensably anthropocentric (O'Neill 1998, 217), though she thinks his speciesism isn't necessarily problematic for environmental problems. Lewis White Beck in *A Commentary on Kant's Critique of Practical Reason* notes how, on his (traditional) interpretation, Kant views humanity as separated from and standing over nature (1960, 125). The view of Kant as anthropocentric (indeed, as viciously so) is pervasive in the environmental ethics literature. For just a few examples, see Tom Regan's critique of Kant in *The Case For Animal Rights* (2004, throughout, but especially 174-185); Peter Singer's disavowal of Kantian anthropocentrism in *Animal Liberation* (2009, 203); Holmes Rolston III's anthropocentric dismissal of Kant in *Environmental Ethics: Duties to and Values in the Natural World* (1988, 62-63); John O'Neill, Alan Holland, and Andrew Light's doubt about the merit of a Kantian view for environmental ethics in *Environmental Values* (2008, 34); and Ronald Sandler's pedagogical discussion of the strengths and weaknesses of Kant's moral philosophy on the traditional reading in *Environmental Ethics: Theory in Practice* (2018, 109-110).

“classical” view of Kant on non-rational nature. I highlight in broad strokes the standard view of Kant from both the theoretical and practical side in an attempt to show why Kant is thought ill-suited for helping us address contemporary issues in environmental ethics and climate change. This, of course, includes a discussion of Kantian duties (or lack thereof) to non-rational nature. I summarize the traditional view from three standpoints: as it is presented in Kant scholarship (using O’Neill and Guyer), as it is perceived in ethics and pedagogy more generally (drawing from James Rachels), and finally, as it is dismissed in animal and environmental ethics (using Singer, Regan, Hoff, and Jamieson). Across all three domains, commentators note the division of reality into two fundamentally different and unequal spheres: reason and nature. This philosophical schism entails a number of dualisms with implications for morality, ones that are prima facie problematic for an environmental ethic.¹² These dualisms include distinctions between noumena and phenomena, the supersensible and the sensible, duty and inclination, activity and passivity, mind and body, form and matter, human and animal. The former sides of these various dualisms tend to be associated with the distinctively human (and the only concern for morality). On the typical view of Kantian ethics, for example, morality concerns only rational beings or, what it ultimately amounts to, human beings. The conclusion drawn is that humanity not only has no obligations to animals or nature, but that we should remain indifferent to the suffering and welfare of such entities (Hoff 1983, 67). Accordingly, on the traditional view Kant is perceived as an impediment to environmental ethics, rather than a potential philosophical

¹² Besides Kant’s failure to concede direct duties to non-rational nature, this is a central concern of environmental ethicists with respect to Kant. However, Kant is not the only philosopher who is attacked for splitting nature into two realms. For a critique of the dualistic schism of humanity from nature in monotheistic traditions, see Lynn White’s influential, “The Historical Roots of Our Ecologic Crisis” (1967). For a critique of the problematic nature of dualisms for both environmentalism and feminism, see Karen J. Warren, “The Power and Promise of Ecofeminism” (1990) and Val Plumwood, *Feminism and the Mastery of Nature* (1993).

resource from which to draw. In the following, I provide some evidence to support the dominance of the traditional reading in Kant scholarship, ethics/pedagogy, and environmental ethics.

The Traditional Interpretation in Kant Scholarship

Before I delve into the way in which the traditional view of Kant vis-à-vis non-rational nature is expressed in Kant scholarship, it is perhaps more helpful to begin our inquiry with a negative observation. In some of the most important works in Kantian ethics, the relationship of rational nature to non-rational nature for Kant is left virtually untouched. For example, in *Acting on Principle: An Essay on Kantian Ethics* (1975), Onora O’Neill—one of the most influential defenders of Kantian ethics—fails to address the moral question of non-rational nature anywhere in over 140 pages of incredibly careful, nuanced argumentation and exegesis. She pursues questions surrounding the meaning, intelligibility, and applicability of the categorical imperative as developed by Kant, defending it against competing normative theories. And yet, she treats Kantian obligations (if there are any) to animals, ecosystems, or environments as a non-issue.¹³ This omission is, I take it, a symptom of the dominance of the traditional reading of Kant (in which Kant’s ethics is seen as fruitless for non-rational nature), even during a time in which the beginning seeds of the animal and environmental ethics movements began to take root (with, for example, Peter Singer’s *Animal Liberation* in 1975 and Naess’s inaugural essay in deep ecology in 1973). What is striking is that moral questions of the environment became prominent in this time and yet top scholars of Kantian ethics largely failed to entertain these questions until the

¹³ Years after this important text, Onora O’Neill would respond to Allen Wood’s essay on the question of the security of Kantian ethics for non-rational nature in an essay entitled, “Necessary Anthropocentrism and Contingent Speciesism” (1998). She defends Kant as an anthropocentrist but argues that his theory is not as speciesist as thinkers like, for instance, Peter Singer, make it out to be. Possibly, the environmental attack on the traditional reading of Kant during the 1980s incentivized top Kant scholars such as O’Neill and Wood to defend a less insidiously anthropocentric Kant.

1990s, focusing instead on our duties to humanity. If the question of nature *were* broached, it would be mostly with regard to aesthetic appreciation of beauty or with regard to more abstract questions on normativity rather than concrete duties. What are the reasons for this Kantian evasive maneuver regarding central debates in animal and environmental circles?

First, those in Kant scholarship didn't dare venture beyond the critical works into the pre-critical lectures on ethics (where Kant offers a less-than satisfying empirical proscription of animal cruelty) and the post-critical *Metaphysics of Morals* (where Kant characterizes only indirect duties regarding non-rational nature). The pre-critical works were often seen as dogmatic, undeveloped, and unsystematic. After all, Kant had not yet awoken from his dogmatic slumber. And the post-critical works have often been treated mockingly, as the unsystematic ramblings of a senile mind. In short, mainstream Kant scholarship regarded the early and late works as falling outside the sphere of the legitimate critical period. Second, the objections raised by animal and environmental ethicists during this time also missed the mark, as environmental philosophy in general has only recently attained a respected position in academic philosophy. If they were heard at all, they would likely have been dismissed out of hand.

On the traditional reading, Kant was viewed as an anthropocentrist whose ethical grounds, though strong and defensible from the perspective of human rights, might appear to "license (or even require) a ruthlessly exploitative attitude toward humanity's natural environment and all nonhuman things in it" (Wood 1998, 189-190). By anthropocentrism here, I mean a view according to which only humanity deserves consideration in the sphere of morality, often to the extent that non-human nature gets treated as a tool to be used and exploited as one wishes. Defenders of the traditional view tend to endorse this form of anthropocentrism. From this omission we can reasonably suspect that Kant scholars at this time felt an attempt to green

Kant would be a fool's errand—better to stick with the humanistic strengths of Kantian ethics against utilitarianism than get dragged into a losing game of making Kant out to be an environmental ally. As I will show in the course of this dissertation, the seriousness of climate change *now* and the relatively unconcerned attitude toward it in the '70s and '80s can help explain the fact that nature was a non-issue for Kantians; and the rise of green interpretations makes sense now, since climate change is an issue that makes sense even from a strictly anthropocentric perspective. In subsequent chapters, I will show how an anthropocentric Kantianism still can be a helpful resource for environmental ethics and climate change, *pace* the perceived limitations of the traditional view. I will also show how the pre-critical view of nature presents a less anthropocentric view of nature, which helps us rethink the status of nature today in the Anthropocene.

Guyer's Early Articulation of Duties Regarding Nature and the Cruelty-Thesis

Interestingly, one of the first attempts to defend Kant against the traditional view despised by animal welfarists and environmental ethicists simultaneously reinforces the traditional view but also plants the germs for its re-evaluation. In *Kant and the Experience of Freedom* (1993), Paul Guyer criticizes the predominant view. In "Duties Regarding Nature" Guyer draws from works in the critical period such as the *Critique of Judgment* and its connections to *Metaphysics of Morals* in order to articulate how the traditional view of Kant—though still decidedly anthropocentric—still can defend duties *with regard to* non-rational nature. Guyer argues that a Kantian can defend a general attitude of nonmaleficence toward animals and nature on the grounds that one has a duty to oneself to develop a disposition (or attitude) favorable to morality which aesthetic appreciation of nature fosters, and on the grounds that cruelty toward animals violates one's duty toward oneself and others. Drawing from the *Critique of Judgment's* Analytic

of the Beautiful and Kant's characterization of beauty as a symbol of morality where Kant links aesthetics and morality, Guyer underscores how for Kant the aesthetic appreciation of beautiful nature is instrumental—or, as Allison puts it, *preparatory* (Allison 2001)—for developing this moral disposition. This is because aesthetic appreciation itself is disinterested and not undertaken from the standpoint of utility or prudence (Guyer 1993, 305-306, 310). Therefore, though we have no direct duties to nature, we should be stewards who conserve beautiful nature on both aesthetic and moral grounds, in accordance with imperfect duties to oneself (Guyer 1993, 328).¹⁴ Also, harming animals or beautiful flora makes one less morally perfect, so we have a duty to prevent harm to nature so long as it does not conflict with our other duties, such as duties to other ends in themselves.¹⁵ Guyer works largely within the confines of what Kant himself writes in *Critique of Judgment* and *Metaphysics of Morals*. He does not delve into the anthropological or historical works, as I do in Chapter 5 of this dissertation. Moreover, Guyer does not try to modify or appropriate Kant for environmental ends, as do Korsgaard and Wood, whom I discuss in the subsequent chapter. In any case, Guyer's account of Kantian duties regarding nature is a good starting-point for thinking about where the traditional view ends (along with its limitations), as well as where the new green reading might begin. Before considering how the traditional view is perceived outside of Kant scholarship, I will conclude this section with an aside regarding the

¹⁴ Guyer in "Natural Ends and the End of Nature" (2007) continues this train of thought with regard to its ecological implications for a system of nature, claiming that Kant has arguments suggesting that domination and exploitation of nature is impermissible if it is "without regard to the ecology of nature as a whole as an arena fit for continuing human habitation" (Guyer 2007, 93). Thus, though this is an anthropocentric defense of ecological preservation, it is still more environmentally resourceful as a position than what proponents of the traditional reading of Kant might have us believe.

¹⁵ Svoboda (2012, 2015) develops the interpretation of perfect duties to oneself as indirect duties to nature in greater depth. I discuss these aesthetic-moral Kantian arguments in greater detail in Chapter 4 of this dissertation. For now, I aim only to provisionally characterize one of the earliest attempts at thinking beyond the traditional reading.

“cruelty-thesis” (Biasetti 2015, 142) or the so-called “brutalization argument” as a standard though unsatisfactory rejoinder to the moral question of animals.

The brutalization argument, according to Kain, is a popular supplement of Kantian ethics that is usually appealed to in Kant scholarship in relation to the topic of Kant on animals. When pressed about how a Kantian should deal with animals, he or she could appeal to some of his statements from his lectures on ethics, where Kant says, in short, that those who are cruel to animals become cruel to humans through empirically conditioned desensitization. That is, inhumane treatment of animals habituates us to respond inhumanely to humans. Such a defense, however weak,¹⁶ was and still is a standard maneuver of proponents of Kant who adhere to the traditional reading. In his *Lectures on Ethics*, Kant says

Any action whereby we may torment animals, or let them suffer distress, or otherwise treat them without love, is demeaning to ourselves...we stifle the instinct of humaneness within us and make ourselves devoid of feeling ([LE 710]; cited from Altman 2011, 17).

The basic idea behind the brutalization argument is that rather than attending to the suffering of animals, we are concerned with the effect that animal cruelty has on ourselves. In other words, inhumane actions toward animals aren't in themselves wrong. Rather, they simply tend to desensitize us with regard to our feelings and duties toward other humans and, hence, should be avoided (Kain 226, 2010). According to Guyer, this type of argument was widespread during Kant's time, and in many ways it is similar to approaches in a long tradition from theologians

¹⁶ For a particularly strong critique of the traditional view of Kant vis-à-vis the cruelty-thesis, see James Skidmore, “Duties to Animals: The Failure of Kant's Moral Theory” (2001). The brutalization argument is weak for a number of reasons, one of which is that it relies on a plausible though contingent empirical premise. For example, suppose one individual tortures animals as catharsis. In this case, the individual who would first discharge anger on animals would then be kinder to other humans. Accordingly, on this argument “[t]here is no necessary connection between cruelty to animals and a reduction in one's sensitivity to human suffering” (Svoboda 2012, 147). Not only is it problematic for Kant to base moral claims on empirically conditioned ones, but surely this is not what Kant means when he discusses the reasons for treating animals humanely. See Kain (2010, 225-226) for more on problems associated with this argument.

such as St. Thomas Aquinas and early moderns like Locke and Hume (Guyer 1993, 304-306). Despite this argument being problematic, it is usually the only recourse that many Kantians think they have when confronted with the problem of non-rational nature in Kant's philosophy. For on the traditional reading, Kant is perceived as an unapologetically anthropocentric thinker who elevates humanity above and beyond the natural. Fortunately, the brutalization argument need not be the only one that can be considered for thinking about how Kant may be a resource for environmental ethics. I discuss alternative options in Part 2. For now, I suggest we look outside the narrow scope of Kant scholarship to see how the traditional view maintains itself as the dominant one in philosophy more generally and in ethics pedagogy.

The Traditional Interpretation in Ethics and Pedagogy

For more evidence that the traditional reading of Kant is the mainstream one, I suggest looking at a common pedagogical text for undergraduates. Considering this more general level will help articulate the standard reception of Kant outside of specialist circles. Of course, a warning is in order: undergraduate textbooks often, as is well known, present caricatured-versions of the philosophers that they deign to represent. This is understandable—for it is no easy task to present a clear and comprehensive picture of a philosopher's position in a short space. Despite the caricatured form that textbooks often unfortunately present, they can be of use to see the mainstream way how a philosopher is perceived, even by researchers specializing in other areas of philosophy. With the hyper-specialization of academic philosophy, no one has time to master every thinker. Thus, for instance, if one works on the history of the philosophy of science, one may in fact have acquired knowledge of the scientific significance of Kant's theoretical philosophy. Even this specialist possibly has a limited view of Kant's moral philosophy (unless, of course, said specialist has a personal interest outside one's research focus). The non-specialist,

pedagogical perception of a philosopher can be a useful resource for seeing how he or she is perceived by non-specialists, and it also shows how he or she is received in the wider culture of those educated in the arts and sciences.

James Rachels' presentation of Kant, I suggest, is a good pedagogical representative of the traditional view of Kant. Rachels' *The Elements of Moral Philosophy*¹⁷ has been a strong staple in undergraduate ethics courses, and his presentation of Kant is a good indicator of how Kant has been received outside specialist circles. There are two chapters on Kant in *The Elements*. The first is primarily a foil from a previous chapter on utilitarianism; Rachels shows how a rule-based normative theory (with Kant's as the prime example) differs from a consequentialist one. After briefly characterizing the categorical imperative, Rachels begins his discussion of the philosophical importance of Kant in Chapter 10's "Kant and Respect for Persons." Curiously, this single substantive chapter devoted to Kant in an introductory ethics textbook opens by asserting how for Kant "human beings occupy a special place in creation" (Rachels 1999, 132). This is immediately followed by a quote from Kant's early (1779) *Lectures on Ethics*: "Animals...are there merely as means to an end. That end is man'...Thus, on Kant's view, mere animals have no moral importance" (Rachels 1999, 132). Given Rachels' traditional characterization of Kantian ethics—defined negatively through an apparently dismal portrayal of its view on animals—the possibility of a Kantian environmental ethic is easily dismissed.

¹⁷ *The Elements of Moral Philosophy* was originally published in 1986 and has been continuously republished for classroom use (now with an 8th edition published in 2014, long after Rachels' death in 2003). Rather than providing abridged excerpts from primary texts, Rachels discusses—among other things—relativism, egoism, utilitarianism, Kantian ethics, contractarianism, virtue ethics, and feminist ethics. Rachels' book betrays itself as dated with regard to the climate crisis, as he only covers anthropocentric theories. Besides a few passing notes to Peter Singer in the utilitarianism section, there is hardly any reference to environmental issues and certainly no mention of climate change, despite the newest edition being only a few years ago. This is, perhaps, why Rachels' anthropocentric perspective tracks the traditional reading of Kant quite well and one reason why I chose it as an exemplar for this section.

Though Kant himself argues for *indirect* duties to animals, proponents of the traditional view often assume that a Kantian approach removes non-humans from the moral picture. This assumption is one that proponents of the new, environmental reading of Kant have criticized, as I shall show later.

In sum, the very first pages of this pedagogical text betray the traditional vision of Kant as a strict anthropocentrist who disregards animals morally. And, though Rachels mentions animals, he doesn't discuss the environment because (I take it), on the traditional view the environment is a non-issue. Why *has* the environment been received as a non-issue or a non-starter for Kant? Looking at how environmental ethicists have criticized Kant should help to answer this question. For they have lodged the most direct assaults on Kant. Examining their complaints illuminates how these environmental ethicists have been unwittingly targeting a one-sided, strawman Kant, namely, the ubiquitous traditional reading.

Part 2: Environmental Ethics and Kant's Invidious Humanism

The following sections discuss the views of proponents of diverse approaches to environmental ethics, broadly construed,¹⁸ and their respective critiques of Kant on the traditional reading. By showing how the traditional reading is not the sole reading we can draw from, I intend to disarm the concerns of these environmental ethicists in the subsequent chapters of this dissertation. I begin by briefly looking at how Kant has been received in animal ethics circles, as animal ethics is a subfield of environmental ethics and was, historically, one of the first approaches to question the merit of Kantianism for non-rational nature. Thus, looking briefly into how Peter Singer and

¹⁸ Environmental ethics, though a relatively new field in philosophy, has a variety of different approaches. Historically, most approaches began with concerns for animals (animal ethics), the aesthetic appreciation of nature, and wilderness. Present offshoots include biocentrism, ecocentrism, ecofeminism, indigenous and Eastern approaches, as well as more anthropocentric perspectives, including those dealing with the philosophical and moral concerns of population and climate ethics.

Tom Regan understood Kant through the traditional interpretation will be useful before considering how he is usually received in environmental ethics. Many of these concerns, such as the lack of direct duties, have been noted in the foregoing. Then, I consider one of the most important attacks on the traditional view from the standpoint of environmental ethics by Christina Hoff. Hoff is usually considered to be the first person to bridge Kant to environmental ethics, albeit in a critical rather than constructive fashion. Finally, I consider how Kant is typically received in the relatively new area of climate ethics, focusing on prominent climate ethicists Dale Jamieson and James Garvey and their dismissive attitude toward Kant.

Peter Singer and Tom Regan—perhaps the two most influential contemporary philosophers for animal ethics—lodge some of the earliest complaints against Kant. These complaints are directed not only at Kant, but at the long tradition of Western philosophy, especially since Descartes. They take issue with Kant’s apparently strong anthropocentrism; they infer that on this view humans are authorized to dominate and exploit animals in any way they see fit; and finally they take issue with Kant’s failure to acknowledge direct duties to animals. In *Animal Liberation*, Singer in 1975 contrasts Kant with Bentham, implying that the anthropocentric speciesism of the former “justifies” lamentable treatment of animals not dissimilar to how the racism of Europeans “justifies” slavery (Singer 2009, 203).¹⁹ And as Regan

¹⁹ Singer, like Regan, notes how Kant appears to be inconsistent (and hence speciesist) with regard to duties to non- or pre-rational humans. We lack direct duties to animals since they are not rational, but, so the speciesist line of reasoning goes, we still have direct duties to so-called marginal cases such as infants and humans with mental deficits who are less rational than adult animals. How, questions Singer and Regan, can Kant justify duties to these humans but not seemingly more rational animals, like horses, unless he is being arbitrary and speciesist? Wood in his modification of Kant’s theory, argues that a rejection of the “personification principle” of the traditional reading of Kant allows for a Kantian to value beings with “fragmented” rationality, which includes marginal-case humans and a large swathe of sentient animals. This logocentric approach, it might be thought, obviates the apparent speciesism of Kant. Though Kant defines humanity as a rational being, marginal human cases lack (or have a fragmented) form of rationality. Even without such a modification as Wood’s, I submit that the claim of speciesism is misplaced, since in numerous places such as *Universal Natural History* and *Anthropology* Kant suggests

articulates in *The Case for Animal Rights* in 1983, the lack of direct duties in Kantian ethics not only conflicts with commonsense moral intuition, but is also theoretically problematic, since Kant's "attempt to restrict inherent value to moral agents is arbitrary" (Regan 2004, 183, 239).²⁰ This complaint against Kant is common, though to be sure a Kantian need not concede such arbitrariness. Indeed, Korsgaard—despite her attempt to modify Kant in a way that makes him more animal-friendly, as it were—makes the case that Kant's argument for the absolute value of ends in themselves is rationally grounded. Nonetheless, the standard complaint against Kant from the standpoint of animal ethics is that his anthropocentrism is ignorant, invidious, and speciesist. Therefore his arguments for the absolute worth and dignity of humanity in contrast to the limited or relative worth of animals are either specious, biased, or else reflect his early modern, human chauvinist tendencies. And of course, if Kant is inept in dealing with the moral problems associated with non-human animals, it would seem that he would only fare worse regarding the moral problems of ecosystems or environments.

that nonhuman intelligences would also be ends in themselves. Another way Kant attempts to address why marginal-case humans are owed direct duties but not animals has to do with what I call the holistic vision of humanity developed in Kant's anthropology and philosophy of history, wherein the moral predispositions of humanity that require numerous generations to cultivate are given focus. Thus, though the human species as a totality is favored from a moral standpoint in these texts, it is not for what Regan and Singer see as simply "arbitrary" reasons but is rather reasoned out in line with the idea of morality (in terms of cultural development as a distinction from animals).

²⁰ Regan finds Kant's position arbitrary because he takes the capacity for rationality (characteristic of moral agents) to be a baseless criterion for moral consideration. Regan's argument (2004, 183-185) is lengthy and complex, but the basic idea is that Regan thinks either Kant is being speciesist, or else he is denying moral consideration to moral patients (namely, those capable of suffering) on arbitrary grounds (namely, that they are being denied moral status because they do not have the capacity to legislate the moral law). According to Regan, both the moral agent and the moral patient (human or not) are capable of suffering: "The issue concerns their *shared* capacity for suffering, not their differing [rational] abilities. If the duty not to cause moral agents gratuitous suffering is a duty owed directly to them, the same must be true of the duty not to do the same to human moral patients. Otherwise, we flaunt the requirement of formal justice: we allow dissimilar treatment of *relevantly* similar cases. Kant's position does violate this requirement, and the violation of it...is an unavoidable consequence of the moral arbitrariness of his theory" (Regan 2004, 183). One worry of this analysis is that the capacity for suffering is potentially just as arbitrary as a criterion for moral status ascription.

In contrast to the more indirect critique of Kantianism found in Singer and Regan, other environmental commentators have engaged with Kant in a more direct fashion. In the following section, I sketch complaints against Kant’s philosophy from the traditional reading, using an essay by Hoff, who is perhaps the first commentator to criticize Kant from the standpoint of environmental ethics. In 1983, Christina Hoff published a short but scathing essay on Kant in the journal *Environmental Ethics*, and in this essay she takes up most of the same concerns that Singer and Regan do. Hoff’s critique is historically important for making sense of the traditional reading of Kant and its more recent shift in a green direction since her publication is the first, to my knowledge, to connect the issues raised by animal ethicists to the field of environmental ethics. She raises a number of issues with Kant’s ethics, noting how his seemingly noble humanistic tendencies—with their capacity to justify universal human rights—have on their insidious obverse an ability to justify human indifference to animal suffering. Because of the influence of this essay against the greening of Kant in my project, I shall address her objections in greater detail. Hoff took the early insights in animal ethics²¹ and placed them in the larger context of environmental ethics, for which Kant (like Descartes) has now—thanks to the myopia of the traditional reading—been transmogrified into an ecological bogeyman. In Chapter 3, I make the case, to the contrary, that Kant’s philosophy of nature is indeed ecological, expanding moral horizons beyond the merely human.

²¹ The first edition of Regan’s *The Case for Animal Rights* was published during the same year as Hoff’s essay “Kant’s Invidious Humanism”; I am not aware whether either of these philosophers corresponded on these issues, though it is at least clear that both would have been familiar with Singer’s radical book published only eight years earlier.

Kant's "Invidious Humanism" regarding Animals

The first and (perhaps) best representation of both the traditional reading of Kantian ethics and the environmental complaint against Kantianism can be found in the succinct essay by Christina Hoff, entitled "Kant's Invidious Humanism." Hoff makes a number of strong claims in this paper. The three main claims are as follows: first, she argues that Kant affords no moral consideration to non-rational beings (i.e., non-humans), entailing that the theory requires that we remain indifferent to animal suffering; second, she contends that Kant's moral theory is "impoverished" since it conflicts with common moral intuitions; third, Hoff argues that the attempt to ground the categorical imperative's formulation of universal respect for persons (which she thinks is a key source of Kant's invidious treatment of non-humans) is unsystematic and poorly supported by the formulation of universal law. Below, I offer a reconstruction of her overarching argument that Kant's moral theory is an invidious flavor of humanism. Her actual paper is divided into four parts and the argument she pursues is not necessarily presented in the order in which I present.

In support of the claim that Kantian ethics is indifferent to animal welfare, Hoff cites explicit passages in *Groundwork* and Kant's Lectures on Ethics where Kant argues that the capacity for autonomy and the self-legislation of the moral law makes one a moral person and end in itself, not to be used as a mere means (Hoff 1983, 64). The negative component of Kant's claim that Hoff focuses on is that those beings who cannot self-legislate are reduced to things or beings whom it is permissible to use as mere means. This is all very much supported by textual evidence that Hoff rightly notes from Kant's ethical theory in *Groundwork* (4:428) and Lectures on Ethics (Hoff 1983, 63-64). Since non-rational beings are mere means, Hoff infers that indifference to their suffering is permitted on Kant's normative framework. In *Groundwork*,

Kant supports his rational humanism with a variety of arguments defending the incommensurable superiority of rational nature...Kant's position on animals in the *Lectures on Ethics* is clear against the theoretical background of the *Groundwork*. The moral domain consists exclusively of beings to whom we have direct duties...so far as animals are concerned we have no direct duties. Animals are not self-conscious and are there merely as a means to an end. That end is man (Hoff 1983, 64-65).

Thus, from Kant's views that animals can be used as means and that cruel actions toward them are only self-damaging from the moral standpoint, Hoff reads Kant as the champion of human rights at the cost of an impoverished view of the moral status of animals.

This leads to Hoff's second major charge, namely, that Kant's ethical theory is inadequate because it conflicts with our moral intuitions. Here, she appeals to commonsense in order to show how the logical requirements of Kant's view lead, as she claims, to a position where animals are reduced to mere things and that, second, this view conflicts with a deeply held moral intuition as to the wrongness of animal suffering. That animal cruelty is opposed to moral commonsense is hardly debatable, and there are strong associations between individuals with histories of animal cruelty and mental conditions such as anti-social personality disorder (Gleyzer et al. 2002; Vaughn et al. 2009). Moreover, recent laws restricting inhumane treatment of animals—in particular, the use of battery cages for chickens, hunting of dolphins, and killing of great apes—are upheld in most developed countries today, suggesting a legal convergence with evolving moral intuitions of society. According to Hoff, “the view that we have moral duties to all, but only, rational beings is incompatible with common moral intuition...the well-being of an animal appears to be an intrinsically valuable state of affairs, and attempts to view it otherwise are unconvincing, unsatisfactory, and finally, perverse” (Hoff 1983, 67-68). Despite an obvious problem with begging the question, we might charitably construe this second claim as a *reductio ad absurdum* of Kant's moral theory: in order to remain systematic, Kant must deny direct duties to animals, and this in turn conflicts with commonsensical moral views. If we

granted that the commonsense intuition about animal cruelty has moral grounds (for without it, we risk begging the question), it would be absurd for a normative theory to either permit cruel treatment of animals, or else stake the location of the moral harm on the cruel agent and not the animal abused; therefore, so it goes, something must be either impoverished with Kant's theory or else it has a logical deficiency (or both).

She uses this *reductio* to transition to her final major claim: that the categorical imperative's formulation of respect for persons is supported weakly by the formulation of universal law. Instead, she thinks the formulation of respect for persons is based on an axiomatic premise in Kant's argument that rational nature exists as an end in itself. After thinking she has already demonstrated the impoverished nature of Kant's ethical theory through her first two claims, Hoff intends to show that not only is it morally deficient, but it is also theoretically inept. Essentially, she wonders why Kant denies direct duties to animals. What are his reasons? Her answer, as she sees it, lies in the categorical imperative's formulation of respect for persons: "rational nature and only rational nature exists as an end in itself." Hoff claims that Kant derives this formulation from the formulation of universal law. She reconstructs Kant's argument that rational nature exists as an end in itself in three short steps:

- (i) A man necessarily conceives of his own existence as an end in itself (Kant calls this a "subjective principle of action").
- (ii) But every other rational being thinks of himself in the same way.
- (iii) Thus, it must be an objective principle that "Rational nature exists as an end in itself" (Hoff 1983, 65).

Hoff fails to cite *Groundwork* in her reconstruction (though it is clear that she is looking at GW 4:429). A charitable reading of her argument can be drawn from Korsgaard's interpretation regarding these passages. Here, Kant is drawing from his distinction between relative and absolute ends. Relative ends are hypothetical and typically prudential ones: if I desire to eat, I

will seek to obtain some food. Absolute ends are those ends that are good for their own sake. That is, they are not conditioned on some prior end. When we assign value to ourselves by realizing we are an unconditioned source of value, we conceive of ourselves insofar as we are capable of setting ends as absolute ends (Korsgaard 2017, xxiv). Humans are the subjective principles of their own actions. They treat themselves as absolute ends as a necessary condition for pursuing any other relative ends, since all conditioned ends require an unconditioned source. Because the end-setting capacity for Kant—as Hoff notes—is a rational capacity, and only humans are rational,²² only they exist as ends in themselves. Kant’s humanism can thus ground a moral conception of human rights on the one hand, but on the other hand denies the status of ends in themselves to all non-human entities: “Kant’s theory is attractive insofar as it provides a theoretical foundation for human rights. Unfortunately, the theory which gives to human beings a preeminent moral status altogether excludes animals from the moral domain” (Hoff 1983, 63).

Hoff’s paper is well-researched and succinctly summarizes the general outlook of Kant’s ethical views vis-à-vis humans and non-humans. Accordingly, her paper is a good representative of what I have called the traditional reading of Kant’s ethics. I will now briefly express a few reservations I have with Hoff’s reading. With regard to her first claim, Hoff is indeed right that we have no direct duties to animals from the standpoint of Kant’s ethical theory, but other

²² The empirical question of whether non-human animals are rational is an interesting one. In Kant’s time, this question was hardly interesting, though he did entertain the possibility of extraterrestrial rational beings (e.g. UNH 1:358-359; *Anthropology* 7:331-332). With recent research on animal cognition and ethology, the question becomes less whimsical. For a defense of Kant’s claim that only humans are rational, one could (as Korsgaard does, 2004, 85-86) distinguish between intelligence and rationality. Many animals are intelligent—capable of adapting to novel environments, learning new strategies for satisfying their natural ends, etc. When rationality is interpreted as not only a prudential faculty for deliberating on actions but, in addition, understanding the *reasons* for which one has made a determination for action, it is questionable whether non-humans have such a capacity. To be charitable to Hoff, let us maintain Korsgaard’s distinction between intelligence and rationality and suppose that only humans are rational in this sense.

commentators such as Toby Svoboda (2012, 2015) have convincingly dealt with and resolved this problem with respect to Kantianism and environmental ethics: despite lacking direct duties to flora and fauna, a robust Kantian environmental ethic is still possible. While it is true that Kant argues that we have no direct duties to animals—even in the later *Metaphysics of Morals*—the case can still be made that animals still deserve moral consideration²³ on a Kantian framework. While direct duties are owed only to moral agents, there is still room for non-rational nature to be included under the sphere of moral consideration: the Kantian moral sphere is just more complex than Hoff makes it out to be, and we certainly have duties *in regard to* flora and fauna; the traditional reading of Kant is a decidedly absolutist view: either a being is owed direct duties (an esteemed rational being) or it is not owed them (it is a mere thing); this view is mistaken, for Kant’s brief discussions of children in his pedagogical/anthropological writings and his discussions of the continuity between human and animal cognition in his geography belie this faultily rigid distinction.

Young children are clearly not rational (in the sense discussed by Korsgaard 2004, 87, as capable of deliberating on the grounds of their actions), but they nonetheless deserve our moral consideration. They also develop intellectual capacities similar to many complex animals (e.g. dolphins and primates) that require education and discipline to foster. Unlike animals, with education the vast majority of children will eventually cultivate their rational capacities for moral agency (*Pedagogy* 9:442-444, cf. *Anthropology* 7:127-128).²⁴ In any case, it may be thought that

²³ Animals deserve consideration from us when we deliberate on actions because they can be harmed and benefitted, and when they are harmed, we become morally worse off; when they are benefitted, we become more morally perfect. By being morally considerable, I do not mean having intrinsic value. Instead, I mean that the welfare of the morally considerable entity in question matters from the standpoint of ethics in a more general sense.

²⁴ In fact, in *Critique of Practical Reason* Kant mentions that the faculty of judgment, requisite for the exercise of humanity’s rational faculties, is a faculty that requires discipline and practice over time (CPrR

we only have indirect duties to young pre-rational children, akin to animals, since pre-rational children are not persons in the Kantian sense.²⁵ Moreover, in Kant's lectures on *Physical Geography*,²⁶ Kant remarks how, in particular, dogs and elephants, are rational-logical analogues of human agents:²⁷

[dogs] seem to be the most perfect animal, and to manifest most strongly the *analogue of rationality*... They carefully look after their responsibilities, remain with their master; if they've done something wicked they become disturbed; and if they see their master angry, try to win him over with a submissive posture (from "Kant on Animals" Kain 2018, 217).

[an elephant] is an animal worthy of admiration (Kain 2018, 218).

An elephant is a gentle animal, and seems to be an analogue of morality. It understands jokes, but cannot be duped (Kain 2018, 218).

5:159). Moreover, Kant claims that humans aren't fully rational (and hence agents) until after the age of 20, when their ends and interests converge (*Anthropology* 7:201; *Jaesche Logic* VI 43). If we follow Hoff in arguing that we only have duties for rational agents, a large proportion of humanity would be excluded from the moral sphere as well (most children, adolescents, and young adults), which surely isn't what Kant has in mind. One might object that Kant can squeeze non-rational potential humans into the moral sphere because they are part of the larger collective species of humanity, but this conclusion might appear to succumb to the charge of speciesism, and Kant's moral philosophy is primarily logocentric, not anthropocentric, since it concerns all rational beings. Thus, in order to provide a charitable reading of Kant when he says all humans—even non-rational ones—are owed direct duties, it should be understood to obtain insofar as they have a proto-rational or fragmented sense of rationality based on their cognitive faculties (e.g. a capacity for representation, imagination, judgement, will), which is how Wood (1998) argues for including proto-rational beings in the moral sphere. An objection to this line of reasoning can be garnered from Singer's argument against potential personhood in abortion, "Taking Life: The Embryo and the Fetus" from *Practical Ethics* (Singer 1993, 152-156). Wood can militate against this objection by emphasizing how disrespecting potential persons (such as in those with developing cognitive faculties) disrespects rational nature in the abstract, which is a moral failing. Hence, we ought not to treat proto-rational beings such as pre-rational children or sentient animals wrongly. If Wood's position is able to overcome Singer's potential argument, it only does so by severely modifying Kant's.

²⁵ In *Metaphysics of Morals* (6:442-443) Kant explicitly discusses our duties *with regard to* (*in Ansehung*) animals. He says though we have no direct duties to animals, we should treat them humanely and benevolently. This passage could be used to interpret our duties to young children, as (as Kant himself tells us in *Anthropology*) they are not yet rational and they are incapable of forming concepts of objects or having determinate experiences. In this passage in *Metaphysics of Morals*, Kant says that personhood is required for direct perfect duties, and children are not persons in the moral sense. But we still have to include them, like animals, in the moral sphere for Kant. Hoff is thus mistaken in her reading of Kant's ethics being so black and white.

²⁶ Kant's *Vorlesungen ueber physischen Geographie* are currently unpublished and untranslated.

²⁷ In the Collins Lectures on Ethics, Kant also regards animals as "an analogue of humanity" for which we have mediated duties in regard to (LE 27:459).

Kant fails to draw moral implications from these statements, but this is understandable, as these assertions are delivered in non-philosophical lectures. Contrary to Hoff's reading, it seems reasonable to infer from Kant's constant use of moral-language²⁸ with regard to elephants and dogs²⁹ that they have a moral status that is at least comparable to young children, and thus deserve membership in the moral sphere of consideration. To be morally considerable isn't synonymous with being an end in itself; nonetheless, the welfare of an entity can *matter*, morally, despite us not owing it direct duties. For Kant, in moral praxis we need to carefully consider animal welfare rather than remain indifferent to animal suffering. Again, this evidence obviates Hoff's black and white reading of Kant's "invidious humanism." Hence, complex animals are not to be used as *things* since they are no less rational than young children (where rationality is understood as the capacity for normative self-governance, Korsgaard 2004, 87), and many animals such as cephalopods and primates exhibit at the very least a form of "proto-rationality" which surely makes them out to be moral analogues of humanity deserving of moral consideration.³⁰ Hoff denies of Kant the proto-rational form to animals since they are not self-conscious (Hoff 1983, 65). This can find further support in the Collins Lectures on Ethics (LE 27:459). However, in his lectures on metaphysics and anthropology Kant does indeed claim that

²⁸ The moral-language that Kant uses with regard to elephants is perhaps closest to the language used in *Groundwork* with regard to ends in themselves, which is the text Hoff appeals to to argue that Kant suggests we remain indifferent to animal suffering. Indeed, Kant describes elephants with these normatively loaded words without reservation; these include "prudence," "good-natured," "patience," "discipline" (Kain 2018, 218).

²⁹ Amusingly, Kant sees monkeys as only having an "analogue of reason (*analogon rationis*)" but not an "analogue of morality (*analogon moralitatis*)" as he believes elephants and dogs do (Kain 2018, 217; *Physical Geography* 9:336-337, 217). Likely, Kant thinks this because field reports he had access to depict monkeys engaging in deceptive activities, such as theft (Kain, "Duties Regarding Animals" 2010, 217).

³⁰ Cf. to Wood's discussion of potentially-rational nature in "Kant on Duties Regarding Nonrational Nature" (1998).

animals have the intellectual capacity for representation and reflection (Schönfeld 2018, 28:274; *Anthropology* 7:141; Wilson 2008, 8). Though perhaps not self-aware in the sense of rationally setting ends in accordance with the categorical imperative, Kant at least views animals in these texts as self-conscious and sentient. Additionally, the case can be made that Kant thinks animals have a faculty of choice (*Willkür*). As Holly L. Wilson notes, “A will [*Willkür*], Kant writes in the *Critique of Pure Reason*, ‘is purely animal (*arbitrium brutum*), which cannot be determined save through sensuous impulses, that is, pathologically” (Wilson 2008, 7; CPR A802/B830). In sum, Hoff’s reading is implausibly black and white and fails to note the striking cognitive and moral continuities Kant sees between humans and animals. One might object that Hoff could avoid this problem by admitting that humans and animals share certain aspects of their nature—for example, insofar as they are sensuous beings—but that nonetheless, the sensuous-nature in both humans and animals is irrelevant to the proper ends of morality. Though initially plausible (especially with regard only to *Groundwork*), this objection fails to account for the stronger relevance Kant gives to feeling in *Metaphysics of Morals*³¹ and the claims Kant makes regarding the impermissibility of cruelty to animals. Regarding the latter, when we harm animals we do not properly do *them* a wrong (since duties to animals for Kant are duties to oneself), but we nonetheless engage in activities that are clearly relevant to the sensuous nature of animals. In other words, *that animals can be harmed or benefited matters* for Kant in deciding what we can and cannot do to animals, despite us not owing them direct duties. As Patrick Kain asserts in defending Kant against a Hoff-like complaint,

³¹ For example, Kant argues that we have duties to oneself to cultivate a good disposition (that is instrumental to morality) through the appreciation of beautiful nature and the benevolent treatment of animals. As Guyer puts it, “duties to oneself can be duties to have—or preserve and develop—certain kinds of feelings” (Guyer 1993, 320). For more on the specifics of Kant’s arguments in *Metaphysics of Morals*, see Guyer’s “Duties Regarding Nature” (1993).

there is indeed something about the animals in question that grounds Kant's demands to treat them decently: because of their nature or behavior, animals are the proper object of one's sympathy and love. Again, proper treatment of animals is a necessary condition for and perhaps a constitutive part of one's moral well-being, rather than a mere 'instrumental' means to it...part of what Kant insists upon is the fact that a self-respecting person is directly concerned with the fate of animals (Kain 2010, 226-227).

Thus, *pace* Hoff, for Kant morality isn't black and white (regarding mere rationality); rather, (and especially when accounting for Kant's latter remarks on virtue), the sensuous aspects of human and animal nature matter to morality. Kant's thought isn't merely humanistic. It can be pushed beyond Hoff's reading as a resource for fostering and justifying real concern for non-rational nature from the standpoint of morality.

Likely, Hoff arrives at her environmental condemnation of Kantianism because she relies solely on *Groundwork* and the early Lectures on Ethics to support her case. Though important works, these are not the only works one can (and should) draw from in order to show how Kant's moral philosophy regards non-rational nature. Although Svoboda doesn't address Hoff directly in his recent work, he tackles similar objections to Kant on the moral status of animals, arguing that there is textual evidence to support an environmental reading and application of Kantian ethics. My main point here is to show that the traditional yet prominent reading of Kant best exemplified in Hoff is not necessarily the best reading; though drawing from specific passages in Kant, it is not nuanced and faithful to more general holistic tendencies in Kant's thought.

With regard to the third claim that Kant's philosophy is unsystematic, we need only question Hoff's reconstruction of Kant's argument (Hoff 1983, 65). Her failure to properly cite *Groundwork* and alternative interpretations in Kant scholarship at the very least raises suspicions with regard to its plausibility. Korsgaard in *Creating the Kingdom of Ends* (2000) offers a much more thorough and complex reconstruction of Kant's argument in *Groundwork*, citing passages in Kant very carefully. On Korsgaard's reading, Kant's argument, insofar as it unifies the

formulations of universal law, respect for persons, kingdom of ends, and autonomy—while by no means perfect in terms of presentation—is indeed systematic and consistent as a philosophical argument. Other commentators, such as Wood, have questioned the assumption that the formulation of universal law is the foundation of the formulation of autonomy and respect for persons.³² Hoff simply assumes this to be the case since it is the order in which Kant presents the formulations of the categorical imperative, and a stronger argument is needed to defend this assumption since Kant’s approach in *Groundwork* is complex and multi-faceted. Though not prima facie outlandish, any approach that attempts to reduce Kant’s argument to a few simple steps that rely on (unjustified) axiomatic premises at the very least must be examined critically. There are plenty of other reasonable interpretations of Kant’s argument that appreciate its complexity. This is not to say that Hoff’s simple presentation is necessarily wrong (in fact, a clearer argument is, all things considered, to be preferred to a turgid one), but that Hoff should have at least mentioned contrary interpretive avenues in her exposition. Otherwise, she is liable to be accused of presenting a straw man argument.

Finally, Hoff’s claim that Kant moral philosophy is morally repugnant (that is, that it conflicts with our commonly held moral beliefs and intuitions) since it seems to disregard the suffering of non-humans appears more to be an exercise in rhetoric, since it largely appeals to sentiments of suffering rather than a systematic refutation of Kantianism. Even if we accepted her conclusion that Kantians cannot adequately grapple with the morality of animals, her appeal

³² In *Kant’s Ethical Thought* (1999) Allen Wood makes the convincing case that this standard view—that the formulation of universal law is the primary or fundamental foundation of the categorical imperative—is itself mistaken, on good textual grounds. Though the formulation of universal law is presented first in *Groundwork’s* argument, it already, Wood claims, logically presupposes the later formulations (Wood 1999, 81-82). If he is right, then not only does Hoff fail to show how Kant “unsystematically” connects the formulation of universal law to the formulation of respect for persons, but she also begins with a faulty assumption, namely that the former formulation has some kind of special axiomatic status.

to moral intuitions³³ rather than argumentation seems at best to be more of a meta-philosophical complaint against Kant's methodology rather than to his moral arguments themselves. At worst, it is blatant begging of the question. She laments that on Kant's view, animals are not deemed worthy to be happy (Hoff 1983, 67); this makes no sense, as worthiness requires autonomy (and culpability) and thus, of course, non-rational animals cannot be *worthy* of happiness. Hoff also thinks Kant maintains that we should be indifferent to animal suffering (Hoff 1983, 67). Quite the contrary! (see, for example, MM 6:443-444 and CJ 5:380, *pace* Hoff). Notwithstanding the problematic passage in *Conjectural Beginning* where Kant asserts that humans may use animals without any qualms (CB 8:114),³⁴ there are plenty of passages in Kant suggesting animal suffering matters for morality. Korsgaard summarizes Kant's decidedly *anti*-indifference stance with regard to animal suffering:

Kant does think we have the right to kill the other animals, but it must be quickly and without pain, and cannot be for the sake of mere sport... He does not think we should perform painful experiments on non-human animals "for the sake of mere speculation, when the end could also be achieved without these" [MM 6:443]. He thinks we may make other animals work, but not in a way that strains their capacities. The limitation he mentions sounds vaguely as if it were drawn from the golden rule: we should only force them to do such work as we must do ourselves [MM 6:443]. And if they do work for us, he thinks that we should be grateful. In his course lectures, Kant at this point sometimes told his students a story about G. W. Leibniz carefully returning a worm he had been studying to its leaf when he was done [LE 27:459]. And both in his lectures and in *Metaphysics of Morals*, Kant has hard words for people who shoot their horses or dogs when they are no longer useful [MM 6:443; LE 27:459]. Such animals should be treated, Kant says, "just as if they were members of the household" [MM 6:443]. He remarks with some approval that "in Athens it was punishable to let an aged work-horse starve." He tells us that "any action whereby we may torment animals, or let them suffer distress,

³³ Though Kant is quite systematic in general—and especially in his moral philosophy and the primacy of the practical, I in no way mean to downplay or disregard the fact that Kant also often appeals to moral intuition. Indeed, in Rousseau fashion in *Groundwork*, Kant claims that the categorical imperative is implicitly operative in the average person (GW 4:403-405). And, in *Critique of Practical Reason*, Kant appeals to the axiomatic status of a moral "fact of reason" supported by what appears to be a strong moral intuition that he believes all humans harbor in the conscience of their hearts (CPrR 5:42-47).

³⁴ I address the this problem in the conclusion of Chapter 5.

or otherwise treat them without love, is demeaning to ourselves” [LE 27:710] (Korsgaard 2004, 89-90).

Despite not being able to set rational ends, animals can still suffer and be made unhappy. Yet Hoff reasons that suffering is irrelevant to the moral question for Kant. This objection (and other similar contentions that Hoff raises against Kant) fails because happiness (which concerns, among other things, a fulfilment of sensuous desire and maintenance of well-being) becomes an important theme in Kant’s post-*Groundwork* moral writings. This is especially true in Kant’s discussion of the highest good, which amounts to the promotion of a world in which the harmonization of our moral ends coincides with a maximization of human welfare.³⁵ Suffering and welfare are both clearly a concern for Kant in his moral philosophy; this concern just isn’t sufficiently dealt with (or, perhaps, developed yet in *Groundwork*). And, if the non-rational welfare of humans is morally relevant for Kant, why would not the welfare of non-rational animals be important as well? Failure to care about the suffering of animals is indeed a moral failing for Kant.

In addition to these potential difficulties with Hoff’s particular reading of Kant’s invidious humanism, Holly L. Wilson in her paper “The Green Kant: Kant’s Treatment of Animals” (2008) further undermines the traditional view of Kant on non-rational nature presented by Hoff. Though Hoff presents a decent case against Kant’s treatment of animals utilizing a general framework from Kant’s philosophy, Wilson’s paper looks more into the specifics: in *Groundwork* when Kant says that animals may be used as a means, what exactly does he mean? Can Kant be a resource for animal or environmental ethics, contrary to the

³⁵ For areas where Kant discusses the highest good and the moral importance of happiness—e.g. when Kant states that one should make “the well-being and happiness of others my *end* (MM 6:452)—see CPrR 5:110-111, 146-148; CJ 5:450, 453; *Religion* 6:134-135; MM 6:448-457.

traditional view? Wilson argues that Kant’s discussion of animals as “mere means” because of their incapacity to self-legislate the moral law doesn’t imply that they are mere *things*. She maintains—drawing largely from Kant’s use of teleological judgment and his assertions in various lectures—that organized beings are ontologically distinct from things. The latter are to be understood in mechanistic terms, whereas animals are organized and have formative inner forces (Wilson 2008, 7). Much like Paul Taylor’s attribution of non-human animals as being “teleological centers of life,”³⁶ Kant views organized beings as animated through spontaneous inner principles (Wilson 2008, 6; 28:275); not only does Kant claim that animals have souls in his Lectures on Metaphysics, but that they are capable of self-determination (understood, of course, in a weaker sense through this principle of animation, rather than agential self-determination by means of the moral law). By focusing on Kant’s general conclusions in *Groundwork* that animals are mere means and shouldn’t be treated as ends in themselves, Hoff ignores some of the important details of Kant’s philosophy of non-rational nature. Wilson’s analysis, by contrast, can be seen as a good response to the Hoff-inspired traditional reading of Kant that is anathema to the greening of Kant.

Perhaps a more sophisticated defender of the traditional reading could obviate my contentions with Hoff’s case.³⁷ It was never my intention to present a knockdown argument

³⁶ See Paul W. Taylor, *Respect for Nature* (1986), which I discuss in relation to Kant’s pre-critical ontology in Chapter 3.

³⁷ For a more systematic, traditional reading of Kant, see Pepita Haezrahi’s “The Concept of Man as End-in-Himself” (1967). In this paper, Haezrahi argues that the “unsystematic” foundations of the formulation of respect for persons that Hoff would later point at can be salvaged by appealing to the postulates of the *Critique of Practical Reason*. Once the dignity of humanity is assured through such a postulate, the “domination and determination of the irrational part by the rational”—both in humanity itself and against other non-rational beings—is secured. Haezrahi’s older paper doesn’t concern the animal debate explicitly, but it does indeed have implications for it and shows one that a more sophisticated reading of Kant against the environment is possible. There have been recent attempts to criticize Kant in the vein of Hoff. For one example, see Jens Timmermann’s “When the dog wags the tail: Animal welfare and the indirect duty in Kantian ethics” (2005). I focus on Hoff because she is, historically, the first person in the

against the traditional view, as it does indeed have much textual evidence in its favor. Rather, my main purpose in focusing on Hoff's astute essay is twofold: first, it is important to see how this traditional objection to Kantianism is both widespread and contentious, especially from the standpoint of Kant versus the environment. And second, my objections to Hoff's paper reveal that there is still a fertile space for the greening of Kant. That is, there are alternative Kantian texts and strategies one could choose for defending a less invidious environmental reading of Kant. Looking beyond *Groundwork* and understanding the historical context from which Hoff has crafted her critique is a good starting point. This larger context—and an attempt at mediating between Hoff, Wilson, Kant, and environmental ethics, is discussed below.

Squaring Hoff's Critique and Wilson's Defense in the Anthropocene

Though I reject most of Hoff's criticism of Kant with regard to environmental ethics, her essay is very important because it is the very first attempt to bridge Kant scholarship and environmental ethics. Historically, this is because the early concerns of environmental ethics—beginning in the mid-1970s—were primarily about the aesthetic appreciation of nature, preservation of wilderness, reduction of pollution and environmental degradation, and humane treatment of animals (Brennan 2015).³⁸ Set in the context of this early environmental framework, Hoff's critique of Kant sticks. For environmental ethicists at this time, Hoff deals a scathing blow to any potential Kantian approach in this field.³⁹ And it is true—if one intends only to defend an

literature to critique Kant with regard to animal and environmental ethics. For objections to Timmermann, see Kain ("Duties Regarding Animals," 2010, 226-227).

³⁸ Brennan, "Environmental Ethics," cited from *Stanford Encyclopedia of Philosophy*. <https://plato.stanford.edu/entries/ethics-environmental/>. Date accessed: 22 October 2018.

³⁹ Of course, Paul Taylor (1986) and Tom Regan (1983) present quasi-Kantian deontological accounts for biocentrism and animal rights, respectively, but both of these philosophers clearly articulate how their accounts are only broadly Kantian. In fact, they criticize Kant for his "invidious inhumanity" view of non-human animals in a similar way as Hoff, and these studies were published only shortly after Hoff's essay in the 1980s.

environmental ethic, Kant's philosophy in *Groundwork* is perhaps not the strongest work in the philosophical canon to which one can appeal since Kant appears only concerned with individual human persons in that text. So, it must be acknowledged that her criticisms are indeed well taken and historically important, especially given the philosophical debates she was engaged with at this time.

Finally, it is important to recognize that the contexts, issues, and debates have changed since the inception of environmental ethics and the early critique of it by Hoff; with the rise of human-caused climate change and a foreboding sixth mass extinction, the Anthropocene places humanity in a new and precarious predicament. Instead of worrying about aesthetic concerns, wilderness, or animal welfare, many environmental ethicists have now begun turn to the problem of climate change, since it is a collective challenge capable of unifying previous environmental and human concerns.⁴⁰ Instead of focusing on the (possibly) limited assistance of Kant's *Groundwork* in regard to the treatment of animals, as Hoff does, with the changing perspectives now required in the age of the Anthropocene, Kant can be of more assistance for environmental ethics through sustainability. And of course, Hoff's initial concerns about the inhumane treatment of animals will be discharged indirectly, for fighting climate change also is a means for evading the looming sixth mass extinction. In the end, then, Kant's humanistic cosmopolitanism may turn out to be one of the philosophical keys for transitioning to sustainability, rather than an invidious impediment. Understood in a historical context where climate change and its collective challenges remained (mostly) off the moral radar; and, where normative theories primarily aimed

⁴⁰ In response to this challenge, a whole new sub-field in environmental ethics has been formed: climate ethics. This field tends to be dominated by consequentialist approaches, and thus my discussion of Kant here can be seen as perhaps a first important step toward making Kantian approaches plausible in this field.

at being defensible with regard to individual human moral agents, Hoff's general critique of Kant makes sense. In the foregoing, I have shown how aspects of her argument are problematic, but the general concern about Kant's views on animals in *Groundwork* is worrying.

Thus, Hoff's position is understandable when viewed in the historical context of her time. And, Wilson's objections also stick better if Kant is read more carefully, read beyond the limited confines of *Groundwork*, and viewed through the lens of our current predicament with climate change. It must also not be forgotten that Hoff's important essay was one of the first attempts—even if only negatively—to bridge the disparate fields of Kant scholarship and environmental ethics. My project, then, takes inspiration from her approach in bridging the two but from a more positive angle, viz., for the greening of Kant with an eye toward his dynamic holism and the moral implications for sustainability that follow from it.

A Short Aside on Kant and Climate Ethics

Climate ethics is a rather new subfield of environmental ethics. It generally draws more from traditional normative theories such as utilitarianism and other analytic approaches rather than calling for an entirely new paradigm shift in normative thinking.⁴¹ In addition, with climate ethics—since we are on the path for a sixth mass extinction—the older concerns of animal welfare that Singer and Regan raised in the '70s and '80s have to be reframed in terms of climate change and biodiversity loss. With regard to the ethics of climate change, we need to take a

⁴¹ For the provocative argument that environmental ethics requires a completely new approach because of the “last man” problem, see Richard Routley, “Is there a need for a new, an environmental ethic?” (1973). Stephen M. Gardiner makes a similar point with regard to the limitations of standard ethical theories for climate ethics in *A Perfect Moral Storm* (2011). Though I am sympathetic to his view—especially with regard to reconsidering the moral vocation of humanity in light of climate change—I do not think we need to totally abandon the ethical wisdom of thinkers in the canon (such as Kant, as is obvious). Indeed, it seems perfectly fine to overcome Routley's “last man” problem by appealing to Kant's notion of perfect duties *to oneself* not to wantonly destroy nature. This is discussed further in my survey of Svoboda's account of duties regarding nature.

broader approach and think in terms of the earth-system. Later, I intend to work this claim out in light of Kant's view of systems and our current plight with climate change. For now, however, I would briefly highlight how Kant is usually received in these circles in order to show how there is much need for a green revisiting of Kantian thought. Despite the tendency of climate ethicists to be more open to figures from the canon, on the whole Kant has remained marginalized. This is likely due to the perception of his thinking as one that only regards abstract, discrete moral subjects and because of the perceived weakness of a strictly non-consequentialist approach to ethics for dealing with collective issues.⁴² For instance, prominent climate ethicist Dale Jamieson in *Reason in a Dark Time* dismisses the moral resourcefulness of Kant for climate change:

There is also the question about the philosophical basis for collectivizing duties. Some accounts claim to be inspired by Kant but they can find no real foundation in his work. He was interested in the conditions under which our actions have moral worth, not in solving collective action problems. There may be many things that are wrong with Paris Hilton flying to Rome on a shopping trip but a contradiction in will is not among them (Jamieson 2014, 173).⁴³

When the problem concerns collectives like ecosystems, entire nations, and future generations rather than individual subjects; when it concerns large time-scales spanning generations rather than particular situations and their maxims: it becomes obvious why Kant has been left behind.⁴⁴

⁴² Since many approaches in climate ethics make use of utilitarian-esque tools such as cost-benefit analyses and accounts of expected utility (and these are, of course, important for the intergenerational discussion), it is no surprise that apparently non-consequentialist approaches like Kantianism get as it were left in the dust.

⁴³ Obviously, there is no *logical* contradiction in flying to Rome (which is what I take Jamieson to be noting in this passage). Though, of course, there is a *practical* breakdown in the categorical imperative when one wills an action for the sake of enjoyment that undermines the conditions of human life on the planet. For more on how the categorical imperative can be understood as a conceptual underpinning of sustainable behavior along these lines, see Schönfeld, "The Kantian Blueprint of Climate Control" (2007).

⁴⁴ In *The Ethics of Climate Change*, climate ethicist James Garvey devotes about two full paragraphs to the resourcefulness of Kant's philosophy for climate change (Garvey 2008, 149-150). However, he considers only the formulation of universalizability and how it might be helpful for thinking about how to live more sustainably; he does not consider others aspects of Kant's thought, presumably because they—on the traditional reading—are too problematic for a thorough-going environmental ethic.

I hope to show that these presumptions about the limitations of Kant's thought for these problems are mistaken and that Kant can indeed be a theoretical asset capable of assisting with issues in climate ethics.

Merits and Limits of the Traditional View

Notwithstanding the potential difficulties that the traditional reading holds for a viable environmental ethic, this reading does have several elements, including historical and textual evidence, in its favor. I would like to briefly highlight these elements to show that we should still consider this view seriously—not only because it is the mainstream view but also because it is plausible. By doing so, it can later be seen why this view, reframed through the lens of climate change, must be superseded by the new, green one. With regard to its historical context, those who malign Kant's anthropocentric normative dualisms are right to point out that his philosophy developed out of a long tradition of human exceptionalism, both from secular and theological lines. The problem of what to do with the moral status of non-human animals has been a concern of theologians since at least Aquinas, with the solution to this problem being that our duties to animals are simply a mediate way for thinking about our duties to others or to God; the rationalist Alexander Baumgarten would take up a similar line of reasoning with regard to our duties toward animals (Guyer 1993, 304). In addition, because of Kant's empiricist influences and general fascination with the natural world, Kant would frequently consider experiential knowledge of travelers, researchers, and foreigners. As is well known, Kant was interested in and taught physical geography⁴⁵ throughout his life, and the lack of any empirical evidence in Kant's

⁴⁵ Kant's interesting views on physical geography, which includes "animal ethology, comparative morphology, and natural history," is discussed by Patrick Kain in "Duties Regarding Animals" (Kain 2010, 217). Kain makes the case that Kant's discussion of the nature and similarity of animals with humans not only has clear moral implications, but also undermines the standard view of Kant regarding animals as mere machines.

time suggesting that animals had have languages or cultural practices was good evidence that they were not rational in the same sense as humans (which, of course, would mean that they would be unable to self-legislate the moral law).⁴⁶

Finally, Kant inherited much from the early modern tradition, and this tradition—made famous by Descartes—was in the business of separating humanity from the rest of nature, understood mechanistically.⁴⁷ Much of the first and third *Critique* as well as the *Metaphysical Foundations* is concerned with developing and modifying this early modern mechanistic tendency in philosophy. Though it is important to consider the intellectual context in which Kant thinks (as well as his philosophical influences), the general early modern strands of thought upon which the traditional reading is often based—such as the belief that animals are mere machines—obscure Kant’s more idiosyncratic and potentially green views.

With regard to textual evidence, there is certainly plenty to suggest that Kant maintains what is characteristic of the traditional reading. I quote several passages from various works below, boldfacing aspects that stand out as problematic from an environmental standpoint. I do this in order to show: first, that the criticisms of environmental ethicists regarding direct duties and Kant’s apparently dualistic anthropocentrism are often well-founded; second, that the lack of discussion in Kant scholarship in the 1970s and 1980s regarding the moral status of non-rational

⁴⁶ See Schönfeld, “Animal Consciousness: Paradigm Change in the Life Sciences” (2006) for evidence of animal cognition, language, and culture as well as a historical discussion of how the Cartesian paradigm of animal consciousness was only partially accepted until only recently.

⁴⁷ Though Kant’s debt to the Cartesian and early modern tradition is solid, it should be borne in mind that Kant rejected several of Descartes’ ideas, including the view that animals are mere machines (CJ 5:464n), favoring the more Leibnizian view of nature as a holistic, organic system of *entelechies*. Kant’s rejection of Cartesian dualism and its environmental significance is discussed in fuller detail in Chapter 3. For now, it’s important to know that those who rely on the traditional reading of Kant would likely never stumble upon Kant’s rejection of animals as mere machines, which is absent in *Critique of Pure Reason*.

nature is not unsurprising given these statements; and finally, that ethics pedagogy rightly focuses on Kant's humanism while either ignoring or lamenting his views on animals:

Now I say: a human being and generally every rational being *exists* as an end in itself, *not merely as a means* for the discretionary use for this or that will, but must in all its actions, whether directed towards itself or also to other rational beings, always be considered *at the same time as an end...* **Beings whose existence rests not indeed on our will but on nature, if they are non-rational beings, still have only a relative worth, as means, and are therefore called *things*, whereas rational beings are called *persons***, because their nature already marks them out as ends in themselves, i.e. as something that may not be used merely as a means, and hence to that extent limits all choice (and is an object of respect) (GW 4:428).

The fact that the human being can have the "I" in his representations raises him infinitely above all other living beings on earth. Because of this he is a *person*, and by virtue of the unity of consciousness through all changes that happen to him, one and the same person—i.e., through rank and dignity an entirely different being from *things*, **such as irrational animals, with which one can do as one likes** (*Anthropology* 7:127).

Now, morality is the condition under which alone a rational being can be an end in itself; because it is possible only by this to be a legislating member in the kingdom of ends. Thus morality and **humanity, in so far as it is capable of morality, is that which alone has dignity...Autonomy is thus the ground of the dignity of a human** and of every rational nature (GW 4:435-436).

As far as reason alone can judge, **a human being has duties only to human beings** (himself and others), since his duty to any subject is morally constrained [*moralische Nöthigung*] by that subject's will. Hence the constraining (binding) subject must...be a person (MM 6:442).

[W]hat **elevates a human being above** himself (as a part of the sensible world), what connects him with an order of things that only the understanding can think and that at the same time has under it **the whole sensible world...**It is nothing other than *personality*, that is, **freedom and independence from the mechanism of the whole of nature...** (CPrR 5:87).

This is how the genuine moral incentive of pure practical reason is constituted; it is nothing other than the pure moral law itself insofar as it lets us feel [*spüren*] **the sublimity of our own supersensible existence and subjectively effects respect for their higher determination [*Bestimmung*]**⁴⁸ in human beings... (CPrR 5:88).

⁴⁸ Following Joshua Rayman (2012), in this dissertation I typically prefer the translation of *Bestimmung* as determination rather than vocation. The latter has become a predominant way to render the term. It makes sense as a translation choice, as the idea of a moral calling or task often fits with what Kant has to say in relation morality, but at the same time it obscures associations with other words in Kant's German

At first glance, these statements would seem to imply that a Kantian environmental ethic is a dead end. If we only relied on these passages or these texts this might be the case, and the traditional view would hold sway. The merit of the traditional view, besides locating Kant in his intellectual context, is to home in on these problematic passages and underscore how they may be serious impediments not only to a Kantian environmental ethic, but to any ethic concerned with non-rational nature. Hence, we can make sense of why environmental ethicists often push against Kantian anthropocentrism as a resource for environmental issues. Kant is not always consistent; his views often are in tension,⁴⁹ he commonly qualifies his statements,⁵⁰ and he sometimes changes his mind.⁵¹ A new plausible reading of Kant with regard to animals and the environment must delve more deeply into Kant's works, understand the contexts of these passages, and be very careful about Kant's technical language and argumentation in order to square later modifications, qualifications, and changes with those in the above passages. This is often the strategy of proponents of the new environmental interpretation of Kant, to whom I turn next.

(Rayman 2012, 57), and also carries religious connotations that Kant had never intended. For more on this, see Rayman, *Kant on Sublimity and Morality* (2012, 57-65).

⁴⁹ For instance, commentators have questioned the role of the power of imagination across the *Critiques*. Some argue that Kant's aesthetic account of the imagination in *Critique of Judgment* has a stronger role for cognition itself. See David Bell, "The Art of Judgment" (1987) and Hannah Ginsborg, "Lawfulness without a Law: Kant on the Free Play of Imagination and Understanding" (1997) for more on this. Whether this is a problem is beside the point—what matters here is the acknowledgment that Kant may not always be consistent, though he continually strives for systematicity.

⁵⁰ The best example of such a qualification, for our purposes, might be seen by contrasting Kant's statements in *Groundwork* that non-rational beings are mere means (GW 4:428-429) and his statements in *Metaphysics of Morals* about the moral requirements for being humane to animals, which includes not making them do work that one would not consent to do oneself (MM 6:443).

⁵¹ For one salient example of how Kant changes his mind, consider Pauline Kleingeld, "Kant's Second Thoughts on Race" (2007), where it is argued that Kant abandons his racist hierarchical views in the later works such as *Perpetual Peace* and *Metaphysics of Morals*.

CHAPTER 2

KANT AND THE ENVIRONMENT: THE NEW

Now that we have taken a look at how Kant is typically perceived (and attacked) on the traditional interpretation with regard to non-rational nature, this chapter will consider how this view has been challenged and revised. I set my sights on some influential alternative readings of Kant—commentators who argue that Kant has more to offer with regard to animals and nature than the traditional reading would have us believe. Though the new, green interpretation of Kant is growing, I will limit my focus in Part 1 on four main but diverse proponents of this view. Part 2 of this chapter will wrap up my survey of literature on the new view of Kant by reframing the traditional interpretation and the green one in terms of climate change, which will be one of the focal points of this dissertation.

I shall begin by commenting on Christine Korsgaard’s constructivist interpretation of Kantianism. She attempts to make Kant’s philosophy more amenable to animal ethics. Then, I shall examine Allen Wood’s logocentric defense of a Kantian approach to valuing non-rational nature and environmental systems. Wood’s modification of Kant’s practical philosophy includes proto- and “fragmented” instantiations of rationality within the moral sphere. Next, I discuss Toby Svoboda’s articulation of a Kantian environmental ethic. Svoboda’s defense relies on Kant’s oft-neglected virtue-theoretic and teleological teachings. And finally, I look into an older but, I claim, quite relevant paper by Holly Wilson on Kant and ecofeminism. Wilson attempts to investigate Kant’s moral and ecological potential for environmental ethics from his naturalistic writings in teleology and anthropology. Korsgaard and Wood’s accounts can be seen as

modifications of Kant's view (Kain 2010, 228), and Wilson and Svoboda's accounts can be seen as attempts at being exegetically faithful to the original texts in their defense. Discussions of pseudo-Kantian approaches to environmental ethics, such as Paul Taylor's biocentrism and Tom Regan's strong animal rights view, are largely reserved for later chapters in this dissertation. By referring to them as "pseudo-Kantian" approaches, I mean that they only obliquely draw from Kant's philosophy rather than use it or build upon it in any systematic way, as do proponents of the new, green reading of Kant. In other words, Regan and Taylor's positions are merely deontological and sometimes draw from Kant's moral language, whereas the proponents discussed in this chapter present themselves as genuine Kantian positions.

Part 1: The New, Environmental Interpretation of Kant

In the following sections, my strategy in characterizing the new wave of greening Kant is to survey the four commentators' positions, consider their strengths in making Kant conceptual resource for environmental ethics, and appraise their possible shortcomings—especially with regard to the limited purview of Kant's works from which they draw and the more pressing concern we face today, namely anthropogenic climate change. I aim to show that, despite the pervasiveness of the traditional reading, a recent shift is happening in the literature. Reframing this shift in the context of climate change, I claim, helps the reader to understand why the traditional reading was plausible, why the new environmental reading is burgeoning, and why the reframing in this dissertation is a helpful step in facilitating the greening of Kant.

Korsgaard's Constructivist approach to Kantian Animal Ethics

In "Fellow Creatures: Kantian Ethics and Our Duties to Animals" (2004), Korsgaard offers a modification of Kant's moral theory. She appeals "to an Aristotelian account of the final ends (or natural good) of animals and insists upon the centrality of our animal nature to our practical

identity” (Kain 2010, 231). In short, she argues that, on Kant’s view, value is *conferred* (“legislated”) onto the world by autonomous agents, rather than it being a part of their essential nature. On her reading, there is no value without a valuer. Humans just happen to be the sorts of creatures that are capable of doing such valuing, given their autonomy (Korsgaard 2004, 95). By virtue of their capacity to confer value onto other entities in the world, humans have intrinsic value as ends in themselves. And, because of the way in which we rationally constrain each other’s wills by our legislation of the moral law, humans are afforded moral rights and esteemed as ends in themselves. Nonetheless, argues Korsgaard, value need not be limited to ends in themselves.

Korsgaard begins by looking into the relevant similarities and differences between humans and animals: Animals are, on her reading of Kant, just like humans to the extent that they are

self-maintaining entities...capable of perception and voluntary motion. Animals maintain themselves in part by forming representations or conceptions of their environment and guiding themselves around in the environment in accordance with those representations (Korsgaard 2004, 83).

The main distinction from humans is that animals navigate this cognitive framework by means of instinct rather than deliberation according to principle. On her reading, then, animals are intelligences, but they are not rational in the robust Kantian sense of the term since they cannot reflect on and assess the grounds of their actions (Korsgaard 2004, 85-86). Despite not being capable of normative self-governance, Korsgaard wonders whether being a *source* of value is essential for beings to be valued (Korsgaard 2004, 87).

By considering so-called passive citizens (such as children and those who have not attained “maturity”), Korsgaard objects to Kant’s claim that value is only to be afforded to those who are sources of value. Because children are not fully rational, is it reasonable to suppose that

our duties to them are only indirect duties owed to other rational agents (like their parents)?

Korsgaard rejects this traditional interpretation of Kant, instead opting for her own reading.

Because passive citizens are capable of being harmed and benefitted by virtue of their sensible, animal nature, we as rational agents and conferrers of value can simply extend value and direct moral consideration to them. As Korsgaard puts it,

The argument for the Formula of Humanity appeals to the fact that we take our choices to confer value on their objects. In that sense, I have suggested, we take ourselves, and our own interests and concerns, to matter, that is, to be the source of normative claims on ourselves and other rational beings. But we do not take our interests and concerns to matter only *because* they are the interests and concerns of an autonomous rational being. The fact that I am autonomous enables me, and many other things equal, to legislate (to myself and other people) against what I take to be bad for me. But it does not follow that I legislate against it only because it is bad *for an autonomous being*. Think again about the case of passive citizenship. Only an active citizen can help to vote for a law against murder. But he need not vote for it merely because he considers the unwilling death of *an active citizen* to be a bad thing. If the citizens of a state can vote certain protections for all human beings, why couldn't citizens of the human moral community, the Kingdom of Ends, vote certain protections for all animal beings? For instance, one might suggest, we demand that they not be tortured, injured, hunted, or eaten, not because of the assault on our autonomous nature, but because of the assault on our animal nature; therefore we should not treat our fellow animals in those ways. Autonomy puts us in a position to make the demand, but is not the reason *for* the demand (Korsgaard 2004, 99-101).

Rather than placing the *source* of value in our animal nature (as someone like Singer would do),⁵² Korsgaard's constructivist argument—which relies on the fact that we, as autonomous value-conferrers, *place* value upon our own animal nature—allows us to consider directly the moral interests of analogously-constituted animal natures. To remain consistent in our valuing, we should also value the animal nature of similar pre- or non-rational intelligences such as

⁵² From a Kantian standpoint, the idea that our animal nature is a source of moral value would be heteronomous. This is, I take it, one of the main complaints Kantians have against sentientist proponents of animal ethics. It is not clear that Korsgaard escapes this complaint, as others in the literature have noted. Wilson, for instance, warns: "We ought not to treat animal nature as an end-in-itself, as Christine Korsgaard proposes, however, because animal nature is pursued by animals heteronomously, pathologically, and reactively. To treat animal nature as an end-in-itself would mean having to cooperate in the ends that animal nature pursues, and that would make our actions heteronomously motivated" (Wilson 2008, 11-12).

passive citizens, infants, and sentient animals. She appeals to a thought-experiment: consider that you were robbed of your rationality (say, from a car accident) and were reduced to a mere animal nature. Now, imagine reflecting upon your rationality-deficient self: you would not wish to be treated as a mere means even in such a state (for instance, as a test-subject). By the same token, we can reflect on other animal natures and consider that the valuing of our own sensuous side could be extended to them.

Korsgaard's position is attractive for a number of reasons, but the most relevant one for our purposes is that it allows for a Kantian defense of duties regarding animals capable of satisfying those who reject the brutalization argument (that is, that though the value of animals depends on our valuing them, it need not be done for the sake of oneself or other humans, but that animals can be valued by humans for their own sake). At the same time, Korsgaard's account avoids the perils of radical egalitarianism found in Regan's strong rights position.⁵³ On Regan's position, because humans and animals have equal intrinsic value, it becomes quite different to handle ethical dilemmas involving conflict between the two. For Korsgaard's constructivist account, value is contingent on the valuers doing the valuing; her approach, accordingly, leaves room for communities of valuers to decide for hierarchical principles in cases where animal and human rights conflict. Of course, this position runs into a number of difficulties, such as the seeming arbitrariness in constructivist positions regarding value. If Kant is a constructivist, isn't his position one which mirrors the voluntarism of Plato's Euthyphro, though with a secular flavor?⁵⁴ Even though there is a difference between God as chooser and

⁵³ For Regan's pseudo-Kantian deontological position, any being that is an "experiencing subject of a life" is afforded equal intrinsic value and, hence, absolute rights that parallel Kant's with regard to ends in themselves.

⁵⁴ A deeper worry, I take it, is that this approach makes Kant much closer to postmodern and historicist approaches for which he is usually seen as their rational antidote.

humanity as chooser, in either case one worry is the arbitrariness of that which is valued on a voluntarist account. Korsgaard's interpretation, as a form of "broadly voluntarist constructivism" (James 2007, 324) might be thought susceptible to such worries. Moreover, the worry of speciesism (as, on her account, humans are the only obvious rational valuers and the capacity to value entities in the world is the source of normativity) is not readily dealt with on this account, and perhaps could be exacerbated on this reading. This is because Korsgaard depends on human valuation, human choice, and human commonality with animal nature to ground animal rights. Since humans share similar sensible natures with many animals and, moreover, humans confer value upon the world insofar as they are a source of value, the extent to which Korsgaard can ground animal rights depends on the extent to which humans will in fact choose to value the animal-nature in other animals similar to humans that they value in themselves. And, of course, this valuing is quite contingent both in terms of cultural values and human-centered prejudices. For example, some communities might not value animals at all, and others might only value the cute and fuzzy ones or the ones that most closely resemble humans.

Korsgaard is aware of many of these difficulties. For instance, she addresses the alternative Kantian view that intrinsic value is a feature of rational beings by virtue of what a rational being essentially is. She worries that this approach to value from a Kantian perspective is a metaphysical commitment that is unjustified (indeed, prohibited) by the critical teachings (Korsgaard 2004, 101), since it would posit value as a real theoretical entity that transcends possible experience. This reply, however, relies on the assumption that Kant is indeed a thorough anti-metaphysician. This anti-metaphysical reading is itself contentious since though Kant does reject traditional metaphysical ideas, he reinstates his own ones (e.g., in *Prolegomena* and *Metaphysical Foundations*) and makes use of traditional metaphysical ideas such as immortality

or God regulatively, for practical purposes. Notwithstanding the merits and potential problems with Korsgaard's approach, it is limited insofar as it is only capable of extending value to discrete, sentient beings (since the similarity of our animal nature with non-human animals is key to her argument).⁵⁵ As Biasseti notes,

[F]rom Korsgaard's Kantian direct duties to animals we can only build an *animal ethics* focused on the needs and interests of individual animals. While her interpretation is surely a step forward towards a more 'green' version of Kant's philosophy, it does not allow for annexing into the moral realm the multifaceted concept of the environment, which includes both animate and inanimate entities, individuals and groups, static events and processes (Biasseti 2015, 143).

This inadequacy for moral considerations regarding collectives seems to be an initial stumbling-block for thinking through the issue of climate change and the moral status of ecosystems. I help resolve these limitations when I discuss Kant's holistic pre-critical view of nature in the following chapter. Is there a way to articulate a less contentious reading that can also consider non-sentient or holistic entities such as flora, environments, and ecosystems? Allen Wood's approach may be just the sort of thing to meet such demands.

Wood's Logocentric reading of Kantian Duties to Non-rational Nature

Allen Wood's approach in "Kant on Duties Regarding Nonrational Nature" (1998) is similar to Korsgaard's greener reading of Kant insofar as he also modifies Kant's philosophy to meet the demands of environmental ethicists who object to the traditional reading. Referring to Kant's philosophy as "logocentric" rather than "anthropocentric," Wood makes the case that a much greener reading of Kant is possible if his position is tweaked by abandoning what he calls the

⁵⁵ Korsgaard's constructivist strategy, in short, is to argue that "moral value arises when the natural good is made the object of legislation" (Korsgaard 2004, 105). I leave the nuances of this argument unstated for the sake of brevity, though it should at least be fairly obvious how Korsgaard modifies Kant's account by appealing to an Aristotelian variant on natural value. In addition, though Korsgaard defends that her account aids in duties to animals, she only speculates in a lengthy footnote at the end of her paper on how it might or might not be applied to non-sentient creatures such as plants (Korsgaard 2004, 106). This suggests that she is aware of the difficulties and potential limitations of this account.

“personification principle” embedded in the formulation of respect for persons. *Pace* anti-anthropocentrists and critics of the traditional reading, Wood thinks that Kant’s logocentric account is adequate for addressing environmental concerns such as the status of non-rational animals and ecosystems. On his reading, rational beings can be afforded respect and dignity as ends in themselves not simply because they are moral persons, but rather because they are particular instantiations of Reason in the abstract. According to Wood,

where Kant goes wrong regarding his theoretical defense of our duties regarding nonrational nature is not in accepting his logocentric principle but in accepting what I have called the *personification principle*. This principle says that rational nature is respected only by respecting humanity *in someone’s person*, hence that every duty must be understood as a duty to a *person* or persons (Wood 1998, 194).

Much in line with Singer, Regan, and Hoff, Wood worries that an indirect approach to environmental duties may be inadequate or even “downright repugnant” (Wood 1998, 195). Hence, Wood’s desire to modify Kant’s theory. Wood recognizes that a rejection of the personification principle has some difficult consequences that would require a reworking of the moral system of duties in *Metaphysics of Morals*, but he insists nonetheless that if we want to secure a Kantian environmental ethic, we need to reject the idea that individuated personhood is necessary for direct duties. In rejecting this claim, he does not think that personhood is irrelevant for moral considerations:

Of course we should respect rational nature *in* persons, and this means respecting the persons themselves. But my main argument here depends on saying that we should *also* respect rational nature *in the abstract*, which entails respecting fragments of it or necessary conditions of it, even where these are not found in fully rational beings or persons (Wood 1998, 198).⁵⁶

⁵⁶ It might be plausible to ground a Kantian environmental ethic by merely looking toward Kant’s universalization imperative to support environmental duties (i.e. to not do actions that undermine the conditions for ecosystem services on which we rely in order to survive). In that case, Wood’s claim (that we should consider morally the fragments of rationality in nature) is superfluous. I have two words of caution for such an approach. First, such a blatantly anthropocentric position hardly justifies consideration of flora and fauna except, possibly, for keystone species requisite for maintaining the services humanity uses. Second, this sort of environmental ethic would hardly give us reason to consider preserving

On Wood's account, since the formulation of respect for persons requires us to respect personality (i.e., Reason in the abstract), and personality is instantiated in nature as components of (e.g. sentience) or necessary conditions (e.g. consciousness) for personality in the concrete (in actual persons), then we have moral obligations to respect the value of rational nature even in non-persons, which includes many flora and fauna. Not only does Wood's alteration assist in the difficult question of marginal case humans (e.g. children and those with mental deficits), but it also can evade the charges of speciesism, since being an instantiation of Reason is key, not being a member of the human species. In addition, Wood reasons,

Once we see that a reasonable interpretation of the principle of humanity as an end in itself requires us to respect the value of rational nature even in human beings who are literally nonpersons, it becomes less difficult to see that there might be an issue about whether respect for rational nature limits our conduct in the case of nonhuman nature in general (Wood 1998, 199).

Sentient beings like animals have what Wood calls the "infrastructure" of rationality, since Kant believes that for humans, sensibility is a necessary component of our nature (Wood 1998, 201).⁵⁷

environments in which humans do not or need not dwell. Wood's account, by contrast, since it observes that we have obligations to partial instantiations of rationality, gives us reasons to protect areas in which humans have no intention to live.

⁵⁷ Some might object that sensibility is not a *necessary* component of rationality in general, since Kant often makes reference to the intellectual nature of God as a non-sensible rational nature. We can also imagine non-sentient AI as an instance of a rational, non-sensible being. Two things can be said against this claim. First, when Kant discusses the non-discursive intellect of God in the *Critique* (e.g. how God operates by means of intellectual intuition), he is not making theoretical claims but is rather using the example of a purely non-sensible intellect as a contrast to our own nature, in order to bring out more clearly how human cognition works. Second, if one focuses on Kant's moral philosophy outside the narrow scope of *Groundwork*, one will readily see how Kant sees sensibility and feeling as key elements for the infrastructure of our capacities for autonomy. Animals have proto-autonomous capacities, and these are the evolutionary "underpinnings of our rationality which we share with animals (Wood 1998, 201). Much akin to Taylor's biocentric position, Wood's would seem to entail that even evolutionarily primordial entities such as amoebas are, in a very minimal sense, proto-instantiations of rational nature. Unlike Taylor, who asserts that all living entities have equal and intrinsic moral value, Wood's position can override the worry of intractable moral dilemmas because he can argue that a fully-instantiated rational nature's essential needs override the interests of a minimally-instantiated rational nature. Still, Wood's position needs further development in order to show where the line can be drawn with regard to

One of the particular advantages of Wood’s reading of Kant is that it can include more environmental entities than Korsgaard’s, since the notion of proto- or “fragmented” rationality can be found not just in sentient, well-developed animals, but in other aspects of nature for which environmental ethicists are typically concerned, such as less neurologically-developed animals or possibly flora.⁵⁸ For example, plants—just like humans—are also goal-directed entities that strive to flourish and survive. Though plants do not experience pain and pleasure like humans and animals, plants “communicate” to each other by means of airborne signals to warn neighbors of hostile intruders. Communication in plants has been shown to be stronger in close kin than strangers, which is a capacity previously thought only found in complex social animals.⁵⁹ In addition, Wood thinks that Kant’s notion of a “harmonious teleological system” satisfies our contemporary usage of the term “ecosystem”⁶⁰ and that the responsibility we take in shaping our environment so that it is capable of facilitating our own rational ends includes—when the personification principle is abandoned—an injunction for us to act as “preservers and guarantors of that system” rather than lords and masters over it (Wood 1998, 204). For if we operate in a destructive, unsustainable way, not only do we thwart the ends of other rational humans, but we also disrespect those entities in nature who are fragmented instantiations of rational nature in the abstract. This very much echoes the stoic injunction to see nature as the embodiment and

what constitutes a proper, morally relevant instantiation of rationality, or else it would seem that everything in nature would fit the bill.

⁵⁸ Wood’s account can, I think, better grapple with Korsgaard’s apparent weakness noted astutely by Biasetti in “From Beauty to Love: A Kantian Way to Environmental Moral Theory?” (Biasetti 2015, 143).

⁵⁹ For a recent summary of literature on how plants “talk” see Heil and Karban, “Explaining Evolution of Plant Communication by Airborne Signals” (2010). For a discussion on plant kin communication and how it mirrors animal behavior, see Karban et al., “Kin Recognition Affects Plant Communication and Defense” (2013).

⁶⁰ In the subsequent chapter, I make the even stronger case that Kant’s early ontology is fundamentally ecological from a theoretical perspective.

instantiation of the *logos*, and for us to direct our own ends to be in accordance with the flourishing and harmony of nature (and, unsurprisingly, it has been argued that Kant's moral philosophy owes a great debt to Roman stoicism).⁶¹ Wood's approach is thus more advantageous than Korsgaard's account of duties to animals insofar as it is more broadly relevant for the central challenge of the Anthropocene, namely to understand how we ought to act with regard to climate change and how we need to shift our roles from lords over nature to environmental stewards (Folke 2013). This is an implication of Kant's approach that is largely underdeveloped or implied in Wood's essay that I develop and build upon in the course of this dissertation.

Wood's approach has a number of strengths. First, like Korsgaard it remains Kantian in its foundations, evading the standard problems of utilitarian and sentientist approaches (like Singer's animal welfare position) such as the concern that the ends justify the means. By the same token, Wood's approach allows us to avoid ethical dilemmas such as those that radical egalitarians (like Regan's strong rights position) are committed to, for individuated personality can have more moral weight in dilemmas with our duties toward non-, proto-, or fragmented instantiations of rationality. Second, it shows how Kantians can still be committed to Kant's view that we ought to respect rational nature while avoiding the charges of speciesism, since humanity is not the sole instantiation of rationality in nature. Finally, it makes it more plausible for us to consider our duties to non-humans and ecosystems, since these are instantiations or "analogues" of rationality (Kain 2010, 228). Because Wood does away with the so-called personification principle, he is able to argue from a Kantian standpoint that we have obligations to respect the rational in nature, whether it appears fully in a person or in a proto-rational organism, as in an evolutionarily similar animal or plant capable of feeling pain or

⁶¹ For a discussion of the importance of stoic thought in development of Kant's moral philosophy, see Martha C. Nussbaum, "Kant and Stoic Cosmopolitanism" (1997)

communicating. In addition, ecosystems are the conditions for the flourishing of rational natures and, moreover, they are analogues of such organisms by virtue of their capacity for self-regulation. If the analogy of ecosystems to rational organisms is too loose for defending direct duties, at the very least the fact that such ecosystems are the material grounds for respecting rational natures obliges us to ensure that these ecosystems are maintained, as indirect duties.

Despite these advantages, Wood's approach runs into the difficulty of mucking up Kant's careful and systematic architectonic of duties in *Metaphysics of Morals*. Environmental ethicists and some Kantians would probably have no problem with this, as many argue that the enumeration of particular duties in that text (as well as Kant's seemingly anomalous—when contrasted with *Groundwork*—discussion of virtue) is problematic. Nonetheless, if it is believed that the *Metaphysics of Morals* (and its taxonomy) is important for Kant's moral and political philosophy, Wood's modification might need to be taken with a grain of salt. Is there an approach to a Kantian environmental ethic that is more faithful to Kant's texts, functioning not as an appropriation or modification, but, rather, as a careful exegesis for the ends of environmental ethics? Indeed, it has been argued that Kant's virtue theoretic approach and account of indirect duties is not only *not* "morally repugnant" but when carefully laid out, is both in line with our moral intuitions and defensible as a solid foundation for an environmental ethic. This is where we turn to next.

Svoboda's Virtue-theoretic Kantian Environmental Ethic

If we do not follow Wood's lead and abandon Kant's personification principle (along with the taxonomy of duties that Kant articulates in *Metaphysics of Morals* from it), would it be possible to value non-human nature from a Kantian perspective? Toby Svoboda tries for precisely this

route in his “Duties to Nature: A Kantian Environmental Ethic” (2012).⁶² Svoboda argues that it is possible to establish a solid foundation for an environmental ethic from a Kantian standpoint if Kant’s virtue-theoretic considerations and indirect duties in the *Doctrine of Virtue* are carefully fleshed out. Not only does Kant’s notion of duties toward oneself evade Routley’s problem of the “last man,”⁶³ but they can—when conjoined with Kant’s view of teleological judgment—be used to defend an environmental ethic that both proscribes cruelty to animals and destruction of flora, and “prescribes kindness toward animals and aesthetic appreciation of flora as optional but nonetheless effective ways to strengthen one’s virtuous dispositions and hence fulfill one’s duty to increase her own moral perfection” (Svoboda 2012, 161). Unlike Wood and Korsgaard’s accounts, Svoboda’s reading has the benefit of being scholarly tight as regards its legitimacy as a Kantian approach, rather than being a modification or alteration to Kant’s views given the pressure placed against the traditional reading.⁶⁴ That is to say, Svoboda offers a reading of Kant that shows how—if the limited confines of the *Lectures on Ethics* and *Groundwork* are abandoned—Kant’s moral system can adequately grapple with the difficulties raised by animal and environmental ethicists. An *indirect account* of duties to animals and nature such as Svoboda

⁶² Svoboda’s first attempt at defending a Kantian environmental virtue ethic is found in “Duties Regarding Nature: A Kantian Approach to Environmental Ethics” (2012). This would later, in 2015, be expanded into a full study including a discussion of the relevance of Kantian teleology for environmental ethics, as well as its compatibility with Darwinian natural selection.

⁶³ The thought experiment of the “last man” is supposed to show how standard anthropocentric normative theories cannot account for the moral intuition that non-rational nature has value independent of human needs. Suppose, so the experiment goes, you were the last human in the world; all nature and manner of creatures remain. Now, would it be morally wrong for you to kill these creatures or damage nature out of, say, boredom? Since Kant’s account—as Svoboda develops it in greater detail—suggests that we have duties to oneself that proscribe damaging beautiful nature and cruelty toward animals, it would still be morally wrong to perform such acts—even if one were the “last man” on earth.

⁶⁴ Svoboda suggests that the fact that Wood and Korsgaard “are motivated by the belief that Kant’s own position in the *Doctrine of Virtue* is incapable of grounding adequate moral concern for non-humans,” shows why they think a modification to his theory is necessary to grapple with the objections raised by animal and environmental ethicists (Svoboda 2012, 149-150).

pursues is not, on his reading, an admission that Kant's anthropocentrism is inadequate for an environmental ethic. Instead is better capable at addressing the challenges of environmental ethics than theories like biocentrism, which problematically extend intrinsic value to all beings.

Svoboda pursues his indirect virtue-theoretic approach to a Kantian environmental ethic by first articulating the traditional reading of Kant regarding nature. His view of the traditional reading is more specific than the one I pursue here (which concerns Kant's relevance—whether instrumental, indirect, or theoretical—for environmental issues and climate change in particular). He homes in on the traditional reading's emphasis on the problematic nature of the cruelty-thesis, which was previously discussed. In short, Kant is viewed as inadequate for animal and environmental ethics by virtue of his empirically flimsy reading of how cruelty toward animals *tends* to desensitize human beings to suffering regarding other humans (Svoboda 2012, 146-150). This view is problematic for at least two reasons. First, the fact that Kant's brutalization argument makes the moral connection between cruelty and sensitivity to human suffering as contingent, rather than necessary (Svoboda 2012, 147): “[s]ince a moral agent could be cruel to animals while fulfilling all her direct duties to humans, there is nothing morally problematic with animal cruelty itself” on the traditional reading (Svoboda 2015, 148). Second, there are passages in Kant on the strict impermissibility of cruel treatments toward animals that suggest that Kant's proscription of inhumane actions is stronger than what the cruelty-thesis could justify. The following lengthy quote encapsulates this inconsistency between Kant's stronger proscriptions regarding animals and the contingency of the cruelty-thesis:

“If a master turns out his ass or dog because it can no longer earn its keep, this always shows a very small mind in the master” (*LE*, AA 27:460). This claim that such an action “always” exhibits a small mind suggest that turning out one's dog is morally problematic even if doing so does not cause one to violate any direct duty to other human beings. In later lectures, Kant claims, “Any action whereby we may torment animals, or let them suffer distress, or otherwise treat them without love, is demeaning to ourselves” (*LE*

27:710). Kant's description of such actions as "demeaning to ourselves" is instructive. Although humans have only indirect duties regarding animals, this passage suggests that humans have some direct duty to themselves that proscribes animal cruelty. The problem with cruelty to animals is not simply that it has a tendency to make us cruel to humans—rather, there is something morally problematic with such cruelty itself. Otherwise, it would not be the case that "any" action of tormenting an animal would be "demeaning" to oneself (Svoboda 2012, 151-152).

Svoboda follows Guyer in exploring Kant's Doctrine of Virtue as a way of justifying these stricter proscriptions. In short, Svoboda appeals to Kant's account of the imperfect (or wide) duty to increase one's own moral perfection (Svoboda 2012, 153). He sees Kant's duty of self-perfection as capable of justifying these stronger claims. This duty is not merely instrumental but, in fact—from the standpoint of Kant's account of virtue—requires one to strive for moral perfection and avoid that which makes one morally worse (which is, of course, a regulative ideal of reason to strive to "be perfect" MM 6:446):

Both cruelty to animals and wanton destruction of flora are morally problematic, but not only because such actions make one more likely to fail in one's duties to oneself and other humans [e.g. as per the cruelty-thesis]. More importantly, such actions decrease one's moral perfection and thus are directly opposed to one's duty to increase that moral perfection. Actions that weaken one's virtuous dispositions are morally proscribed because they are incompatible with the maxim commanded by this direct duty to moral perfection. On this interpretation of duties regarding non-humans, Kant's position entails that animal cruelty or wanton destruction of flora violates a direct duty one has to oneself...[which is] much stronger than the traditional interpretation recognizes (Svoboda 2012, 161).

One obvious strength of this account for Kantians is that they may be satisfied with a stronger and more defensible account of our duties to non-humans, as the cruelty thesis is indeed weak. Environmental ethicists, however, may still find this reading problematic since it may be thought that, because flora and fauna are only considered indirectly (because one's moral perfection is what is really at stake), then the actual welfare of those entities is irrelevant morally-speaking. In his expanded study on Kantian duties regarding nature, Svoboda utilizes Kant's regulative account of teleological judgment to think through these sorts of problems. For instance, because

flora and fauna, as organized beings, are viewed with teleological judgments as capable of being harmed and benefited, we have reasons to value the flourishing and “natural goods” of such beings, even for their own sake (Svoboda 2015, 107). By appealing to Kant’s regulative account from *Critique of Judgment*, Svoboda can garner additional support for a Kantian account of environmental duties regarding organisms while at the same time avoiding the metaphysical entanglements encountered by views that attribute intrinsic value to organisms. In other words, Svoboda appeals to *Critique of Judgment* to strengthen his case, yet avoids conflicts with contemporary theories of natural selection, field ecology, and Kant’s critical teachings by the use of *regulative* rather than constitutive judgment about the teleology of nature (Svoboda 2015, 113). I take Svoboda’s cue in Chapter 4 when I discuss Kant on aesthetic and teleological judgment regarding flora, fauna, and climate change. Then in Chapter 5, I appeal to Svoboda’s account of Kantian duties to oneself and place them in the context of sustainability and the impending sixth mass extinction. This shows that, besides being defensible as an environmental ethic, it also has valuable application today for the climate crisis. Since Svoboda draws from the environmentally underexamined *Metaphysics of Morals* to make his case, I propose looking into one final advocate of a green view of Kant: Holly L. Wilson also draws outside the usual texts from Kant, namely from his anthropology. As Wilson shows, the greening of Kant requires not only a defensible account of duties to non-humans, but also a reconsideration of Kant’s holistic view of humanity.

Wilson’s Ecofeminist approach to Kantian Ecological Naturalism

Holly L. Wilson’s green approach to Kant in “Rethinking Kant from the Perspective of Ecofeminism” (1997) is interesting for a number of reasons, but one that stands out in particular is its freshness; her article appeared even before Wood and Korsgaard, and is perhaps even more

radical since it argues for a Kantian naturalistic view compatible with ecofeminist environmental ethics. Not only is a naturalistic reading of Kant contentious in the literature, but Kant's sexist views are well known; thus, Wilson is provocative to argue in the face of the traditional view that Kant is not only a green resource, but that he also holds insights for thinking about the connection between environmental exploitation and the domination of women in a progressive way. Her naturalistic reading of Kant coincides with my later argument for an ecological Kantian view of nature. Additionally, her use of Kant's anthropological views sets the stage for my later chapter on Kant's view of humanity and sustainability.

First, Wilson highlights how ecofeminists take issue with "normative dualistic thinking," according to which the root of the domination of both nature and women can be found in the hierarchical binaries etched into social consciousness (Wilson 1997, 377). In short, man has been associated with reason, strength, goodness, and mind, whereas *nature and women* have been associated with the "lower" contraries of inclination, passivity, sin, and body. These dualistic tendencies in society preclude the cultivation of a kingdom of ends on earth, for "[d]ualistic thinking separates human beings from the ecological community; a nondualistic thinking requires that we view human nature as intrinsically connected to nature" (Wilson 1997, 378). Contrary to most readings of Kant from the standard interpretation, Wilson argues in this paper that "Kant explicitly connects women to nature in a positive sense: he uses the purposive view of nature to understand human nature as belonging in regional areas, and he is not a normative dualist" (Wilson 1997, 380). Wilson uses as her point of departure Kant's *Anthropology* to articulate Kant's naturalistic view of women and Kant's *Critique of Judgment* in order to sketch his purposive view of nature in framing an ecofeminist approach. To connect these two texts, Wilson argues that Kant's regulative teleological judgment is the essential standpoint of

Anthropology. By means of teleological judgment, Kant views nature as a systematic, interconnected whole:

It is in this interconnected whole that Kant understands natural sexual and gender difference. Women not only reproduce the human species, they also fear for the preservation of the human species. This position does not appear to be inconsistent with some positions in feminism... Now if women take as their primary end the preservation of the human species, then they will also naturally care about the means necessary for that preservation; as Kant argues with respect to the hypothetical imperative, it is irrational to will the end, but not the necessary means to that end. Unlike other species, Kant maintains, the human species has to be educated to its destiny; hence the necessary means for the preservation of the human species includes education...[W]omen have a greater natural tendency toward developing the refined qualities that make for civilization, for civilization is directly contrary to the use of physical force and disharmony (Wilson 1997, 382-384).

According to Wilson, humanity for Kant is embedded in nature, and men and women hold complementary roles for facilitating the progress of the species. Education, it turns out, will be one of the keys to securing a kingdom of ends according to Kant in *Anthropology*. Now, with climate change, we can extend Kant's insight about the importance of education for ensuring a sustainable world in which we can flourish.⁶⁵ On Kant's view, suggests Wilson, women and naturally feminine traits are more conducive to a cooperative and sustainable outlook than the competitive and unsustainable tendencies of men and masculine traits, though both complement each other in humanity's striving for progress. An unbalanced, overemphasis on masculine traits such as competition have, it could be argued, helped justify the view of nature qua limitless resource rather than nature qua dwelling of concern. It is important to cultivate this civil balance between the masculine and feminine traits in order to ensure reason can be realized to its fullest, healthiest potential by means of education, enlightenment, and morality.

⁶⁵ Kant appears less optimistic about the "bottom-up" potential of education for social evolution in Part 2, Section 10 of the *Conflict of the Faculties* (7:92-93), favoring instead a strong political vanguard for cultural progress. Despite Kant's vacillation on the role of education for humanity's progress between *Conflict* and *Anthropology*, it is still clear that Kant maintains that education will play an important role with regard to humanity's moral determination.

In *Anthropology*, though Kant makes a number of sexist statements suggesting that he views women as inferior, Wilson shows how Kant thinks women and men differ in natural, albeit equal, ways. The natural differences between men and women, she claims, complement each other which—through the use of teleological judgment—allows us to see how humanity is a naturalistic and collective species progressing toward moral perfection. Instead of viewing women as inferior, as the standard normative dualisms maintain, “[w]omen propagate and preserve the species and... naturally rule men through their more refined feelings... and their shrewdness” (Wilson 1997, 381). Ecofeminism, contrary to many other postmodern flavors of feminism, is not timid with regard to claims of essentialism with respect to sex and gender. Like Nel Noddings’ *Ethics of Care*, the essentially feminine-associated traits of women are viewed by ecofeminists as worth cultivating. For instance, feminine traits of care, empathy, and patience are, claim ecofeminists, critical for fostering a sustainable, non-exploitative view of nature. Since Kant naturally associates women with these views but does not demean them—instead viewing masculine and feminine traits as complementary (akin to the Daoist yin-yang)—he can offer a plausible ecofeminist approach, argues Wilson.

Wilson’s approach has a number of strengths, one of which is showing how alternative texts in Kant need to be commissioned for the greening of Kant for animals and nature:

Much of the feminist criticism of Kant depends on establishing that Kant’s theory of the rational subject is defective in a number of ways, but most primarily because the rational subject is isolated and autonomous. This criticism can only stand if we continue to ignore the enormous amount of literature Kant has on physical and pragmatic anthropology. In these works, it is the whole human species that is central and the individual must orient herself or himself from that perspective (Wilson 1997, 391).

We have a responsibility to other animals because we have feelings toward them, because they can be harmed, and because they care for the preservation of their own young.⁶⁶ We

⁶⁶ Feelings are an unsecure basis for morality for Kant, so I take Wilson here to be suggesting that they nonetheless have an important indirect role to play in moral action. The ground of these feelings might be mistaken (cf. Kant’s discussion of our mistaken view of direct duties to animals based on an “amphiboly

have a responsibility to larger wholes, or ecosystems, because it is in these wholes that human beings can develop into rational beings by reproducing themselves, preserving themselves and their progeny, maintaining themselves safe from harm, having feelings for each other, and relating to one another morally (Wilson 1997, 394-395).

With respect to sustainability, I find her statements here prescient. I aim to take her example in the following chapters of this dissertation. In addition, she is very clear to present Kant's non-mechanistic views about nature; they are not the standard ones found in the *Critique of Pure Reason*, but are instead views of nature as interconnected and ecological; humanity is a natural species unfolding along an evolutionary pathway. Rather than discrete, disconnected rational beings, we are in fact embedded in nature in a significant sense for Kant.⁶⁷ Because of this, we need to care about nature, our place in it, and the prospects of our future generations. Finally, Wilson hints at the relevance of Kant for sustainability, but leaves this largely undeveloped in her early though provocative essay (Wilson 1997, 394). Regarding limitations, Wilson's approach is perhaps too Kantian or essentialist to be taken seriously in most feminist circles, but is also perhaps too radical and provocative (at least, at the time she published this essay) to be widely accepted in Kant scholarship. In this way, she offers prophetic insight for how the greening of Kant can be taken up, but like most prophets, she comes long before her time.

Part 2: Reframing of the Green Shift in Kant Literature: Climate Change

At the end of Chapter 1, I examined Paul Guyer's account of duties regarding nature as the first step toward the new, green movement in Kantian ethics, followed in Part 2 by a survey of four of

in moral concepts of reflection" MM 6:442), but their connection to duties to oneself are secure (Svoboda 2012).

⁶⁷ It might be objected that without individual rational agents, a moral theory makes little sense. Wilson's point in drawing out the species-specific, non-individualistic elements of Kant's thought is not intended to suggest we abandon the necessary features for ethics. Rather, her point is, I take it, to underscore how the overemphasis on discrete moral agents (typical of *Groundwork* analyses) misses out on other important aspects of Kant that might be helpful for our current predicament vis-à-vis environmentalism and feminism.

its most influential and innovative proponents. These proponents, as we have seen, have all looked at the greening of Kant from different angles—whether this amounts to a slight modification of Kant’s ethical theory, or with a closer examination of some of his texts that are not considered on the traditional reading, such as Kant’s discussion of virtue or his views on philosophical anthropology. In this dissertation, I align my own approach with these four thinkers in varying ways. Laying this out should be helpful for the reader to make sense of the chapters to come and how they build upon or contribute to the new environmental reading of Kant. First, I align myself with Svoboda insofar as I think we need to shift our focus to different aspects of Kant’s work, although I do not focus on virtue ethics; nonetheless, aspects of virtue and a concern for humanity’s perfection and moral vocation will be discussed in Chapter 5; I align myself with Wood insofar as I think the logocentric view of Kant—in which we read Kant in terms of collectives instead of persons—is an important step for thinking about climate change and ecological systems from a Kantian perspective. These are topics taken up in Chapter 3’s discussion of the pre-critical ecological view of nature and Chapter 4’s discussion of climate change, biodiversity loss, and reflective judgment; I align myself with Korsgaard, insofar as I think that it can be both philosophically interesting and practically helpful to appropriate and modify aspects of philosophers from the canon rather than merely remain at the level of scholarly exegesis. Her constructivist approach for valuing ecosystems could be strengthened if she would make further use of Kant’s teleological judgment, as I do in Chapter 4. Finally, I align myself with Wilson insofar as I think that we should look into other avenues of Kant’s thought for sustainability, in particular seeking out what can be appropriated philosophically from his philosophy of history and anthropology, as I do in Chapter 5. Climate change will also be a way in which I draw together my chapters that build upon the above readings.

As we have seen, a likely reason for the neglect of Kant's environmental potential can be better understood if we consider the issues that were prominent during the 1970s and 1980s when animal and environmental ethics were in their infancy. At this time, the main areas of concern involved the moral status of animals, the aesthetic considerations surrounding the preservation of "wild" nature, and issues surrounding pollution. Now, the second two could be addressed by a Kantian by reference to his account of natural aesthetics and indirect duties toward nature, respectively, but on the traditional reading, Kant's view of animals is decidedly lacking.⁶⁸ In the '90s Kantians attempted to address this challenge, beginning with Korsgaard and Wood as discussed above. At the same time, climate change was not yet a central concern in environmental circles, and hence Kantians had little incentive to engage these issues. In the last 20 years, however, much has changed; most of the old environmental issues have been superseded by the climate crisis.

As Ed Ayres puts it, climate change presents itself as a unique challenge because there are four primary factors or "megaphenomena" that drive it. Accordingly, climate change can be understood as one of the most pressing, major environmental tasks we face today; for instance, it is one-sided to tackle pesticide pollution or attempt to preserve endangered species if we do not at least pay attention to the underlying roots of environmental degradation and biodiversity loss (Ayres 2000). Local issues in pollution and conservation are, of course, important ethical

⁶⁸ For instance, on the traditional reading a Kantian environmental aesthetics case could be made for preserving wilderness, insofar as a lack of wild nature would be a lack of beautiful and sublime nature. A lack of wilderness would then be a missed chance for the appreciation of nature, which is useful as moral preparation for valuing something without interest. A Kantian on the traditional reading could also make the case against excessive pollution, insofar as pollution near human communities could harm (and thereby disrespect) ends in themselves. In addition, polluting nature undermines the aesthetic-moral potential of aesthetic nature, discussed above. Both approaches are limited however. For example, on the traditional reading, we would have no obvious reason to protect "ugly" wilderness or polluted nature isolated from human societies.

considerations. However, in the age of the Anthropocene humanity needs, in addition, to develop a broader, more holistic perspective. Climate change, now, needs to be a fundamental topic for environmental ethics since it unifies the roots driving our ecological crisis.⁶⁹ And not surprisingly, as climate change has gained more traction as a pressing issue, Kantian environmental accounts have been on the rise.⁷⁰ We have Wood, Korsgaard, and Wilson to thank for setting the foundation for the new green reading and showing how it is possible. But now with climate change, both old and new readings of Kant vis-à-vis the environment can be reframed in light of humanity's plight in the age of the Anthropocene. This dissertation, then, attempts to build upon and address the insights and challenges of proponents from the new reading by looking at how a defense and application of a Kantian approach to environmental ethics can address climate change, the stages of which I signpost below.

The Task for Greening Kant: Ontology, Aesthetics, and Anthropology

Thus far, we looked at the central features of the traditional reading of Kant's philosophy. We have seen how the traditional reading is pervasive in Kant scholarship, undergraduate ethics approaches, and in animal and environmental ethics. Then, we then examined some of the newer approaches that defend how Kant's moral philosophy has more to offer for environmental concerns than is usually supposed. It was argued that both readings have merit, but that the

⁶⁹ Climate ethics, as a distinct discipline under environmental ethics, is on the rise in the literature.

⁷⁰ For some examples of Kantian approaches to climate change from various perspectives see Casey Rentmeester, "A Kantian Look at Climate Change" (2010), Schönfeld, "The Kantian Blueprint of Climate Control" (2008), Matthew C. Altman, "Kant's Strategic Importance for Environmental Ethics" (2012), Mads Greker et. al., "A Kantian Approach to Sustainable Development Indicators for Climate Change" (2013), Michael Thompson, "Climate, Imagination, Kant, and Situational Awareness" (2011), Patrick Frierson, "Kant, Individual Responsibility, and Climate Change" (2014). Many (but not all) of these approaches consider the relevance of Kant for climate change by way of the categorical imperative or Kant's political philosophy. My contribution will be to think about these issues from alternative standpoints such as the pre-critical ontology of nature or the anthropological writings.

tension between the two approaches is best resolved if we reframe the debate in terms of the contemporary problem of climate change. We can understand why the environment was a non-issue for early proponents of the traditional reading, since climate change was not yet on the radar. And with the increasingly more urgent sense of climate change's relevance, greener readings of Kant have become more prominent. Kantians certainly wish to be able to assist in humanity's existential plight. In the next three chapters, I aim to home in on the game-changer that is climate change in order to show how the greening of Kant is not only possible, but can be a welcome philosophical and ethical resource for our current challenges. Thus, I pursue a three-pronged approach that converges on the question of climate change with regard to our moral responsibility and relationship to nature, biodiversity and ecosystems, and current and future generations. This approach begins with an exploration of Kant's dynamic, pre-critical ontology, where I argue that Kant offers an ecological picture of nature compatible with ecocentric approaches in environmental ethics and conducive to moral framing for conservation and climate change mitigation. Then, I look into Kant's aesthetic and teleological resources for the crisis from *Critique of Judgment* in order to show how Kant's views on reflective judgment give us good moral and aesthetic reasons to protect animals and ecosystems. Finally, I investigate the often-neglected historical and anthropological works with an eye toward Kant's holistic vision of humanity and argue how this vision is relevant for the heroic tasks of transitioning to sustainability, pursuing environmental virtues, and securing a green paradigm shift toward ecological stewardship. All three areas are underexploited in the new Kant literature; therein, I maintain, lies my contribution for securing the fate of the green Kant.

CHAPTER 3

KANTIAN ECOLOGY: THE EARLY, DYNAMIC VIEW OF NATURE

In this chapter, I explore the pre-critical ontology of nature in order to show its environmental significance. In particular, I examine *Living Forces*, *Physical Monadology*, *New Elucidation* and *Universal Natural History* with an eye toward the ecological potential of Kant's holistic vision of nature.⁷¹ In these early naturalistic works, Kant views nature as an energetic and interconnected network; there is but one world and all its components are dynamically connected through a complex web of natural relations, according to which the whole is greater than the sum of its parts. I argue that these overlooked texts can provide an *ecological* view of nature compatible with and complementary to approaches in environmental ethics such as ecocentrism, deep ecology, and climate ethics by facilitating a systems-oriented view of the environment. In addition, I claim that an adoption of Kant's early ontology can be helpful for considering nature in a moral sense through its framing potential, not unlike that of Lovelock's Gaia Hypothesis. When adopted today, this framing potential can aid humanity in protecting and conserving nature in the face of climate change. I aim to show how this ecological view makes Kant out to be more of an environmental ally than is usually thought. This is especially pressing, given that contemporary opponents of Kant focus on isolated moral or epistemological texts such as *Groundwork* or the *Critique of Pure Reason*. Finally and perhaps most provocatively, I maintain

⁷¹ In a footnote in Biasetti, "From Beauty to Love: A Kantian Way to Environmental Moral Theory?" (2015) it is suggested that an ecological reading of Kant—following the path opened by Wood's essay on duties regarding non-rational nature and Kant's teleology—would indeed be quite fruitful to pursue. However, neither Biasetti nor Wood intimates how the pre-critical philosophy might play an important role in the development of such as reading, as I defend here.

that Kant's dynamic ontology of nature is even more useful for environmental ethics than Arne Naess's appropriation of Spinoza's pantheistic monism.

This chapter is divided into three parts. Part 1 is exegetical: it is a presentation and interpretation of Kant's early texts. I provide the historical context of Kant's early naturalistic works. Then, I outline *Living Forces*, *Physical Monadology*, *New Elucidation*, and *Universal Natural History* to show how Kant's early ontology of nature is holistic, dynamic, and naturalistic. Here, Kant presents a view of nature that is unified, interconnected, and energized through dialectical forces (or *entelechies*) that undergird reality, engender physical bodies, and produce the structure of space. Kant's view outlined here will then be developed in Part 2 to show how Kant's ontology of nature foreshadows approaches in environmental philosophy such as ecocentrism and deep ecology and is more useful as an environmental resource than Spinoza.

Part 2 is theoretical: it explains how Kant's view of nature can be interpreted ecologically. Furthermore, it underscores the cognitive tools Kantian holism can provide humanity for confronting anthropogenic climate change. As a foil for developing my ecological interpretation, I briefly highlight literature in environmental ethics regarding the theoretical importance of holism. Then, I make the case that Kant's early ontology of nature can indeed be interpreted ecologically through its affinity with ecocentrism. I submit that it is both compatible with and complementary to views espoused by Aldo Leopold and J. Baird Callicott. Finally, I suggest that Kant's view can be valuable for climate ethics because of his emphasis on systems-thinking. If adopted, the Kantian ontology can help facilitate theoretical cognition of the earth as a single world-system, which is necessary for the practical challenges of climate change. On my interpretation, Kant turns out to be much greener than environmental ethicists usually concede, even more-so than the deep ecological, romantic appropriation of Spinoza. I conclude Part 2 by

anticipating an objection regarding the split between the pre-critical and the critical works, especially apropos of Kant's supposedly vicious anthropocentric individualism in the latter.

Part 3 is practical: it explains the heavy-lifting that can be done once humanity is equipped with the pre-critical ecological view. I argue that this view of nature can be applied as a moral framing device for convincing humanity to protect nature. By conceiving nature as a single interconnected organism that evolves over time, humanity is better able to understand how it is embedded in and a part of the earth-system. It has been argued that Gaian framing can be useful for conservation, as in, for example, the deep ecological injunction to self-identification with nature.⁷² Kant's holistic ontology, I claim, is an intellectual foundation or predecessor of deep ecology; thus understood, deep ecology can then be seen as not completely radical in philosophy,⁷³ since its founder's philosophical hero, namely Spinoza, has much in common with Kant's early views of nature. And Kant's early views, because they are dynamic, multipolar, and emergent, are also *more* ecological than the monistic ontology of Spinoza. Since deep ecology has been helpful in facilitating conservation efforts as a theoretical base for environmentalism, the Kantian view will also be capable of aiding in such efforts.

⁷² For a discussion of deep ecology's concept of "self-realization" (that humanity is as it were an organ in the organism of nature as whole) and its connection to conservation, see Freya Mathews, "Conservation and Self-Realization: A Deep Ecology Perspective" from *The Deep Ecology Movement* (1995).

⁷³ Deep ecology strives for a radical paradigm shift with regard to humanity's relation with non-human nature. Though deep ecology maintains that extreme change is necessary, Naess means "radical" not only in the contemporary political sense but also, paradoxically, in the etymological sense of "rootedness" (*radix* as "root"); to adhere to the deep ecological philosophy means, for Naess, to return to one's philosophical roots. Similarly, by radical here I mean ostensibly alien to academic philosophy, but actually a root of it. This section will show how deep ecology can be understood as having a solid, albeit undeveloped foundation in Spinoza and Kant. Thus, for example, when analytic philosophers dismiss deep ecology as mystic hogwash, they are mistaken since the central theoretical tenets of deep ecology can be seen as rooted in the early Kant and Spinoza with systematic and theoretically defensible foundations. Though radical in their political aims, the deep ecologists have a firm foundation in the history of philosophy and deserve recognition.

Part 1: Kant's Early Ontology of Nature and Natural Science

As my survey in Chapter 1 suggested, a limitation of both environmental ethics and Kant scholarship is a general neglect of Kant's early views. With regard to environmental ethics, opponents of Kant one-sidedly highlight the anthropocentrism of the critical works without attending to the dynamic, pantheistic, evolutionary, and holistic views of the pre-critical ones. If these elements are carefully articulated, many can also be appreciated in the critical works as well—especially the *Critique of Judgment* (a subject of the subsequent chapter). Although lamentable, this emphasis on the critical works is hardly surprising. Even in Kant scholarship, little work is done on Kant's pre-critical thought, except perhaps for making sense of his “mature” shift in the first *Critique*. When Kant scholars do engage with these works, it is often from a historical perspective in the philosophy of science. It is, to be sure, interesting to understand the development of Kant's Leibnizian-Wolffian beginnings in relation to the Newtonian provocation of his time.⁷⁴ Focus on these areas is also understandable, since Kant's early work is very scientific in nature. Yet, there are very few attempts to apply the pre-critical works to contemporary issues, especially ones in ethics. In this chapter I aim to investigate such potential; Kant's pre-critical holism indeed has contemporary environmental significance. In the ensuing sections I highlight the elements of Kant's ontology useful for forging a new alliance with ecocentrism. But first, I lay out some historical background in order to contextualize Kant's thought.

⁷⁴ There is considerable scholarship on Kant's indebtedness to the physics and metaphysics of Descartes, Leibniz, and Newton. For respective examples, see Massimi and Bianchi, “Cartesian Echoes in Kant's Philosophy of Nature” (2012), Marius Stan, “Kant's Third Law of Mechanics: the long shadow of Leibniz” (2013), and Michael Friedman, *Kant's Construction of Nature* (2013). For extensive studies on the foundations of Kant's natural philosophy, see Friedman's *Kant and the Exact Sciences* (1992), Martin Schönfeld's *The Philosophy of the Young Kant* (2000), and Watkin's *Kant and the Metaphysics of Causality* (2005).

Natural philosophy has always been one of Kant's concerns, even since his earliest writings. It is thus strange how scholars often underplay it in discussing Kant's philosophy.⁷⁵ Any reading of Kant should not be read in complete isolation; though Kant's pre-critical works on natural philosophy are often quite different from the critical teachings, they should not be ousted from the Kantian philosophy wholesale. For the greening of Kant in particular, I recognize such divergences but nonetheless maintain that they should be seriously considered. As early as 1746, Kant in *Thoughts on the True Estimation of Living Forces* intended to ground sciences on firm metaphysical foundations. In order to resolve the *vis viva* controversy,⁷⁶ Kant mediates between Descartes' principles in natural philosophy and Leibniz's monadological metaphysics, showing how both sides are inadequate for their description of nature (Kuehn 2001,

⁷⁵ This has been the general tactic of most Anglophone readers of Kant. For instance, P. F. Strawson in his influential *Bounds of Sense* (1966) overlooks many aspects Kant's natural philosophy in order to isolate and appropriate general elements from the Analytic for his conception of realism. Most likely, this tendency is due to such readers' intention to show how Kant's philosophy is still relevant despite new innovations in natural science with relativity and quantum theory.

⁷⁶ The *vis viva* controversy was an infamous debate between Leibnizians and Cartesians that has its origins in 1686 with the publication of Leibniz's *Discours de metaphysique* (Iltis 1971, 32). In *Principia philosophiae* (1644) Descartes defends the principle of the conservation of the quantity of motion (now called "momentum") as mv (Iltis 1971, 21). Leibniz objects in a number of subsequent papers that the quantity of motion that is conserved is not mv , but mv^2 —what he calls "living force" or *vis viva* (Iltis 1971, 22). Leibniz's living force is proportional to what we now call kinetic energy, or work when applied to distances (Schönfeld 2013, 686). By "dead pressure" Kant refers to the Cartesian quantity of matter, and "living force" relates to the dynamic Leibnizian concept (Schönfeld 2013, 687). Kant's aims to resolve the debate by first, arguing against what he takes to be the mathematically erroneous and question-begging status of Leibnizian-Wolffian moving forces, or *vis motrix* (Kuehn 2001, 90; Watkins 2005, 106); and second, arguing that the Cartesians are correct but only from a mathematical standpoint. The work was received poorly if at all, since Kant—who in provincial Prussia was far away from the intellectual fray in England, Paris, and Berlin—was unaware of how Roger Boscovich and Jean d'Alembert would articulate how both sides (*vis viva* and momentum) were right (Iltis 1971, 21). The delayed publication did not help Kant's case, as the issue was settled by the time he finally submitted it for publication (Kuehn 2001, 94); both Leibniz's and Descartes' notions of force were later determined to approximate different aspects of force later expounded by Newton in *Principia Mathematica* (Schönfeld 2000, 34). For a succinct discussion of the argumentative strategies of the controversy, as well as its historical context in the Leibnizian tradition to which Kant would be more familiar, see Daniel Garber's "Leibniz: Physics and Philosophy" (1995) and Carolyn Iltis' "Leibniz and the Vis Viva Controversy" (1971).

90-91). He finds the geometric method of the Cartesians convincing yet wants to preserve the dynamic metaphysical foundations of Leibniz and Wolff. Kant's strategy for mediating their views is to acknowledge the logical validity of the mathematical sphere in Descartes, but to argue that radicalized metaphysical principles are needed for dynamics (Schönfeld in *Natural Science* 2012, 685). This foreshadows Kant's later claims that the methods of philosophy and metaphysics are distinct from those of mathematics in *Critique of Pure Reason*.⁷⁷ The Cartesians are correct with regard to the apodictic certainty of mathematics but wrong insofar as they attempt to apply it beyond its proper scope, relying on dead or static forces to explain a dynamic reality. Further, the Leibnizians are right to invoke forces or *entelechies* as the internal principles that engender and structure reality (LF 1:17:16-23), but they are wrong insofar as they posit moving forces to do so, which Kant believes fails to explain the phenomena, just as the "heating force" of the Scholastics fails to explain the process of heat (Watkins 2005, 104). Kant amends the Leibnizian-Wolffian view by appealing to living forces rather than moving ones (LF 1:18). In short, he argues that both camps are correct and incorrect, depending on the perspective from which they are viewed. Kant's contribution in *Living Forces* is his positing of dynamic forces for a novel physical influx causal theory in which there is real (not ideal) interaction between bodies (LF 1:21:3-8).

In 1755 Kant publishes another large treatise: *Universal Natural History and Theory of the Heavens*. In this text, Kant departs from the Cartesian-Leibnizian debate and draws from Newtonian principles of attraction and repulsion in order to argue about the natural origins,

⁷⁷ E.g., see CPR A723/B751-A738/B766 for the methodological distinction between philosophical and mathematical cognition.

evolution, and structure of the cosmos (UNH 1:226).⁷⁸ Kant, as Martin Schönfeld puts it, paradoxically allies himself “to the Newtonian model of physical nature and to the Leibnizian doctrine of the best of all possible worlds” (Schönfeld 2000, 107). In *Universal Natural History*, Kant uses Newtonian principles to explain the emergence of the cosmos from a dynamic interaction of forces and bodies (UNH 1:230). Given initial chaos, a self-forming process of swirling vortices leads to a systematically structured cosmos (UNH 1:264). Kant’s cosmos appears akin to Leibniz’s best of all possible worlds since it is harmonious, law-like, and beautiful (e.g. UNH 1:255). However, unlike Leibniz, Kant adheres to a holistic view of nature as a self-regulating system in which substances dynamically interact; because of his monadological idealism, Leibniz is forced to posit two static and metaphysically separate worlds of minds and bodies or final causes and efficient causes. For Kant, “[t]he immanent cosmogony of the *Universal Natural History* was an implicit repudiation of Leibniz’s separation” (Schönfeld 2000, 108). Not only does Kant take issue with Leibniz’s dualistic schism of nature, but more startlingly suggests as an alternative his view of nature as an interactive nexus of dynamic relations—a veritable ecology of nature.

Besides *Living Forces* (which utilizes metaphysical principles) and *Universal Natural History* (which defends an empiricist approach to cosmogony by appealing to principles of attraction and repulsion), Kant publishes the shorter treatise, *New Elucidation*. In this work, Kant is concerned with the metaphysical foundations of his early views of dynamics and natural philosophy. Kant attempts to, among other things, deduce the principle of sufficient reason and various corollaries to uphold a metaphysics of natural science (focusing on succession and

⁷⁸ The seeds of the “Kant-Laplace nebular hypothesis”—a scientific explanation for the origin of spiral galaxies, is found in this text (Schönfeld 2000, 114-115).

coexistence). Instead of defending a single basic metaphysical principle, Kant accomplishes this by arguing that the building block of reality is a two-fold, dialectical principle (that of identity and negation). Reality is dynamically constructed out of binaries, much like the attractive and repulsive forces in *Universal Natural History*. Formally speaking, *New Elucidation* is a work in the scholastic, Wolffian tradition, developing conclusions and scholia from a priori premises. This method was commonplace at this time. What is uncommon, however, is the content of the text as well as Kant's evolving relationship to Newton.⁷⁹ Still concerned with grounding natural science and the physical views espoused in *Living Forces*, Kant defends an early compatibilist view of freedom and solution to the mind-body problem. At this time Kant was still under the spell of Leibnizian-Wolffian rationalism, though he attempted to find middle ground between Leibniz, Descartes, and Newton in the course of his development of a novel version of the physical influx metaphysical theory of causality (Watkins 2014).⁸⁰

In 1756 Kant publishes *Physical Monadology*. Kant is seeking a middle path between the exact geometrical science of Newtonianism on the one hand and Leibnizian metaphysics, on the

⁷⁹ Kant's relationship with Newtonianism is a peculiar one, and seeing how Kant develops and orients his thought in accordance with the importance he places on Newtonianism is key for making sense of his later works in natural philosophy in the critical period. In short, with *Living Forces*, Kant is ambivalent toward Newton; he tries to navigate between Cartesianism and Leibnizianism with regard to dynamics and kinetics in the *vis viva* debate, and Newton is mentioned only a few times. This suggests that Kant was not very familiar with Newton at this point (and in Berlin, Kant's work was received poorly, if at all, because the debate he wanted to mediate had already been resolved with Newton's *Principia*). Then, with *Universal Natural History*, Kant begins to pay lip service to Newton when he discusses attractive and repulsive forces, but these qualitative forces are more a continuous development of the ones in *Living Forces* and *New Elucidation* (Watkins 2003, 23) than the mathematized ones of the *Principia*. Finally with the *Metaphysical Foundations* of 1786 Kant, having made the full regulative conversion to Newtonianism, seeks to provide a justification of the concepts and definitions used in *Principia* in order to show how they correspond with the a priori categories of *Critique of Pure Reason*.

⁸⁰ From Watkins, "Kant's Philosophy of Science" (2014) from *Stanford Encyclopedia of Philosophy*, <https://plato.stanford.edu/entries/kant-science/>. Date accessed: 22 October 2018.

other hand (in this case, Kant wishes to uphold the simplicity of monads). He does this by arguing that physical monads are dynamic fields of force. According to Watkins,

simple substances fill space not by means of mere existence, but rather in virtue of their spheres of activity. As a result, any division of the relevant spheres of activity does not compromise the simplicity of the substances themselves, since the spatial properties of substances (including the infinite divisibility of space) arise from the interaction between their activities rather than from their intrinsic features (Watkins 2014).

More interestingly, this resolution leads Kant to argue for specifically Newtonian principles of force. We witness here—twenty years before *Metaphysical Foundations*—Kant intentionally arguing for and utilizing Newtonian principles in order to avoid the dogmatism of both sides, a tactic he makes famous in the *Critique*. This continuity of Kant’s Newtonianism is important for understanding how Kant’s holistic views of nature, despite their ontological status in the early works, pervade the critical works. Though Kant will later make the distinction between phenomenal and intelligible worlds, he still tacitly maintains a holistic, single-world view of reality. This is, of course, most apparent in his intention to unify the realms of nature and freedom in *Critique of Judgment* (CJ 5:176-177). This concludes the general contextual background of Kant’s early works on natural philosophy and his intellectual motivations. In the next three sections of Part 1, I highlight the ecological principles that underlie Kant’s early ontology of nature: *Living Forces* presents a dynamic view of reality; *Physical Monadology* and *New Elucidation* present a naturalistic and anti-dualistic view of the interface between mental and physical nature; and *Universal Natural History* provides perhaps the best glimpse into the emergent holism of Kant’s early view of nature.

Living Forces and a Dynamic Nature

In *Living Forces*, Kant attempts to resolve the *vis viva* debate through the appropriation and development of his own unique metaphysical principles.⁸¹ Kant claims that the foundation of all motion results from the process of active forces⁸² (LF 1:19:2-4). “It was believed,” claims Kant in the opening of *Living Forces*, “that Aristotle’s obscure entelechy is the secret of the action of bodies...Leibniz, to whom human reason owes so much, was the first to teach that an essential force inheres in a body and belongs to it even prior to extension” (LF 1:17). Kant likens his living forces to the *entelechies* of Leibniz.⁸³

The notion of an *entelechy* is often shrouded in obscurity. Thus, a brief digression on its etymological, metaphysical, and environmental meaning will be helpful for seeing how Kant’s pre-critical ontology is ecological in the wider sense. An *entelechy* is, in the most general sense, that which is actual or energetic as opposed to potential and material. According to the *Oxford*

⁸¹ For the purposes of illuminating Kant’s early ontology and its relevance for environmental holism, I will focus solely on Chapter 1 of *Living Forces*. This is because it is here that Kant presents his metaphysical concepts (which are later expanded on and developed in the other pre-critical works like *Universal Natural History* and *Physical Monadology*). Chapter 2 of *Living Forces* is an abstruse critique of the dynamics of the Cartesians and other contemporaries of Kant, and the final chapter is Kant’s dialectical synthesis of the Cartesian and Leibnizian sides of the *vis viva* debate (Schönfeld 2000, 54). Though of historical significance, these chapters need not be emphasized here, as they are rather the (failed) application of Kant’s dynamic metaphysical principles in Chapter 1 of *Living Forces*. For a more detailed discussion of the argument of this work, see Watkin, *Kant and the Metaphysics of Causality* (2005) and Schönfeld, *The Philosophy of the Young Kant* (2000).

⁸² *wirkenden Kraft*.

⁸³ In the history of ideas, Aristotle was the first to make use of the concept of *entelechy* in his *Metaphysics*, where he utilizes it as the principle which makes potentiality into activity (and is associated with *energeia*, or the putting of work into action through force), or making matter enformed (Cohen 2016, “Aristotle’s *Metaphysics*” from *Stanford Encyclopedia of Philosophy*, <https://plato.stanford.edu/entries/aristotle-metaphysics/>. Date accessed: 22 October 2018). Later, it was taken over and put to prime use by Leibniz in his *Specimen Dynamicum* and *New System of Nature* as an explanatory principle for the unity and vitality of animal substance or monad. Kant is indebted to Leibniz here, but he adds a dynamic twist to the old principle. Finally, a connection can readily be made between Hobbes and Spinoza’s use of *conatus* (or “endeavor”) as the self-directing principle of desire in organisms and the tendency-to-action in matter. This connection might be helpful to keep in mind when I later discuss the connection between Kant and Spinoza.

Dictionary of Philosophy, the term *entelechy* in Aristotle means “the realization of the potential of a thing, or the mode of being whose essence is fully realized, as opposed to being merely potential (Blackburn 2016).⁸⁴ Etymologically, ἐντελέχεια can be broken into three parts: ἐν meaning “in”; τέλος meaning “goal”; and ἔχειν meaning “to have.” Conceptually, this means that an *entelechy* is a self-goal-directedness; or, a being whose goal is contained within itself by its very nature. Metaphysically, the word “being” is misleading. By virtue of its goal-directedness *entelechie*s are, strictly speaking, a dynamic processes or activities; *becoming* rather than being. Kant conceives of *entelechie*s as self-regulating, self-realizing powers or drives at the heart of nature. Organisms, ecosystems, and planetary-systems are all instantiations of the primitive concept of *entelechy* understood as a goal-directed system.⁸⁵ The cosmos, for Kant, is itself a system. It is the emergent result of processes that are the dialectical basis of reality. Now, a self-regulating, interconnected dynamic system is the most basic sense of ecology. As Arne Naess puts it, “intimate interconnectedness in the sense of internal rather than external relations characterizes ecological ontology” (Naess 1977, 46). The first provocative sentences of Kant’s *Living Forces* show how the pre-critical ontology of nature is indeed relevant to the environmental ethicist. Ethicists will be interested to see how Kant conceives of nature in fundamentally different ways from previous views in the early modern period. On Kant’s view, nature isn’t a mechanical aggregate of objects, hanging together through the sheer will of God; rather, nature is an interconnected network of active, self-directed internal powers unfolding in accordance with its own conative purpose. These powers evolve through time, yielding the

⁸⁴ *The Oxford Dictionary of Philosophy* (2016), cited from <http://www.oxfordreference.com/view/10.1093/acref/9780198735304.001.0001/acref-9780198735304-e-1088?rkey=QChXVo&result=1>. Date accessed: 28 September 2018.

⁸⁵ As we will see later, the similarities of *entelechie*s conceived as goal-directed systems to Paul Taylor’s biocentric approach to environmental ethics are striking.

diverse, complex, and beautiful *network* of nature. Ecology, in the most basic philosophical sense of the term, refers to reality insofar as it constitutes interconnected systems. In short, an ecological vision of nature is essentially network-oriented. Such is the ecological vision of nature in Kant's *Living Forces to Universal Natural History* that I will sketch, and the reason why environmental thinkers need to reconsider the value of Kant's philosophy as a potential theoretical resource.

In *Living Forces* Kant does not rely on God to unify and harmonize the realm of monads with the realm of physical nature (as Leibniz does). Rather than positing two separate realms—a dualism between ideal and mechanical nature—Kant argues for a multipolar single-world view of reality. Kant intends to discover the physical corollaries of the holistic view of nature built upon dynamic, organic forces: “Since all connection and relation of separately existing substances is due to the reciprocal actions that forces exert on each other, let us see what sorts of truths can be derived from this concept of force [*Kraft*]” (LF 1:21). And in rejecting pre-established harmony, Kant defends an alternative theory of physical influx, similar to those of Knutzen, Baumgarten, and others (Watkins 2005, 50). On this view, physical motion is explained in terms of active (pre-physical) forces or powers (LF 1:21:3-8). For Kant's pre-critical ontology, “reality consists of non-spatial, non-temporal, unextended simple substances; space, time, and motion are phenomena derivative from this underlying monadic realm” (Friedman 1992, 5). Living forces are the dynamic or processual substratum through which space and bodies form. As Schönfeld puts it in *Natural Science*, “space is a relational field generated by dynamic action” (Schönfeld 2012, 692). Newtonian universal gravitation is a corollary of the activity within the

field of *entelechies* (LF 1:24:19-26),⁸⁶ and space is generated through the interaction of force, weaving the network of reality. In short, in *Living Forces* all of nature's substances are connected dynamically and holistically because they are located in a spatio-temporal network of forces: "the world is an actually composite entity, and so a substance connected with no thing in the entire world will not belong to the world at all" (LF 1:22).⁸⁷ Though other worlds are logically possible, admits Kant, our world is a single, interactive network spun from the web of primitive forces.

In addition, *Living Forces* presents the rudiments of a compatibilist view of human freedom.⁸⁸ I maintain that examining Kant's compatibilist foundations in *Living Forces* and in *New Elucidation* provides further evidence that Kant's early view is holistic and naturalistic. Through physical influx and a single-world ontology of dynamic interaction, Kant is able to explain how bodies and minds interact. This explanation will, in *New Elucidation*, be used to show the compatibility of freedom and nature without positing distinct metaphysical worlds. Kant's solution relies on the relational notion of location: as was noted, forces generate the spatial network in which bodies interact. This interaction, of course, must take place in a

⁸⁶ As scholars like Watkins, Friedman, and Schönfeld have noted, Kant's understanding of Newtonian mechanics is at this time sketchy at best. In *Physical Monadology* and *Universal Natural History* Kant appeals to attractive and repulsive forces that are more explicitly in the Newtonian fashion, though it would probably not be until *Metaphysical Foundations* that Kant would engage with Newton's *Principia* in attempting to show how his transcendental philosophy provides empirical instantiations and metaphysical justifications of its principles (Friedman 2013, 15-17).

⁸⁷ *die Welt aber ein wie eine Welt wirklich zusammen gesetztes Wesen ist, so wird eine Substanz, existiren die mit keinem Dinge in der ganzen Welt verbunden könne ist, auch zu der Welt gar nicht gehören, es sei denn etwa in Gedanken.*

⁸⁸ See Jeremy Byrd, "Kant's Compatibilism in the New Elucidation of the First Principles of Metaphysical Cognition" (2008) for an analysis of the argument that suggests how Kant's early view of freedom differs from both Leibniz and the critical Kant.

determinate location.⁸⁹ For a mental entity to interact with nature, it “must be able to act externally by reason of the fact that it is in a location” (LF 1:20-21). Kant continues:

It is just as easy to grasp the nature of the paradoxical proposition concerning how it is possible that matter, which one fancies can cause only motions, impresses certain representations on the soul. **For matter that has been set in motion acts on everything that is spatially connected with it, and hence also on the soul; that is, it changes the internal state of the soul insofar as this state is related to what is external to it.** Now the entire internal state of the soul is nothing other than the summation of all its representations and concepts insofar as this internal state is related to what is external to it, it goes by the name of *status repraesentativus universi*; thus, by means of the force that it has while in motion, matter changes the state of the soul through which the soul represents the world. In this way, we can understand how matter can impress representations on the soul (LF 1:21, boldface emphasis mine).

Kant’s early holistic ontology avoids the determinism of early modern mechanism and the anthropocentric hubris of Descartes by overcoming his dualisms. Matter doesn’t fatalistically determine the soul; rather, the reciprocal motions of matter modify the soul’s interface (or “window” to use Leibniz’s term in *Monadology*) with the world, as it were opening the windows through which the soul sees and engages with reality. On this reading, then, Kant presents a holistic view of the interaction between minds and the world, conceived in terms of primitive forces. Minds and bodies do not inhabit metaphysically distinct locations in reality (as in both Descartes and Leibniz); rather, the mind has an interface with the whole through its external mode of representation and the location it finds itself in constrains the sorts of perceptions (and self-determinations) that are possible for it. Kant is thus able to explain the interaction between minds and bodies (and compatibility of freedom) with an interconnected world of efficient

⁸⁹ For Kant, even an immaterial soul must occupy a location by virtue of its external representational capacity. This shows how Kant’s early ontology is metaphysically distinct from Descartes, who doesn’t think minds occupy a place, since they are un-extended (cf. *Discours de la Méthode* Part 4). At best, Descartes vaguely alludes to the “intermingling” of the mind with the body, but is unable to adequately explain this possibility given the sharp metaphysical separation between mental and physical worlds that he posits. For Kant, this is easier since mind and bodies are both ultimately conceived in terms of living forces.

causes without pre-established harmony, although both Kant and Leibniz make use of dynamic inner principles, or *entelechies*, as the ontological substratum of nature. As Watkins puts it, “Kant holds that characterizing force more abstractly as active rather than in terms of motion solves the [mind-body] problem because it shows how to understand force in such a way that there is no heterogeneity between the mind and the body at the relevant level” (Watkins 2005, 107). The environmental significance of Kant’s rejection of the heterogeneity between mind and body—or, that is, Kant’s anti-Cartesian, anti-dualistic metaphysical framework—should not be downplayed for the greening of Kant. In this early text alone, Kant can be viewed as an ally for animal and environmental ethics. For thinking and extension are part of the same immanent reality. Thinking beings like humans are not superior to animals for belonging to a higher intellectual or divine reality. Rather, the immanent metaphysics of the pre-critical ontology suggests a continuum view of organic beings. With regard to its evolutionary views on souls, animals, and consciousness, the pre-critical ontology of nature can be seen as a theoretical paragon for animal and environmental ethics.⁹⁰ This strand of thought will be developed further in Part 3.

Physical Monadology and New Elucidation: Freedom and the Dialectics of Nature

In *New Elucidation* and *Physical Monadology*, Kant supplies the rationalist principles and physical entailments, respectively, required for and implied by his early dynamic ontology of

⁹⁰ In “Rethinking Kant from the Perspective of Ecofeminism,” Holly L. Wilson argues that Kant’s philosophy—drawing from the Critique of Teleological Judgment—can be utilized to sketch a Kantian ecological view of nature (Wilson 1997, 385-386). However, she does not draw from the pre-critical works, which I maintain are even better resources for making Kant out to be an ecological ally. It is also relevant to note that Wilson highlights the anti-Cartesian aspects of Kant’s thought, citing for example his dismissal of the Cartesian view that animals are mere machines (Wilson 1997, 387-388; CJ 5:464n). Patrick Kain also highlights Kant’s anti-Cartesian stance in “Duties Regarding Animals”: “Kant insisted that animals are not ‘mere machines,’ but have souls with a *vis locomotive*, because the mental representations that guide their behavior cannot be realized in matter ([CJ] 5:457, 464n)” (Kain 2010, 215).

forces. The ontology in *Living Forces* thus can be seen in more naturalistic terms by examining Kant's integration of freedom into his early holistic system of nature in *New Elucidation* and *Physical Monadology*. Accordingly, sketching these two works is the aim of the following section. In *Physical Monadology*, one of Kant's tasks is to show how simple monads—presumably, the *entelechies*, souls, or forces at the basis of his ontology, since “all bodies...consist of absolutely simple fundamental parts, that is to say, monads” (PM 1:477:16-17)—are compatible with the mathematical foundations of Newtonian physics. The problem lies in their simplicity: if monads are simple, they cannot be divided. However, on the Newtonian model of reality which Kant sought to defend, anything located in space must be liable to the infinite divisibility of space, the plurality of which seems to contradict the simplicity of monads (PM 1:480:4-13). Since monads actively preside in space by means of their perspectival interface with other substances (PM 1:480:36-39; LF 1:21:18-25), they would also seem to be subject to the infinite divisibility of space, thereby contradicting their simple nature (PM 1:477:5-7). Kant wants it both ways: to preserve the plausibility of the Newtonian model (for its explanatory power) while simultaneously upholding the importance of monadic simplicity (for maintaining the primacy of living forces in nature). His solution in *Physical Monadology* involves the postulation that both views are right: monads can be simple and yet space can be infinitely divisible. The solution relies on Kant's earlier dynamic or processual view of reality. Monads aren't merely static, un-extended points on an ideal plane. Rather, they are dynamic points that fill out space through the sphere of their activity⁹¹ (PM 1:481:36-39). The monad properly speaking is the center of this sphere, and hence is a simple energy point, while its field of activity remains subject to the infinite divisibility of matter. Since the physical monad's sphere of

⁹¹ *sphaera activitatis*.

activity precludes the presence of other monads at the same location, Kant is able to preserve the individuation of each monad through its external denominations: “The monad does not determine the little space of its presence by the plurality of its substantial parts, but by the sphere of its activity, by means of which it hinders the things which are external to it” (PM 1:480). Kant then maintains that a dialectic of attractive and repulsive forces generates a stable and systematic structure of nature. This dialectic is clearly a development from the earlier *Living Forces*. On Kant’s early ontology, the fabric of reality can be likened to an elastic ether; this “primitively elastic” medium is dynamic (PM 1:487:6-19), as Kant uses “elastic” in its Greek sense, viz., a dynamic compression: “to drive, push out.” Not only is this ontology of forces key to solving the classic philosophical problem, but it also shows how monads occupy the same realm as the rest of nature. In short, physical monads are naturalistic, not otherworldly. They are the immanent components of a holistic vision of reality. And since they are individuated, they leave space for freedom of the will.

A key insight of *New Elucidation* is Kant’s use of a complex principle as the building block of reality. In the pre-critical philosophy, Kant argues that reality must be understood fundamentally as the constitution of two principles: the principle of identity and the principle of contradiction (ND 1:389). This dual metaphysical foundation reveals Kant’s early philosophy as multipolar and dialectical.⁹² Much like in *Living Forces*, where Kant sees the structure of nature as a result of the dialectical interaction between entelechies striving for equilibrium in their generation of space; and in *Physical Monadology*, where attractive (positive) and repulsive (negative) forces generate the sphere of activity of the monads that constitute the primitive

⁹² It would be interesting to investigate the extent to which Engels was influenced by Kant in his dialectical materialism, where he goes beyond the merely human-historical claims of Marx and argues that nature itself is the evolutionary result of a dialectical binary at the basis of nature.

substance of reality; so also in *New Elucidation* Kant claims that a binary and dynamic metaphysical ground lies at the ontological basis of nature. Unlike standard views in theology where being is conceived as ontologically positive,⁹³ Kant's view of being is the interactive synthesis of identity and negation, attraction and repulsion, good and evil: on Kant's early ontology of nature, then, being is processual: it is becoming at its core.

One of the issues that *New Elucidation* addresses is the mind-body problem and the associated problem of human freedom. Can freedom be understood as compatible with such an “interlinked, interconnected and interwoven”⁹⁴ view of reality, understood as a dynamic nexus of relations (ND 1:404:1-3)? If everything, including our perceptions and representations, is subject to the reciprocal interaction of bodies according to laws of attraction and repulsion, how is freedom possible? Kant's solution to this problem is very similar to the Leibnizian resolution to the puzzle of freedom, although Kant rejects pre-established harmony. In the middle of Section 2 of *New Elucidation* (ND 1:401-405), Kant presents a short dialogue in which he argues that not only is his view of freedom compatible with the holistic ontology of nature presented above, but also that the opposing problem of determinism and radical freedom (“indifference of equilibrium” presented by the interlocutor Caius), is incoherent.⁹⁵

⁹³ Though Kant appeals to God as the sustainer of the two principles (ND 1:395-396), the fact that a dual principle grounds reality seems suspiciously heretical, as being rather than becoming is primitive. From an eastern philosophical perspective, this makes Kant's early metaphysical foundations appear closer to Daoism than orthodox Christianity.

⁹⁴ *quā stabili rationum conserte contexteqü colligatarum nexu.*

⁹⁵ Schönfeld suggests that Caius likely stands in as a representative of the mechanistic views of D'Holbach or la Mettrie (2000, 155-156). In Kant's dialogue, Caius laments that the order of nature entails that freedom is an illusion, since spontaneity of the will is impossible (ND 1:401:22-28). Titius, a representation of Kant's early compatibilist view, corrects Caius by helping him to realize that freedom is only illusory when it is assumed to be an absolute, ungrounded spontaneity of the will (ND 1:403).

The main concern of this short dialogue is to square the concern of natural determinism with moral responsibility. Kant's interlocutor, represented by Caius, exclaims: "responsibility for the misdeeds committed does not fall on me, for, bound as I was by the connected series of grounds which have determined each other from the beginning of the world, I could not have failed to have done whatever I did do" (ND 1:401). If nature is the emergent result of a series of dynamic forces in accordance with laws of attraction and repulsion, the freedom of the will seems either determined and hence illusory, or else impossible.⁹⁶ And, of course, freedom is required for moral responsibility. How does Kant (via Titius) respond to this concern? First, he argues that every action must have a determining ground or reason (Kant's version of the principle of sufficient reason). An autonomous will, on Kant's view, is a will that is capable of acting spontaneously and consciously according to an inner principle of self-determination (ND 1:402:11-16; 404:7-10). A will can unfold its own nature within the larger web of nature without the imposition of external forces; it is a self-determining inner force. Even free actions require a determining ground. Absolute freedom and the "indifference of equilibrium" are absurd: freedom requires a motive or desire to action with a conscious representation of a state of affairs. Otherwise, it is mere chaos—i.e., not freedom in any meaningful sense (ND 1:403:1-5). An

⁹⁶ Indeed, Kant attempts to navigate safely between two different types of fatalism: the materialistic Scylla of Hobbes, on the one hand, and the rationalistic Charybdis of Spinoza, on the other. His argument for the existence of God as a guarantee to the foundations of the metaphysical principles—of identity, contradiction, and determining grounds—that make possible the lawful interaction of forces (ND 1:395) perhaps betrays his deep concern not to be read as an atheist like Hobbes or Spinoza. In the preface to *Universal Natural History* (UNH 1:222-224) Kant reiterates this atheistic concern, though his cosmological system thus construed certainly doesn't need a God to explain the origin of the cosmos: According to Friedman, "the order and harmony of the material universe can be completely explained by the fundamental laws of material interaction... which determine an *evolution* of the structure of the universe out of a primordial chaos. Yet this purely mechanistic explanation is itself the best proof of a divine origin of the universe; for it is God, and God alone, who has established these fundamental laws of interaction" (Friedman 1992, 11).

autonomous being is a self-law-giving being embedded in the larger nexus of nature as a whole, not an anarchic, discretely disembodied being cut off from this nexus.

To summarize: all events follow natural necessity because they are located within a web or network of causal relations understood through a binary or processual metaphysics of nature. The free will is able to act freely despite being engaged in this web by resisting the external series of causes impinging on it (via inclination or external force) through a spontaneous inner principle of self-determination. Both types of causality have a determining ground (because absolute freedom is absurd), and both occupy the same metaphysical realm. On this view, then, Kant (whether or not we believe his argument successful) integrates freedom, moral responsibility, and the physical web of relations into a holistic, single-world view of nature imbued with living forces.⁹⁷ In this sense, Kant's compatibilist solution is holistic (since there is only one interconnected metaphysical world) and naturalistic (since everything is ultimately as it were built out of the natural, energetic forces that are the building blocks of nature). This metaphysical world is a natural world because Kant does not need to appeal to a transcendent order in order to explain the possibility of free wills in nature. Freedom is immanent.

Universal Natural History: the Ecology of the Cosmos and Nature's Systematicity

In *New Elucidation* Kant uses his ontology of dialectical forces to resolve the theoretical challenge of freedom understood within a single metaphysical world. And, in *Physical Monadology*, he solves the empirical problem of the presence of monadic forces in a nature ordered by attractive and repulsive forces. *Universal Natural History* takes a similar route, drawing from this dialectic of dynamic forces to show how the origin, development, and

⁹⁷ This defense of moral autonomy (e.g., rationality versus inclination) appears quite similar to the ethical theory presented in *Groundwork*, but it is important to emphasize that here Kant does not distinguish between the noumenal and phenomenal realms: there is only one realm, and it is the realm of nature.

systematicity of the cosmos can be understood by means of this naturalistic ontology. Kant's ontology discussed thus far illuminates how his view of nature in *Universal Natural History* is evolutionary and holistic: it is, I claim, a veritable evolutionary ecology of the cosmos.

Universal Natural History is one of the most interesting and important of the pre-critical works for understanding Kant's view of nature. Additionally, it is perhaps the best text to look to simply because in it Kant synthesizes and unifies most of the key elements I have been discussing in the previous works: *Universal Natural History* presents an emergent view of the universe, built upon the energetic structures from the other early works, and argues for a holistic view of nature's systematicity that would later get taken up in the third *Critique*. Nature is a great chain of being (UNH 1:365). All its members—from organisms to planetary systems—play a part and contribute to the beauty, perfection, and functioning of the larger whole. This chain has evolved from chaos into order. In a word, the view of nature I wish to highlight in Kant's *Universal Natural History* is emergent and dynamic, systematic and holistic.

Nature is a self-forming process. It isn't simply the static consequence of a creator God or the eternally standing whole of Spinoza, but is self-made⁹⁸ (UNH 1:264). It is immanent rather than transcendent; its origins are natural rather than divine (UNH 1:262; 344). Nor is nature the work of a single act of creation. Rather, nature has evolved over time in accordance with dialectical laws of attraction and repulsion to bring about “as it were, a continuous life in nature”⁹⁹ (UNH 1:264-265). Put differently, nature has “evolved from chaos” into a harmonious nexus of order (UNH 1:313-314). The evolution of nature,¹⁰⁰ beginning with the spiral formation

⁹⁸ *bildenden Natur*.

⁹⁹ *Kräfte... welche sich... die gleichsam ein dauerhaftes Leben der Natur ist*.

¹⁰⁰ *Auswicklung der Natur*.

of the universe by means of attractive and repulsive forces “is effective throughout the entire sequence of eternity with ever increasing degrees of fruitfulness” (UNH 1:312-314).

Differentiation, diversity, and complexity unfold from this process. The “sphere of formed nature...has within it the seed of future worlds,” which on Kant’s view, “strives to evolve out¹⁰¹ of the raw state of chaos over longer or shorter periods” (UNH 1:314). And yet, nature evolves not on a linear pathway (as perhaps might be understood in monotheistic creation cosmologies), but rather emerges cyclically through processes of birth and rebirth, creation and destruction.¹⁰² “Worlds and world-orders pass away and are swallowed by the abyss of eternities; by contrast, creation is ever busy carrying out new formations in other regions of the heavens and replacing what has gone with advantage [*Vorteile*]” (UNH 1:317). Kant uses the metaphor of the phoenix to articulate how nature operates according to its own dynamic laws: nature begins with simple polar forces that propel it toward self-organization; the phoenix of nature then evolves itself into planetary systems sustaining complex organisms, only to decay back into its simple dynamic starting point. In a word, the phoenix is Kant’s symbol for the cycle of nature and the way in which it bounces between birth and death, creation and destruction.¹⁰³ The phoenix of nature is associated with the feeling of sublimity for Kant, since cosmic generation, evolution, and destruction are profound:

¹⁰¹ *auszuwickeln* .

¹⁰² It should thus be no surprise that one of Kant’s most innovative followers, Arthur Schopenhauer, should find it plausible to synthesize the Kantian philosophy with Vedic teachings such as Atman and Brahman.

¹⁰³ Rather than a singular big bang, some theorists argue that an endless series of bangs and crunches alternate, as it were, in musical oscillation as the song of nature’s creation and destruction plays on unto eternity, not unlike the fiery play of Kant’s phoenix of nature. For a discussion on how Kant’s symbol of the phoenix of nature anticipates models in quantum cosmology such as the “big bounce,” see Schönfeld, “Phoenix of Nature: Kant and the Big Bounce” (2009). For a discussion of the big bounce from the perspective of theoretical physics, see Brown et. al., “The Phantom Bounce: A New Oscillating Cosmology” (2008).

If we follow this phoenix of nature, which burns itself only to rise rejuvenated from its ashes to new life through all infinity of time and space; when one sees how, even in the region where it decays and ages, it continues unexhausted with new appearances and on the other border of creation it proceeds in the space of unformed raw matter with constant steps for the expansion of the plan of divine revelation to fill eternity as well as all the spaces with its wonders: then the mind that contemplates all this sinks into profound astonishment (UNH 1:321).

The metaphor of the phoenix is of interest for the green Kant for a number of reasons. First, it emphasizes nature's self-standing role in generation and emergence: nature needs no supersensible explanatory source of motion and organization, but rather unfolds and evolves according to its own dynamic laws, as discussed in the foregoing. In addition, the phoenix imagery highlights the naturalistic and even pantheistic aspect of Kant's view of nature: As a phoenix, nature is both creator *and* destroyer; it is immanent. A deity is superfluous.¹⁰⁴ Creation begins with a dialectical interplay of forces whereby *entelechies* unfold their natures, resulting in the natural structures and regularities of planetary systems. Destruction is the natural process of decay and entropy for which the phoenix of nature cosmically inclines. Indeed, on this picture, Kant looks in many respects closer to Spinoza than Leibniz, contrary to what is usually thought. Nature is for Kant organic, living, and constantly changing. It is a network of powers tending toward birth, death, and rebirth: that is, it is dynamic and evolutionary; each micro-step in the unfolding of nature evolves solar systems, animal life, and intelligences with more and more complexity, all until the inevitable refolding of nature back into nothingness eternally returns the rebirth of the Phoenix anew.

¹⁰⁴ Kant makes numerous passing references to God in this text, though it is clear (based on the foundational principles of Kant's argument; e.g., UNH 1:344) that the deity is neither required nor useful in explaining the origin of the universe. If anything—much like Hobbes's view (Jesseph 2002)—God is explanatorily useless. One interpretive strategy, then, is to acknowledge that, regardless of Kant's idiosyncratic beliefs on religion, he must for prudential reasons pay lip service to the Church. For orthodoxy is a requirement for sustaining an academic post in pietistic Prussia.

An additional note worth mentioning is with reference to the final and third part of *Universal Natural History* (UNH 1:351-368). In this section, Kant speculates about the nature of other planets as well as alien intelligences. Whereas Part 3 is usually cited as (amusing) support for Kant's view that there are other rational ends in themselves besides humans,¹⁰⁵ what I'd like to briefly highlight is Kant's rejection of human exceptionalism, his holistic view of nature as an organic unity, and his view of planets as evolving, self-organizing ecological systems. Kant's rejection of human exceptionalism and his defense of a holistic view of nature is best expressed in the following passage in Part 3 of *Universal Natural History*:

This insect [viz., lice] that expresses the disposition of most people very well both in the way it lives and in its insignificance, can be used as a comparison with good reason. Because in its imagination its existence matters infinitely to nature, it considers the whole of the rest of creation as in vain as far as it does not have its species as a precise goal, as the centre point of its purposes. The human being, so infinitely removed from the highest stage of beings is so bold as to allow himself a similar delusion, to be flattered by the necessity of his existence. The infinity of creation encompasses in itself, with equal necessity, all natures that its overwhelming wealth produces. From the most sublime class among thinking beings to the most despised insect, not one link is indifferent to it; and not one can be absent without the beauty of the whole, which exists in their interrelationship, being interrupted by it. Meanwhile, everything is determined by universal laws which nature effects by the connection of its originally implanted forces. Because it brings forth nothing but propriety and order in its processes, no single aim can disturb or interrupt its consequences (UNH 1:353-354).

Humans often consider themselves the pinnacle of creation, but they are conceited, just as the louse thinks its dominion of the scalp proves it to be the height of existence. What Kant deigns to

¹⁰⁵ I favor Wood's use of "logocentrism" rather than "anthropocentrism" when referring to Kant's critical moral system, since the former highlights how the foundations of Kant's ethics are not speciesist, as animal ethicists like Singer are wont to presume. However, in the pre-critical works discussed in this chapter, Kant is even more radical than the logocentric view of the critical period, insofar as he views all of nature in terms of evolving intellectual complexities. That there may exist other aliens with lesser or greater degrees of rationality (for instance, the average intellect of certain aliens, ventures Kant, might be comparable to Newton, UNH 1:358-360) could be a point worth exploring in order to support Kant's view of the evolution of organisms and their moral significance. For instance, on this view humans, though worthy of respect, are not the end of nature as might be gathered from his statements in *Critique of Teleological Judgment*. Rather, they are simply one middling species on the evolutionary ladder of being.

express in this work is that both the human and the louse lack the greater perspective to realize that they are merely one more, albeit important, organ in the functioning of the great system of nature.

In addition, Part 3 can help us toward a reading of Kant in line with a view of planets as ecological systems. For Kant planets themselves evolve and form in accordance with dialectical laws of nature yielding the conditions for the development of life (UNH 1:352-353; 360). They are, it may be inferred, the macro-instantiations of *entelechies*. They are organic, interactive systems that self-regulate, evolve, and sustain animal life. And each planet, as a potential life-sustaining ecological system, is interconnected and interlinked with the larger cosmic system: “everything in the whole extent of nature is connected in an uninterrupted graduated sequence by the eternal harmony that refers all links to each other” (UNH 1:365). This view is quite dissimilar from the anthropocentric one that proponents of the traditional reading garner from *Groundwork* and *Critique of Pure Reason*. When environmental ethicists avail themselves of Kant’s ecological views of nature present in texts like *Living Forces* and *Universal Natural History*, they arrive at a theoretical resource rather than an anthropocentric impediment.

It may appear as if I am pushing the organic metaphor of the phoenix of nature too hard in *Universal Natural History*, but there is further support in an essay published around the same time in which Kant argues that it is quite plausible to consider the reality of a world-soul: In “The question, whether the Earth is ageing, considered from a physical point of view” (1754), Kant considers how the age of the earth might be determined scientifically. He reasons that, just as the best way for thinking about the age of an animal or person involves reference to its health and stage of decay, so also the age of the earth can be determined if reflected through living terms, like an organism:

Indeed, it seems to be a subject worthy of enquiry to determine whether the Earth is ageing gradually and whether it is not in its declining phase, or whether its constitution is still in good health, or indeed whether the perfection to which it is to develop¹⁰⁶ has not yet been fully attained and it has perhaps not yet passed beyond its childhood (FE 1: 196).

In this text, published just one year before *Universal Natural History*, Kant frames the earth in organic, Gaian terms. Earth has a state of health and can be harmed or benefitted; earth has a lifespan for flourishing and currently is thought to be in its infancy. Most importantly with regard to Kant's views of religion and his views of nature, Kant not only accepts as plausible the view "of those who presuppose a general 'world-spirit', an imperceptible but universally active principle, as the secret driving force of nature"¹⁰⁷ (FE 1:203), but he seems to endorse such a view at the end of the essay. The "generation and the economy of all three realms of nature" which is to say, the ecology of nature, can be best understood in terms of a world-spirit (FE 1:211). Kant is clear, however, that by such a "Proteus of nature" he does not mean to anthropomorphize nature as a mind. Instead, he interprets the most reasonable source of the "life of nature" to be "a subtle but universally active matter which, in the products of nature, constitutes the active principle" of nature (FE 1:211). The active principle that Kant muses as the heart of nature appears very much in line with the pre-critical living forces, *entelechies*, and monads. Thus, the early works converge on a view of nature understood ecologically, as an organic and emergent Gaia that pervades and connects all beings through dynamic, living forces.

Besides being emergent, dynamic, and evolutionary, Kant's early ontology of nature is decidedly holistic. Nature is seen by Kant as a complex and interrelated nexus of teleological

¹⁰⁶ *Entwickeln.*

¹⁰⁷ *überall wirksames Principium als das geheime Triebwerk der Natur.*

connections. Throughout the treatise, Kant never fails to underscore the systematicity of nature as he conceives it, as the following passages evince:

How could it be possible that things of different natures in connection with one another should aim to bring about such excellent harmonies and beauty...in which the essential natures of all things were conceived in relation to each other?

Without the assistance of any arbitrary inventions, I enjoy the pleasure of seeing the creation of a well-ordered whole by reason of established laws of motion which looks so much like the system of the world we have before our eyes that I cannot help but regard it as the same (UNH 1:226).

Multipolar forces of attraction and repulsion dynamically structure the cosmic edifice in accordance with laws of motion into a determinate, harmoniously interconnected solar system in which the diversity of life becomes possible. Nature's holistic systematicity is, from the standpoint of the philosopher or scientist who reflects upon it, beautiful, awe-inspiring, and sublime.

The fixed stars, as we know, all relate to a common plane and thus constitute an orderly whole, which is a world of worlds. One can see that in the immeasurable distances, there are more such star systems, and that creation in the entire infinite scope of its size is everywhere systematic and interrelated (UNH 1:255).

If the magnitude of a planetary system in which the Earth is a grain of sand and scarcely noticeable puts our reason into a state of wonderment, then with what amazement are we delighted when we contemplate the infinite magnitude of worlds and systems...There is no end here but rather an abyss of a true immeasurability into which all capacity of human concepts sinks even if it is raised with the help of mathematics (UNH 1:256).

By its immeasurable magnitude and by the infinite diversity and beauty that shines forth from it on all sides, the universe puts us into silent astonishment (UNH 1:306).

The feeling of awe from sublimity evokes a feeling of admiration for nature as a totality; though sublimity is associated with contrapurposiveness, formlessness, and infinite magnitude or immensity in *Critique of Judgment*, for the pre-critical Kant even a judgment of sublimity can be appreciated as beautiful within the context of nature as a whole in *Universal Natural History*.

When examined from an aesthetic, cosmic perspective, Kant claims that the world can be

understood as a great chain of being (UNH 1:278; 319). Rational nature as found in humanity is only one middle rung in the ladder of beings who have evolved as nature has unfolded from its initial dialectical furls (UNH 1:330). Humans feel themselves to be superior since they take themselves to occupy a higher stage in the evolution of rationality in nature, but this feeling is misguided and shrouded with hubris, since they themselves are no exception to the laws of creation and destruction (UNH 1:318). All seeming imperfections, evils, and death can be understood intelligibly if conceived with a “total-field image”¹⁰⁸ of nature as a whole:

Nature, by encompassing all possible stages of diversity in itself, extends its embrace to all types of perfection up to nothingness and the defects themselves are a sign of the superfluity in which its sum total is inexhaustible. (UNH 1:338).

Nature, despite having an essential determination to perfection and order, embraces all possible changes in the extent of its multiplicity, even to failings and deviations. It is precisely the same unlimited fertility of nature that has brought forth the uninhabited heavenly spheres as well as the comets, the useful mountains and harmful cliffs, habitable landscapes and empty deserts, *virtues and vices* (UNH 1:347, emphasis added).

Kant’s early view thus, in addition to its holism, presents a naturalistic view of morality: ethical consciousness is natural and emerges in accordance with the harmonious unfolding of nature.

As I have shown, Kant’s early naturalistic works depict an ontology of nature that is processual, dynamic, interconnected, and naturalistic. To put this more radically but succinctly, Kant’s early view of nature is *ecological*. Part 2 of this chapter attempts to show how, precisely, such a radical and seemingly anachronistic term could be attributed to Kant. I use the ecocentric views of Aldo Leopold and J. Baird Callicott to think through the ecological sense of Kant’s theoretical vision (and sharpen what I mean by “ecological” in the first place). I also show how

¹⁰⁸ This term is used by deep ecologists to suggest the proper perspective for cultivating right relationships with nature. I use it here in order to foreshadow my claim that Kant’s philosophy of nature is an important philosophical predecessor to deep ecology, discussed in Part 3.

Kant's early views are more green than is usually thought; they not only have moral implications for how we view nature, but also are compatible with ecocentrism and climate ethics.

Part 2: Environmental Holism and Kant's Early Ontology

Aldo Leopold's land ethic is perhaps the best starting place for thinking about what an ecological view of nature looks like. The land ethic, a seminal essay from *A Sand County Almanac* (1949), was an important and original contribution by Leopold, who was a trained conservationist rather than philosopher. Leopold's short essay became the foundation for an entire movement in environmentalism as well as the ecocentric strand of philosophy in environmental ethics. Though Leopold hardly fleshes out the ethical entailments of his ecocentric view in this essay, later thinkers would expand upon it and provide the necessary philosophical sophistication to bolster Leopold's prescient insights.¹⁰⁹ Leopold espouses a holistic understanding of nature and our place in it; he views ethics itself as an emergent and evolving practice beginning with anthropocentric individualism and culminating with ecocentric holism. But what is ecology, philosophically-speaking, and how does Leopold's land ethic provide the best conceptual glimpse of ecological thinking? "Ecological thought," states Callicott in his "Conceptual Foundations of the Land Ethic" (2010)

has tended to be holistic in outlook. Ecology is the study of the relationships of organisms to one another and to the elemental environment. These relationships bind the *relata*—plants, animals, soil, and waters—into a seamless fabric. The ontological primacy of objects and the ontological subordination of relationships characteristic of classical Western science is, in fact, reversed in ecology. Ecological relationships determine the nature of organisms rather than the other way around... The whole, the system itself, thus, literally and quite straightforwardly shapes and forms its component species (Callicott 2010, 87).

¹⁰⁹ J. Baird Callicott is the most prominent defender of Leopold in academic philosophy. *In Defense of the Land Ethic: Essays in Environmental Philosophy* (1989) is perhaps the best work in this regard.

On Leopold's view, nature is a vast and complex self-regulating system, whose parts are mutually and reciprocally interconnected. This model of nature—one which is essentially ecological—would later become the paradigm of Gaia presented in James Lovelock but presaged by earlier thinkers such as Alexander von Humboldt, Arthur Schopenhauer, P. D. Ouspensky, Spinoza, and (as I hope to show) the pre-critical Kant. “Plants and animals, soils and waters, according to this paradigm, are integrated into one super-organism. Species are, as it were, its organs, specimens its cells” (Callicott 2010, 87). This Gaian concept can be detected in Kant's regulative understanding of nature's teleological systematicity in *Critique of Judgment*, but it is even more pronounced in the pre-critical works such as *Universal Natural History* and “Whether the Earth is Ageing.”

In the foreword to the land ethic, Leopold asserts that “the basic concept of ecology” is the understanding of land as a community (Leopold 1966, xix). By community, Leopold has in mind his “community concept” wherein humanity is conceived as embedded in a “community of interdependent parts” (Leopold 1966, 239). The community concept, as a conceptual determination of humanity, is subject to evolution in the same sense in which all species in nature evolve according to the overarching ends of Gaia. For Leopold the land ethic is the paradigm shift that “enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land” (Leopold 1966, 239). An ecological understanding of nature is one in which the interdependence and co-evolution of each part is recognized for what it is in the larger organic context. Kant's view of nature in the early works anticipates Leopold's later insights, although he only asymptotically approaches them. Despite Kant's rejection of ontological holism in the critical period (forever precluding him from Leopoldian moral revelations), he retains a system-oriented theoretical understanding of nature. For Leopold, the

land ethic's ecological holism "changes the role of *Homo* from conqueror of the land-community to plain member and citizen of it" (Leopold 1966, 240). Kant would never claim that the land deserves respect as an end in itself (for obvious reasons), but his pre-critical ontology suggests a similar Leopoldian relationship to nature itself, as humble member rather than despot.

Stewardship is a clear moral implication of ecological holism, and I develop this idea with greater detail in Chapter 5 on Kant's holistic view of humanity and cosmopolitan sustainability.

Leopold defends a hierarchical ordering of nature emerging through process rather than an aggregation of static objects. This is presented through the symbol of the "land pyramid," which Callicott takes to be the key section of Leopold's essay; for the understanding of nature as a processual system rather than aggregate of discrete things marks the conceptual paradigm shift from anthropocentric individualism to ecological holism. A grasp of this leads one, on Leopold's view, to effect "a complete transition from concern for 'fellow-members' to the 'community as such'" (Callicott 2010, 89). Here, Leopold states in layperson terms the ways in which solar energy travels through the various strata of the earth-system; how energy is transferred and transformed from the stratosphere to the biosphere in a dynamic fashion. In short, nature is not an aggregation of things but is instead a holistic web of energy. Nature is a confluence and convergence of different processes that dialectically unfold, retaining the structural integrity and beauty of the whole:

The pyramid is a tangle of chains so complex as to seem disorderly, yet the stability of the system proves it to be a highly organized structure. Its functioning depends on the co-operation and competition of its diverse parts.

In the beginning, the pyramid of life was low and squat; the food chains short and simple. Evolution has added layer after layer, link after link. Man is one of thousands of accretions to the height and complexity of the pyramid...the trend of evolution is to elaborate and diversify the biota.

Land, then is not merely soil, it is a fountain of energy flowing through a circuit of soils, plants and animals. Food chains are the living channels which conduct energy upward; death and decay return it to the soil. The circuit is not closed; some energy is dissipated in decay, some is added by absorption...but it is a sustained circuit, like a slowly augmented revolving fund of life...This interdependence between the complex structure of the land and its smooth functioning as an energy unit is one of its basic attributes (Leopold 1966, 252-254; Callicott 2010, 89).

Leopold and Callicott provide a solid philosophical image of an ecological view of nature: it is systematic, holistic, dynamic, and evolutionary. Humanity is not at the privileged center, but is understood contextually as a living part of the whole.

This image can be sharpened to even greater relief if the very meaning of the concept of ecology is further analyzed. Etymologically, “ecology” means the “study of the house.” The house is the dwelling that sustains us; it is the structure under which we live. Here, the house is nature. A house can of course be divided into subsections—the kitchen is an οἶκος oriented toward cooking, the living room is an οἶκος for postprandial repose, and so on, just how each ecosystem on earth has its own micro and macro function connected to the broader earth-system. As flora and fauna relate to an ecosystem, so too does each ecosystem relate to the larger system of nature. This is precisely the way how Kant views nature in the pre-critical works—a relational system of interdependencies.

Finally, there is a clear *economic* sense of ecology; a house requires proper maintenance in order to function sustainably. Without a well-regulated economy (lawful house, or οἰκονόμος), the flourishing of the whole (and of its members) diminishes. The economic aspects of the concept of ecology can be helpful for making sense of ecological thinking and its connection to Kant’s early ontology. Just as Kant views nature as a balanced system of primitive forces or *entelechies*, Leopold and Callicott view nature as a regulated exchange of energy. In the land ethic’s ecological economy,

[t]he living channels—food chains—through which energy courses are composed of individual plants and animals... at the heart of ecological processes: Energy, the *currency* of the *economy [of] nature*, passes from one organism to another, not from hand to hand, like coined money, but, so to speak, from stomach to stomach (Callicott 2010, 91 emphasis added).

The early Kant, like Leopold, would agree that the currency of nature is energy or force put into action. Kant's pre-critical conception of nature, then, is readily compatible with the ecological view of nature presented by these thinkers. Kant views nature as interconnected, emergent, naturalistic, and holistic; it is a living, systematic, self-organizing, organic web of relations. This is precisely the way ecocentric thinkers like Leopold and Callicott conceive of nature as presented in the land ethic's community concept and land pyramid. Kant's early view of nature indeed fits with this model, though it certainly predates it.¹¹⁰ Because of Kant's critical turn, he never reaches the moral conclusions of Leopold and Callicott. However, I suggest that there are clear practical implications of Kant's early theoretical view for climate ethics, as well as what I take to be its complementarity with ecocentrism. These are suggested below before I consider an objection and then transition to the question of conservation from a Kantian standpoint.

Kant and Leopold: Domestic Partners, Mutual Support

Kant's ecological view fits with ecocentric views in two ways—first, it is compatible with it and second, it complementary to it. By the former, I mean that the ecological holism of the pre-critical ontology coincides with many central theoretical tenets of the land ethic; they diverge in their explicit ethical injunctions, but from the theoretical standpoint they share much in common: a view of nature as like an organized being, harmoniously connected and intertwined; humanity

¹¹⁰ Scott M. Routlier claims of Kant's view of nature that "to the extent that Kant treats nature holistically—as an interlocking system of ends—he anticipates Leopold's land pyramid or ecosystem view" (Routlier 2004, 141). Routlier hints at the affinities between Kant's system-oriented thinking and ecosystems, but does not discern the way in which the pre-critical view of nature is even *more* ecological. In Part 3 I argue that Kant's early view of nature can be also understood as a foundation and precursor to deep ecological thinking.

is a mere member that is embedded in the living whole;¹¹¹ the basis of nature is energy, force, dynamic activity; living and non-living entities and conscious and inert matter naturally relate along a continuum of evolutionary development. In these ways, Kant is not opposed to ecocentrism as many environmental ethicists are wont to say. He simply must be read outside the narrow confines of the critical period. Second, Kant's view fits with ecocentric views insofar as it is, in addition, complementary to it. More specifically, it is complementary when considered in light of the exigencies of climate change: even if animals or land have no value in themselves on the traditional Kantian view, Kant's holism can justify a stewardship view of nature. Leopold (and his land ethic) has been important historically in environmentalism and environmental ethics, but he still remains a marginal thinker and his philosophy is virtually unknown outside environmental philosophy. Kant, on the other hand, has remained one of the titans in the Western canon. It would undoubtedly be easier to integrate Kant's pre-critical insights into the philosophical canon and use them as a springboard for environmental praxis rather than try to popularize an inherently unpopular view like Leopoldian ecocentrism.¹¹² In any case, the Kantian view can complement the Leopoldian one since the former shares much with the latter theoretically, albeit the former has more philosophical credibility, as it were. Moreover, Kant's is another philosophical perspective from which humanity can view the climate crisis. Kant's ecological view of nature is yet another asset for combating climate change: the more

¹¹¹ If this sounds suspiciously close to the Spinozist view, it should come as no surprise to learn that the romantic post-Kantian German philosophers married Kant's philosophy with Spinoza's in an organic synthesis. Though it may seem bizarre to think of the critical Kant and Spinoza happily wed, when the pre-critical Kant is considered this marriage makes more sense.

¹¹² Perhaps the land ethic's time will come as humanity transitions away from a commodity-centered view of nature, but strictly holistic views in ethics have never been very popular. This can even be seen with other radical and unpopular thinkers, such as the strong animal-rights proponent Tom Regan, who mocks ecocentrism by calling it "ecofascism." Kant, on the other hand, is a respected figure for his defense of universal human rights, and an integration of the pre-critical holism would likely be easier to effect.

environmental allies, the better; on this basis, Kantians can say that Kant isn't a foe but a possible ally in this battle, especially with regard to viewing nature holistically as an object of cognition from the standpoint of the pre-critical works.

Kant's ecological view of nature as I have construed it makes Kant out to be an important cognitive tool for the ethics of climate change. Climate change is a very difficult challenge.¹¹³ It presents a number of problems for humanity's usual individual-centered thinking. Scientific thought since the early modern period has been preoccupied with cognition of individual, discrete objects of experience. It would be much later when Alexander von Humboldt and Ernst Haeckel¹¹⁴ would effect a paradigm shift of nature as a complex system that shows how discrete-thinking is inadequate. These philosophers set foundations for fields such as ecology as a scientific discipline. Though Kant is not usually associated with these figures,¹¹⁵ his philosophy retains a focus on systems-thinking: In the early works, Kant seeks an understanding of nature's systematicity; in the critical period, Kant secures the epistemological foundations for a systematic organon of knowledge; in his practical writings, Kant views ethics through the lens of a unified system of nature and freedom. Kant's fixation with systems and networks can remind us that climate change involves the entire earth-system and thus requires a systematic response involving all of us collectively. If Kant's nexus-orientation is adopted, it can facilitate reflective, scientific, and practical cognition of the earth as a world-system, which is necessary for the

¹¹³ The details of this challenge, especially with regard to the collective ethical and scientific problems that face us, are discussed in greater detail in Chapter 5 on Kant and sustainability.

¹¹⁴ Ernst Haeckel, a 19th century zoologist, was best known for coining the term ecology in its scientific context in his *Generelle Morphologie der Organismen* (1866); he was greatly inspired by Alexander von Humboldt's holistic view of nature and was a popularizer of Darwin's theory of evolution by natural selection (Wulf 2015, 362-363).

¹¹⁵ Unsurprisingly, Alexander von Humboldt—the grandfather of ecology—was significantly inspired by Kant (and especially the pre-critical works such as *Universal Natural History*), even having a bust of Kant in his library (Wulf 2015, 40).

collective challenges of climate change. The usefulness of the pre-critical view for the climate crisis makes Kant out to be much greener than environmental ethicists usually concede. These ethicists hardly consider the pre-critical works, and this partly the fault of Kant scholars themselves failing to recognize the practical value of these works. Thus, both sides are misguided in neglecting these works, and both have much to gain from reconsidering them.

An Obvious Complaint: What of Kant's Critical Turn?

Before I discuss the practical import of Kant's pre-critical philosophy of nature, I would like to address an objection about the seeming disconnect between the pre-critical ontology and the critical epistemological turn. Now, even if it is granted that the pre-critical ontology—when interpreted ecologically—has value for environmental ethics and climate change, this still doesn't address the schism between Kant's pre-critical works and the so-called mature works in the 1780s. Why should these early works be taken seriously if Kant so famously abandoned them, subjecting them even to radical criticism in *Critique of Pure Reason*?¹¹⁶ And even worse for the greening of Kant, aren't his later views in the critical period more problematic for nature since he shifts from a holistic ontological realism to an individualistic epistemological idealism?¹¹⁷ To this, I reply: Kant didn't fully change his mind; though Kant makes the

¹¹⁶ Norman Kemp Smith (*A Commentary to Kant's 'Critique of Pure Reason'* 1918) suggests that many of the Leibnizian-Wolffian views that transcendental idealism opposes represent Kant's attempt to overcome his own philosophical problems such as the compatibility of mechanism with freedom and the soul. Michael Friedman (*Kant's Construction of Nature* 2013) articulates a similar point, suggesting that Kant's *Metaphysical Foundations* is in part an extended critique of his own naturalistic works, such as *Physical Monadology*.

¹¹⁷ Interpretations of the extent of the epistemological reading of the critical period are still part of an ongoing, contentious debate. Some parties espouse an ontological "two-world" view (Schulting 2011, 2), while others defend Kant more in the holistic sense wherein Kant's "two-aspect" view (intelligible vs empirical, noumenal vs phenomenal) is interpreted in an epistemological or methodological way; others view Kant here to be developing a perspectival differentiation. In any case, it can at least be agreed: 1) that dualisms pervade the critical period, which and these offer difficulties for an environmental ethic, since nature is usually placed on the opposite side of reason, and 2) that individualistic interpretations are predominant (I criticize this latter assumption in Chapter 5 on Kant and socialism). For a succinct

epistemological turn with his Copernican anthropocentric individualism, he still thinks in holistic terms even in the three *Critiques*: nature—conceived through and structured by our own cognitive faculties—is still comprehended in terms of systems, even if only regulatively. Kant never abandons his initial judgment that nature is always to be grasped as a holistic system of interconnected parts. He simply adjusts and amends how he thinks humans are capable of representing it. Thus, despite Kant’s rejection of ontological language and metaphysical realism, the critical works are continuous with the early ones with respect to how an ecological view of nature can be developed from his system of nature. And, even if Kant did radically change his mind, there are at least two reasons why this shift is not a significant worry for making use of the ontological insights of the pre-critical works.

First, that a philosopher rejects his or her earlier views does not mean those views are meaningless, wrong, or insignificant. Counterexamples abound in both fiction and philosophy; Franz Kafka thought his writings were an absolute failure—he left numerous novels incomplete and had thousands of pages of manuscripts: “According to the directives addressed to his friend Max Brod in Kafka’s will, these manuscripts were all to be burned” (Reiner 2005, 2). And yet hardly anyone would agree that works such as *The Trial* have no important insights into the human condition just because Kafka changed his mind or thought it insignificant. Similarly, Ludwig Wittgenstein drastically changed his philosophical views from the *Tractatus* to the unpublished *Philosophical Investigations*; he constantly doubted the merit of his work and wanted it to remain hidden from the public eye, and yet this work changed the trajectory of

discussion of the current debate with regard to Kant’s transcendental idealism, see Dennis Schulting, “Kant’s Idealism: The Current Debate” in *Kant’s Idealism* (2011).

Western philosophy in the 20th century.¹¹⁸ Thus, a philosopher’s renunciation of his or her early views does not mean that they are of zero value. With Kafka and Wittgenstein—like Kant, as I maintain—such works have immense philosophical value. Unlike Kafka and Wittgenstein, however, Kant’s relevance is particularly pressing. For climate change (and its impacts such as water and food depletion, extreme heat and drought, and hurricanes) is not just an aesthetic or theoretical challenge but is also, potentially, an existential threat to people in impoverished nations and future generations.¹¹⁹

Second, even if Kant did significantly change his mind in the critical period with a shift away from ontological holism toward epistemological individualism, he faces the same challenges as other individualist environmental ethicists like Paul Taylor.¹²⁰ In his influential *Respect for Nature* (1986), Taylor develops a Kantian-inspired deontological environmental ethic. His view is biocentric because it maintains that all living beings have equal inherent worth. Since living beings pursue their own goods, aim to flourish, and avoid what is against their interests, they are “teleological centers of life.” Echoing Kant’s formulation of respect for persons, Taylor claims that all such centers of life are ends in themselves and deserving of

¹¹⁸ For an excellent biographical study of Wittgenstein and his constant self-struggle, see Ray Monk, *The Duty of Genius* (1990). Though Kant didn’t live as tortured a life as Wittgenstein, both philosophers struggled throughout their lives and constantly engaged in self-criticism to develop their ideas. It is important to remember that even Kant’s own critical works are not static but constantly evolving. *Critique of Judgment* is one particularly salient example of how Kant, like Wittgenstein, is always chipping away at his own philosophical edifice, as a sculptor works on a stone.

¹¹⁹ For a discussion of catastrophic climate change and the potential of an intergenerational arms race which could spell doom for future generations, see Gardiner, *A Perfect Moral Storm: The Ethical Tragedy of Climate Change* (2011).

¹²⁰ I draw this criticism of Taylor (from the standpoint of his individualist ethics) from Callicott’s holistic approach to the question of the value of nature. It should be noted, however, that not all environmental ethicists consider Taylor’s individualism to be an impediment to moral praxis. I highlight Callicott’s complaint in this section because I think it is an important one, and also because I aim to underscore the significance of Kant’s holistic tendencies in this dissertation.

dignity and respect. This leads Taylor to reject anthropocentrism and the presumption of human superiority over nature with a duty for respecting nature as such.

Though initially more plausible for an environmental ethic than Kantianism, Taylor's biocentrism runs into a number of intractable difficulties that follow from his radical egalitarian individualist view of value; because all living beings have intrinsic value, any human agent will find herself in an almost impossible situation in moral dilemmas and simply living, in general.¹²¹ Taylor's radical egalitarianism and his failure to consider collectives, as Callicott suggests, puts his ethic in a precarious position liable to *reductio*. As Callicott put it, living the life of a Jain would be easier than adhering to the demands that Taylor's theory requires, as there is no meaningful way to resolve moral conflict (Callicott 2013).¹²² Thus, Taylor's moral individualism and radical egalitarianism (that is, that individual goal-directed organisms are the recipients of inherent worth and that all such entities have it equally)—even if more “eco-friendly” than Kant's *Groundwork*—is a deadlock when holism is eschewed. A Kantian environmental ethic that likewise neglects a holistic view of nature will run into similar objections, but the important point is that this is no real complaint against Kant's critical philosophy since the same objection sticks against Taylor's admittedly more “environmental” approach in *Respect for Nature*. Both

¹²¹ For a helpful discussion of deontological approaches to environmental ethics and the associated problems of radical egalitarianism and practical vacuity (which includes Taylor's biocentric approach), see Robert Elliot, “Normative Ethics” (2007).

¹²² Taylor attempts to avoid this problem by arguing that moral subjects have basic existential needs. For example, though all organisms are ends in themselves, some need to consume others in order to survive. Similarly, Taylor thinks that humanity can appeal to priority principles such as self-defense or distributive justice in order to live (Taylor 1986, 263). However, this is still unhelpful, since a clear distinction between “luxury” and “subsistence” needs is no easy task. Even if it were granted that only subsistence needs are permissible, one would wonder what kind of austere life is possible at the lowest level. Hence, Callicott's claim that Taylor's view makes the life of Jains—devout ascetics who are said to sweep before their every step in order to ensure they do not trample insects—easy by comparison to what his ethical theory obligates. For a fuller discussion and critique of Taylor's biocentrism (and its relationship to Kantianism) from the standpoint of Leopoldian ecocentrism, see Chapter 8 of Callicott's *Earth Ethic*, “The Earth Ethic: A Critical Account of Its Biocentric Deontological Foundations” (2013).

the Taylorian biocentrism and Kantian ethics of *Groundwork* view morality from the standpoint of ends in themselves vs things, and only *individual* entities matter in this framework; both succumb to Callicott's complaint regarding holism, though Kant avoids radical egalitarianism, which gives additional support to my claim that the holistic, pre-critical ontology of nature is a resource worth revisiting: the ecological import of the pre-critical works indeed deserves consideration for the greening of Kant, since here Kant views value in terms of evolving degrees in the ladder of being, and he keeps an eye toward the importance of holistic systems-thinking in his Gaian view of nature.

According to Martin Schönfeld in "Who or What has Moral Standing?" (1992) not only does Taylor's radical egalitarianism run into the previously discussed practical problems for a realistic environmental ethic, but it also runs into logical problems, namely, that biocentrism does not necessarily entail egalitarianism:

A more serious problem arises, if moral standing is not only assigned to humans and nonhumans alike, but to humans and nonhumans equally. Both human beings and animals are moral patients, hence both have moral standing. But the fact that both have moral standing in principle cannot entail that they have moral standing equally. There are several reasons which make an egalitarian allotment of moral standing problematic. First, such an egalitarian allotment implies consequences that come close to absurdity... Secondly, such an egalitarian allotment would lead to the overpopulation of moral dilemmas in the normative system... [to avoid such dilemmas, one could justify] allowing hierarchical gradations in the moral standing of different entities as long as the hierarchy is tied to relevant [moral] facts (Schönfeld 1992, 257).

As Schönfeld notes, Taylor sneaks in a premise—un-argued for—that all goal-directed beings are also *equally* valuable; yet, he is wary of the possibility that value might come in degrees.¹²³

Taylor can avoid radical egalitarianism's problem of moral absurdity by appealing to a hierarchy

¹²³ In Chapter 1, I considered Christina Hoff's complaint that the critical Kant does not allow for value to come in degrees with regard to ends in themselves and non-rational nature. The pantheistic-leaning pre-critical view of nature can help to avoid these challenges, though any serious Kantian reading must also account for the critical works, as I do in that chapter.

of value. An ecological view of nature wherein entities evolve, progressing up the ladder of being—such as Kant’s view as I’ve presented it—can obviate the worries of radical egalitarianism. One way of thinking about resolving this ethical worry is to consider that moral value tracks rational complexity. For example, though all living beings have moral value, rational humans are more valuable than pigs, and pigs are more valuable than chickens, though all beings should be afforded care and concern in moral deliberation.¹²⁴ Moreover, if Taylor should adopt a degree- or hierarchy-view of natural value (as I suggest is implied by Kant’s evolutionary ontology) then his biocentric environmental ethic will be more secured against the claims lodged by Schönfeld, Callicott, and others.

In summary, the objection that Kant’s critical views gainsay the significance of the early works is only partially right (since there are continuities in Kant, though he does indeed make the shift from the ontological to the epistemological), and even if a radical shift were granted, the problems it entails are not particular to Kant but apply even to other environmental individualists who stand to learn from the pre-critical teachings. As a sort of sustained response to this objection, my later discussion of *Critique of Judgment* will show how the critical view of nature can have important implications for protecting and conserving nature. Before moving onto an application of moral framing for environmental praxis, I digress with a short discussion on how the critical views retain many ecologically relevant features found in the pre-critical philosophy

¹²⁴ The specifics for determining what counts as more or less complex, or the criterion for specifying degrees of moral value, falls outside the scope of this chapter, which was simply concerned with considering how the pre-critical philosophy of nature offers more with regard to ecocentrism and biocentrism than is usually thought. All that needs to be noted is that there is a way for adjudicating between courses of action in ethical dilemmas on this view. Perhaps one way of doing so would be to ascribe more value to creatures with more intellect or wisdom, which is certainly Kant’s way of thinking about it when he discusses the varying alien intelligences across the solar system. We have to be cautious here since, lamentably, a similar approach has been used by racists and sexists to attempt to justify slavery or the domination of women in the past.

of nature. In certain respects, there is more continuity between the pre-critical project and the critical project that is usually supposed.

The Critical Philosophy and the System of Nature

It may seem that I am suggesting that a return to the pre-critical ontology is necessary for the greening of Kant because the critical philosophy is somehow deficient for a Kantian environmental ethic. Though others such as Wood and Svoboda have argued that this is mistaken, it is not an implausible assumption. This is because Kant makes use of dualisms in the critical works, and his Copernican turn takes an apparent nature-centric shift toward anthropocentric individualism. The dualisms of the anthropocentric shift, it may be thought, muck up any possibility for a Kantian environmental ethic, possibly even making the critical Kant an opponent of environmental thinking. This view is misguided. Kant's theoretical emphasis on dynamic systems-thinking is one commitment which remains continuous across Kant's works.

With the critical turn, Kant argues that any attempt to understand reality in itself (beyond any possible experience) is forever doomed with insoluble paradoxes; constitutive knowledge of nature independent of human experience is forever off limits—an elusive and enticing philosophical deadlock, for which critique offers the ultimate therapeutic convalescence. Even though ontological discussions of nature are rejected in the critical works, one ecologically relevant continuity between the early and critical works is that Kant still thinks about the human-nature interface in terms of dynamic systems. In both *Critique of Pure Reason* and *Critique of Judgment*, nature is thought systematically as a postulate or presupposition of judgment itself for the possibility of experience; humans, on Kant's view, simply cannot but help to think about nature as a systematic and well-ordered totality, and this is a regulative feature of our cognitive

machinery.¹²⁵ The dynamic interplay between our cognitive faculties and the world are a continuous feature of Kant's philosophy. Human reason aims to reconstruct reality in accordance with its requirements for systematicity. Though we cannot make valid ontological claims about the edifice of nature, our philosophical thinking functions as an epistemological mirror the system of nature.

A second ecologically relevant continuity between the pre-critical ontology of nature and the critical philosophy relevant for the greening of Kant is his dynamic conception of the systematic causal structure of nature. As Watkins convincingly argues, Kant's critical view of causality shares ontological features from the pre-works:

Despite...differences between Kant's pre-Critical and Critical views, it is quite striking that he still maintained several fundamental features of the model of causality he had developed early on...Whether one talks of substances or agents, causal powers or faculties, essential natures or characters, determining or acting, the same kind of basic ontological structure is instantiated in both cases, and that structure is represented by the same set of concepts, namely the categories of substance and causality and the predicables of activity (*Handlung*) and power or force (*Kraft*) (Watkin 2005, 425).

Kant's view of causality, as discussed with his primacy of forces, suggests a systematic and dynamic conception of nature.

Finally, with the completion of *Critique of Judgment*, Kant aims to show how the unification of the realms of nature and freedom as a single, holistic system, is possible. This ties in the ideas of the highest good in *Critique of Practical Reason* and his theoretical investigations of empirical experience in *Critique of Pure Reason* with *Critique of Judgment's* teleological

¹²⁵ In "Reason and Reflective Judgment: Kant on the Significance of Systematicity" from *Kant's System of Nature and Freedom* (2005), Paul Guyer presents an extensive analysis of the role of systematicity for experience and knowledge in the critical philosophy. He notes a tension between Kant's epistemological claims in *Critique of Pure Reason* and *Critique of Judgment* (e.g., is the presupposition of systematicity constitutive of experience or is it a reflective device for acquiring empirical knowledge?), which suggests that Kant was continuously developing his ideas about nature's systematicity from the pre-critical works all the way toward the end.

judgment as one natural whole. Though the traditional view of Kantian ethics, drawn from the critical philosophy, appears to leave little room for moral consideration to non-rational nature, Kant's unending commitment to systems-thinking—both in regard to our judgments of nature and our understanding of ourselves—is another ecologically relevant continuity between the pre-critical view of nature and the critical turn. What all this amounts to is that the critical regulative holism can be helpful for viewing the earth as a single object of cognition. This can then be an asset for thinking through the complex challenges of climate change. For climate is a global phenomenon that affects the entire earth-system; nearly everyone contributes to it and most will feel its sublime effects. It needs to be thought through in holistic terms, and the regulative view from the critical period can assist with this endeavor. The theoretical view of the critical philosophy, in sum, is not necessarily anathema to environmental ethics.

Part 3: Moral Framing and Environmental Praxis: Pre-critical to Critical

The purpose of Part 3 is to highlight the ethical implications of the Kantian view of nature, both in its pre-critical ontological interpretation and its critical epistemological one. To be clear, I am not concerned with concrete Kantian duties here; they will be developed later in this dissertation. Rather, my concern is with the ethical implications and possibilities for developing a Kantian environmental ethic as a result of this exploration; one such implication is the capacity for an ecological view of nature—such as Kant's has—for aiding in the preservation and conservation of nature via what is often referred to as a moral framing device.

What is a moral framing device? It is a conceptual schema or heuristic device used for thinking through a difficult or complex problem in order to garner practical support for an issue. A moral framing device will often have epistemic dimensions to be effective, putting the issue at hand into a broader perspective. By means of such a device, the problem can be framed or

packaged in such a way for non-experts to adequately process, deliberate on, and act. In short, a moral framing device is a cognitive tool used to structure and disclose a plan of action, much in the same way that medical professionals rely on metaphors and analogies in order to explain difficult and necessary procedures that have clear therapeutic benefits for patients. In a similar way, moral framing devices have been used to communicate environmental issues to great effect, making them intelligible and relevant to the masses.¹²⁶ One such example is James Lovelock's Gaia Hypothesis, which was a part of the 1970s era of conservation. Although not a scientific theory (since it isn't testable), the Gaia Hypothesis was used primarily as an epistemic tool for getting scientists and citizens to think holistically about the earth-system and as a moral tool for convincing humanity to preserve nature.¹²⁷ This device frames our planet as itself like a macro-organism; it is a complex, self-regulating creature. Manipulation of any of its essential processes (e.g. via emissions or pollution) will disturb the equilibrium and flourishing of the entire organism. From the standpoint of moral framing, the Gaia Hypothesis was helpful for convincing the masses to conserve nature since it got many to think about nature in non-commodity terms. By considering the earth as a single organism of which we are simply a part (like an organ in the body), it is easier to think about the importance of acting harmoniously in accordance with the whole of it rather than being as it were a cancerous growth. By contributing to pollution, waste,

¹²⁶ For a discussion of the importance of framing devices for communication with the masses apropos of climate change, see Matthew Nisbet, "Communicating Climate Change: Why Frames Matter for Public Engagement" (2009). For a discussion of framing strategies (and how they have shifted) in conservation biology, see Georgina Mace, "Whose Conservation? Changes in the Perception and Goals of Nature Conservation Require a Solid Scientific Basis" (2014).

¹²⁷ Though historically used as a framing device for conservation in the 1970s, the Gaia Hypothesis is still being considered for its relevance today in the Anthropocene. For instance, see the recent Gifford Lectures by Bruno Latour, "Facing Gaia: A New Enquiry into Natural Religion" (2013): <http://rs.resalliance.org/2013/03/22/bruno-latour-thinks-about-the-anthropocene/comment-page-1/>. Date accessed: 22 October 2018.

and deforestation, humanity projects itself as a parasite or tumor instead of an important organ in the body of Gaia. Reframing nature holistically had (and has still) two clear moral implications for nature: first, Gaian framing allows for a re-identification of humanity with nature, and second, it allows us to rethink our role in nature. If we identify with nature rather than see ourselves as adversaries, any attack on the body of it is an attack on the parts—conservation operates as a form of self-defense. Thus the preservation and conservation of nature becomes more morally salient with Gaian framing. And, if we shift our vocation from a parasitic foreign body to a properly functioning organ, we will not only live in accordance with the will of nature, but will also live sustainably. The moral call for stewardship becomes a live option when the earth is framed in holistic, Gaian terms. The framing strategy involving identification and self-defense is one adopted and utilized by deep ecologists.

Deep Ecological Framing: Spinoza or Kant?

Now, I maintain that the ecological insights of the pre-critical ontology of nature can have moral implications through framing mediated by deep ecology. Deep ecology¹²⁸ has made use of framing devices in order to promote environmental praxis (in particular, with the idea of self-

¹²⁸ Deep ecology, like Leopold's land ethic, is an unorthodox approach to ethics that underscores the need to reconsider the place of humanity in nature; though it has gained more momentum on the side of actual praxis as a grass-roots movement rather than a philosophical theory, it does have defenders who—like Callicott for the land ethic—attempt to explicate its normative dimensions theoretically. The founder of deep ecology—Arne Naess—emphasized the importance of a pluralistic approach to theoretical foundations in order to establish as many grounds for an environmental ethic (making use of the so-called convergence thesis for environmental ethics). He himself found Spinoza's monistic philosophy to be one ideal platform for deep ecological praxis, as he sees Spinoza's philosophy as systematic and logical in its defense of a single-world, unified view of nature wherein ethics is conceived in naturalistic terms. For Naess's unique interpretation of Spinoza in relation to deep ecology, see "Spinoza and Ecology" (1977). Contemporary philosophers such as Pauline Phemister argue that alternative figures in the canon can be useful for deep ecology and environmental ethics in general; she argues in particular for the reconsideration of Leibniz's organic monadological philosophy for these ends in *Leibniz and the Environment* (2016). In concert with Phemister's call for a reexamination of the canon, I wish to show how Kant's pre-critical philosophy is not only conducive to deep ecological praxis, but also argue that his philosophy is a conceptual foundation for deep ecology's Gaian total-field perspective.

identification), and I will show how Kant's view of nature can be seen as an adequate foundation for a deep ecological view, being ecologically superior even to Arne Naess's philosophical hero, Spinoza. But first, I must lay out a little background on deep ecology as a philosophical and normative theory before I discuss its unexplored affinities to Kant's dynamic ontology of nature.

Deep ecology has its roots in a 1973 paper by Norwegian philosopher Arne Naess.¹²⁹ In this paper, Naess coins the term "deep ecology" and formulates a new approach to environmental philosophy. Naess bases deep ecology on an eclectic combination, including the theory of Spinoza, practice of Gandhi, and mysticism of eastern thought (Drengson 1995, xvii-xviii). Deep ecology endeavors to reevaluate current so-called "shallow" ecological movements and their values. By shallow, he understands environmentalism concerned superficially with the present, pollution, and developed countries; the environment only has instrumental value on this view. Naess, channeling Kuhn,¹³⁰ pursues a new paradigm in environmental thinking. Most importantly, this entails a shift to a non-anthropocentric ontology. Whereas shallow ecology "avoids serious fundamental questions about our values and worldviews," deep ecology "aims to achieve a fundamental ecological transformation of our sociocultural systems, collective actions, and lifestyles" (Drengson 1995, xix). Naess believes that this kind of radical, deep questioning will allow us to re-think humanity's relationship to nature and return to our environmental roots.

According to Naess, there are two primary components of deep ecology: first, the deep ecology movement and second, ecosophy. The former is concerned with activism, policy-change, and grassroots-change (Drengson 1995, xxi). Naess argues that a plurality of positions

¹²⁹ The classic paper is Naess's "The Shallow and the Deep, Long-Range Ecology Movement: A Summary" (1973). I mostly cite from the 1995 version in *The Deep Ecology Movement*, ed. Drengson.

¹³⁰ For the classic text on paradigms in the philosophy of science, see Thomas S. Kuhn, *Structure of Scientific Revolutions* (1962). Cf. to Drengson (1995): "Shifting Paradigms: From Technocrat to Planetary Person" for an environmental take on paradigms.

must converge toward the goal of sustainability. It doesn't matter whether Christian, Buddhist, atheist, or Spinozist, so long as deep ecology's fundamental tenets are preserved. The second component of deep ecology is what Naess calls ecosophy, or a philosophy of ecological wisdom (Naess 1995, 8). If the movement is focused on concrete change (e.g., policy), then ecosophy is concerned with the more philosophical, systematic, or spiritual elements of deep ecology. The most important part of any ecosophy is the capacity it has for disclosing that, through "self-realization," "wide identification" is possible; wide identification is "a broadening and deepening of the self" beyond the limited confines of liberal individualism (Naess 1995, 14). The basic idea is that any ecosophy should allow you to see yourself as more than yourself. If you are a Christian mystic, you can identify with all of creation. If you are a Spinozist, you can see yourself in God/Nature as an essential mode in the totality. If you are a pre-critical Kantian, you can see yourself as an *entelechy* or force embedded in the web of the cosmic edifice. When you are able to identify with the totality, you are then able reconceive your relationship to nature. For example, if both you and a forest are modes of God and the forest is being threatened by corporations, you will feel compelled to protect the forest in an act of self-defense (Mathews 1995, 130). Naess claims, moreover, that wide identification can "elicit intense empathy" with others, including nature itself (Naess 1995, 15). The holism of wide identification makes humanity more sensitive to injustice and suffering in general.

Wide identification allows you to see yourself in the universe and the universe in you from your own perspective (since otherwise, the self would be annihilated in the totality). Indeed, this already starts to sound very much like some of the themes found in Leibniz and the pre-critical Kant. Kant's affinity to deep ecology can be understood once the seven central deep

ecological tenets have been laid bare. According to Naess, any ecosophy in deep ecology involves

(1) Rejection of the human-in-environment image in favor of *the relational, total-field image*. Organisms as knots in the biospherical net or field of intrinsic relations... (2) *Biospherical egalitarianism*—The ‘in principle’ clause is inserted because any realistic praxis necessitates some killing, exploitation, and suppression... (3) *Principles of diversity and of symbiosis*... (4) *Anti-class posture*... (5) Fight against *pollution and resource depletion*... (6) *Complexity, not complication*... (7) *Local autonomy* (Naess 1995, 3-6).

Upon a cursory glance, it is clear that many of these principles are implications of Spinoza’s *Ethics*. Naess argues that Spinoza’s philosophy is a solid foundation for deep ecology for a variety of reasons. First, Naess claims that an ecosophy needs to have a systematic foundation from which practical maxims for environmental praxis can be developed (Naess 1995, 11). Spinoza’s *Ethics*, with its geometric method and rigorous systematic framework accords with this picture nicely. Second, Spinoza’s holism is decidedly non-anthropocentric. For deep ecology, holism is perhaps one of the most important elements for transitioning out of a human-centered ethic and into a new axiological paradigm. Spinoza pulls no punches in regard to his critique of humanity’s tendency toward religious and anthropocentric projection on nature (Spinoza 2002, 239-240). Though the lack of a teleology in Spinoza might be problematic from a deep ecological view,¹³¹ it is clear that his holistic non-anthropocentrism is one vital reason Naess likes Spinoza. Third, Naess favors Spinozism because—in identifying God with nature and denying a personal God—it entails a immanent, anti-teleological worldview. As such, it is quite conformable with modern evolutionary theory and ecology. By avoiding the theological and hermeneutical tangles of orthodox views of God, Naess’s Spinozistic foundation for deep

¹³¹ For many deep ecologists, like Kant, wish to preserve final causes and think of the earth-system itself as like a functioning, flourishing being (cf. Lovelock’s Gaia Hypothesis).

ecology is able to settle agreeably next to scientific ecology as its normative obverse. Finally, and perhaps most obviously, Naess likes Spinoza because of his monistic holism. For Spinoza, there is only one substance and all are merely attributes and affections or modes of this substance. Moreover, the variety of this substance is infinite in quality and magnitude. On such a view, the deep ecological injunction to see the world and ecosystems as essentially interconnected opens a new way of considering other non-human beings and systems morally. Biodiversity and the infinite complexity of nature are part of God/Nature's perfection, and there are only a few more steps to seeing this diversity as being worthy of respect. These are a few plausible reasons—some stated explicitly and others not so—why Naess prefers Spinoza. However, it is not the case that this preference excludes a pre-critical Kantian take on deep ecology. Indeed, the central dynamic and holistic aspects of Kant's early philosophy discussed in this chapter are quite compatible with deep ecology. Viewing the latter through the lens of the early works allow us to understand how Kant can be seen as a philosophical precursor to deep ecology *and* how his dynamic approach is superior to the static view of Spinoza's monism.

With his appropriation of Spinoza (via his systematic, holistic, and naturalistic ontology), Naess is able to frame a biocentric model of nature; identification and self-realization are useful for conservation, the total-field, relational view of nature is useful for admiring and respecting nature; the holistic understanding of nature shifts humanity's place in it as humble steward rather than hegemonic narcissist. And yet, for very similar reasons, Kant's early ontology of nature can be seen as a better intellectual foundation or precursor to deep ecology. This has, moreover,

important implications for deep ecology in the philosophical canon—both for academic philosophy and pedagogy.¹³²

As I have shown, Kant presents a view of nature that is holistic and multipolar—a web of relational knots in a total-field unfolding through time; dialectical polar principles of attraction and repulsion, identity and negation, and force dynamically structure the cosmos; organisms for Kant are like the cells in the Gaian world-spirit; diversity, complexity, and the beautiful harmony and order of nature resonate importantly for Kant. I maintain that Kant’s early ontology is ecologically superior to Spinoza’s because it is not only more dynamic, but it is naturalistic and multipolar. To understand the latter, Spinoza’s *monism* can function as a useful contrast: Spinoza’s monistic view of nature is undoubtedly dynamic, as all beings unfold in the ripples of nature’s naturing; these ripples are modes, or the heartbeats of God/Nature’s unending divine pulse. However, on Kant’s *multipolar* view of nature, the source isn’t simply the One, but the Dialectic. Spinoza’s monistic view presents a uniform field-view of interconnectivity that is indeed helpful for deep ecological thinking, but Kant’s is one-step above and beyond Spinoza’s with regard to an ecological view insofar as Kant’s pre-critical presentation of nature is one of interactivity; instead of uniform, it is an organic and relational network of emergent structures, undergirded by dynamic and dialectical *entelechies*. In this respect, Kant’s view is more compatible with evolutionary theory and naturalistic views in cosmology. By virtue of its

¹³² For example, if deep ecology has philosophical foundations in both Spinoza and the early Kant, then it should be taught to students of philosophy outside of environmental ethics classrooms. Though radical in its ethical mandates, deep ecology should be seen as at-home in the philosophical palace rather than like an uncanny Ronin; deep ecology indeed has a feudal lord, and this is Kant.

multipolar, relational, and dialectical foundations, it is also, therefore, more ecological and more *deep* ecological than Spinoza.¹³³

In the end, Kant's early view of nature can be helpful as a deep ecological moral framing device for protecting and conserving nature since it can teach humanity to see itself as a relational constituent of Gaia. When nature is framed in the early Kantian dynamic way, we can realize our humble place on the organic ladder of being and begin to consider the importance for conserving and protecting the rung upon which we so tenuously stand.

From the Pre-critical Ecology to Environmental Reflective Judgment

In the course of this chapter, I have suggested that we reexamine the pre-critical works in Kant's works in order to discern their environmental significance for today. These works have largely been ignored for contemporary ethical application, and have instead only been analyzed for their historical value. I highlighted aspects of *Living Forces*, *Universal Natural History*, *New Elucidation*, and *Physical Monadology* that draw out the ecological resources of Kant's early ontology of nature. On my reading, Kant presents a holistic view of nature in which all things are interconnected and systematically intertwined. Nature is for Kant a unified, world-edifice; his ontology is grounded upon dialectical and multipolar principles of identify and negation, attraction and repulsion, force and resistance; and, Kant's metaphysical view of nature in these works is inherently dynamic, as he sees the cosmos emerge and evolve from chaos into a beautiful and harmonious system according to natural principles. Finally, on Kant's anti-dualistic physical influx theory of causality, consciousness and minds are themselves—despite their

¹³³ Some of the more ethical tenets of deep ecology, such as biospherical egalitarianism and anti-class posture, are not really implied by Kant's pre-critical view of nature. However, it was never my intention to show how Kant is compatible with the practical view of deep ecology, but was rather to show how it can be seen both as a theoretical precursor and as superior to Spinoza's.

complexity—just as natural as matter. Material and mental phenomena are both founded upon primitive dynamic forces, *entelechies*, or physical monads. Though humanity regards itself as a nobler creature by virtue of its rationality, it is simply another natural species that resides on a rung of the ladder of being. In short, Kant’s early view of nature is ecological as understood in the philosophical sense presented by Callicott, and humanity is an essential link in the systematic chain of Gaia.

This chapter has also shown how Kant’s holistic view of nature—by virtue of this ecological interpretation—is theoretically compatible with ecocentric views in environmental ethics and can present itself as a theoretical resource for environmental ethicists. Furthermore, Kant’s early ontology—as I argued by contrast with Naess’s Spinoza appropriation—can be understood as a conceptual precursor and foundation to deep ecology, superior even to Spinoza by virtue of Kant’s multipolar and organic conception of nature. Finally, I argued that adopting the pre-critical view of nature can have ethical implications for how we should treat nature, similar to how Lovelock’s Gaia Hypothesis has been used in the past by environmentalists, ecologists, and conservationists; framing humanity as humbly embedded in nature assists with preservation and conservation efforts. For, like the injunction of the deep ecologists for self-identification, the early Kantian view of nature can be utilized for getting citizens to think about their place in nature: its harmonious beauty and order is indelibly disrupted by anthropogenic climate change, and the harmful effects of climate change’s magnitude and might impress in us to think about its sublimity (which reminds us of our moral determination). We appreciate nature for all that it provides—both aesthetically and existentially, and we humbly admire nature in its immensity. Indirectly, as moral framing devices, these views of nature clearly have environmental significance, though they of course require further development in order to

specify what concrete duties they entail. In the next chapter, we will consider Kant's critical view of nature's systematicity and the moral resources that natural aesthetics—via beauty of flora and fauna and sublimity of climate change—can be for humanity in light of climate change. This will allow us to flesh out more concretely what sort of duties humanity has with regard to nature and in the face of climate change. It will also help unearth the extent to which Kant can be seen as a green figure for our current predicament with the environmental crisis.

CHAPTER 4:

KANTIAN HOLISM AND AESTHETICS

In Chapter 1, we critically examined some of the most influential interpretations of Kantian ethics vis-à-vis non-human animals and the environment. It was argued that, despite the perspicacity of many of the views from the traditional interpretation, they only provide us one picture with regard to the value of Kant's thought for environmental concerns.¹³⁴ This obliged us, in Chapter 2, to investigate alternative interpretations of Kant regarding non-rational nature from figures such as Wilson, Guyer, and Wood on the one hand, and new readings from up-and-coming scholars like Kain and Svoboda, on the other. These are indeed welcome additions to the literature since they not only make unique contributions to Kant scholarship, but they also offer compelling reasons for environmental ethicists to reconsider the moral worth of Kantian thought for environmental ethics. The way in which this new school of Kant interpretation revisits older views suggests to us that there may indeed lie further insights of Kantian thought for our environmental concerns, and in particular, the ethics of climate change. Unlike Chapter 3's emphasis on the pre-critical works, the new school has tended to focus on the major works from the Kantian canon, which are those many environmental ethicists find most problematic.¹³⁵ This

¹³⁴ Admittedly, my strategy is to make use of the usual Kantian move—of reconciliation and synthesis, inherited from Leibniz (Jolley 1996, 2)—of showing how both sides are right given one perspective, but wrong from another; the truth lies somewhere in between.

¹³⁵ A likely reason for the environmental disdain of Kant's critical philosophy lies with a conflation of the logocentrism inherent in Kant's "Copernican Turn" with a vicious anthropocentrism (which, as I have shown, is a strawman of Kant) used in part to motivate radical anti-anthropocentric positions such as those found in deep ecology.

chapter will take a similar approach and appeal to *Critique of Judgment* in order to make the case that even aspects of the critical philosophy—though beset by certain limitations—can be an asset for environmental ethics. We shall reconsider the ethical significance of *Critique of Judgment* with regard to environmental aesthetics and Kant’s teleological insights for the world-system.¹³⁶

Critique of Judgment and Views of Nature

Since some of the more influential proponents of the new environmental reading of Kant make use of *Critique of Judgment* (rather than *Groundwork*) as their point of departure for thinking about the value of non-rational nature, the task in this chapter will be to identify other holistic aspects of this text for the greening of Kant. With the help of contemporary commentators¹³⁷ such as Guyer and Wood, I show how Kant’s account of natural beauty can be of interest for viewing nature with disinterested appreciation. Then, I investigate the Critique of Teleological Judgment to establish a bridge between the moral appreciation of beautiful natural objects and *nature as a whole*. Commentators on Kantian environmental aesthetics have much to gain by incorporating elements from the Critique of Teleological Judgment into their views on Kant’s aesthetics, since Kant’s view of nature’s systematicity is one way for considering the environment and biodiversity from an aesthetic-moral standpoint; and environmental ethicists

¹³⁶ Kant’s contributions to an understanding of nature as a holistic world-system can be seen in Alexander von Humboldt. Humboldt is one of the first to help popularize the idea of nature as a unified, world-system beyond the poesy of the romantics or the speculations of German idealists like Schelling. In short, Humboldt helped make the idea of a *science* (understood in the contemporary sense of the term) of a world-system plausible, influencing later figures in the environmentalist movement such as George Perkins Marsh, John Muir, Rachel Carson, and James Lovelock (Wulf 2015, 9-10). Since Humboldt took many of his insights from the pre-critical cosmological works and the third *Critique*, the transition from the pre-critical works of Chapter 3 to Kant’s aesthetics and regulative teleology in Chapter 4 is apropos.

¹³⁷ For work in Kant scholarship discussing the connection of beauty to the value of non-rational nature, see Wood, “Kant on Duties Regarding Nonrational Nature” (1998), Allison, *Kant’s Theory of Taste* (2001, 234-35), Guyer, “Natural Ends and the Ends of Nature” (2007) and *Kant and the Experience of Freedom* 1996, Chapters 1 and 7), Biasetti, “From Beauty to Love: A Kantian Way to Environmental Moral Theory?” (2015), and Svoboda, *Duties Regarding Nature: A Kantian Environmental Ethic* (2015).

stand to benefit from a consideration of Kant’s regulative teleology, since it provides a heuristic for viewing nature holistically while avoiding the metaphysical spookiness and apparent problems of constitutive teleology for natural selection (Svoboda, 2015). Next, I argue that the Kantian sublime as it is typically understood from the *Analytic of the Sublime* is of limited use for fostering a moral view of nature. Nonetheless, I show how Kant’s sublimity can still be helpful indirectly—from an anthropocentric perspective—for the ethics of climate change. The environmental value of Kantian sublimity *beyond* the scope of climate ethics is limited because it is seen as primarily promoting respect for humanity’s rational nature (freedom), possibly at the expense of non-rational nature.¹³⁸

My exploration of the environmental significance of *Critique of Judgment* is divided into three parts. In Part 1, I examine Kantian beauty, highlighting its ethical connections for the environment, as discussed in the secondary literature. By drawing from elements of the *Analytic of the Beautiful*, Kant’s discussion of “On Beauty as a Symbol of Morality” in section 59, and sections of *Metaphysics of Morals*, I show that we have a duty to not wantonly harm beautiful flora or treat animals inhumanely. In Part 2, I suggest a return to the *Critique of Teleological Judgment* to open up new ways for thinking about Kant in relation to nature and overcoming some environmental setbacks in his account of beauty. In Part 3, I intend to contribute to this discussion of Kantian environmental aesthetics by arguing that dynamical sublimity—understood specifically in relation to climate change—can facilitate climate change mitigation and adaptation; this discussion will be carried over to Chapter 5, where the sublime experience of humanity’s courage incites resistance to climate change as a heroic project of the human species.

¹³⁸ For an orthodox Kantian, to respect nature is to regard it as a law for us, which would indeed be heteronomous. Schiller’s account of sublimity is subject to a similar objection.

I conclude by pointing to potential environmental shortcomings of the standard Kantian view of sublimity, motivating my final investigation into Kantian anthropology for sustainability.

Part 1: Kantian Beauty and the Environment

Kant's aesthetic analysis in *Critique of Judgment* opens several routes for valuing nature. One relies on Kant's account of natural beauty. This view hinges on beauty as a symbol of morality (CJ 5:351-354), which is often supplemented by commentators with similar passages from *Metaphysics of Morals* (e.g. MM 6:442-43). The general view is that, from a Kantian perspective, a disinterested appreciation of natural beauty functions as a sort of moral preparation for acting humanely to others and discharging our duties regarding non-rational nature.

According to Kant in the *Analytic of the Beautiful*, we disinterestedly value beautiful nature when we reflect upon it.¹³⁹ And, the cultivation of a reflective appreciation for beautiful nature has affinities to moral feeling. According to Kant, "to take a *direct interest* in the beauty of *nature*...is always a mark of a good soul; and...if this interest is habitual, if it readily associates itself with the *contemplation of nature*, this indicates at least a mental attunement favorable to moral feeling" (CJ 5:298-9). When we cultivate these aesthetic and morally analogous feelings in our disinterested appreciation of beautiful nature, we develop an *attitude* favorable to morality. Kant thinks there are important links between love and concern for nature and moral virtue: "if someone is directly interested in the beauty of nature, we have cause to suppose that he has at least a predisposition to a good moral attitude" (CJ 5:300). How does this work? The reflection of nature's beauty is alluring—this aesthetic disposition is the result of an ability to appreciate the seeming purposiveness and harmony of nature (i.e., that nature seems *as if* it were organized

¹³⁹ In the third *Critique*, Kant says that "The beautiful prepares us for loving something, even nature, without interest" (CJ 5:267).

as a single interconnected unity suited for humanity's mental faculties)¹⁴⁰ along with the appreciation for beautiful nature's *form*, rather than empirical content. As a result, the disinterested appreciation for natural beauty can be instrumental for loving nature and, hence, having an attitude favorable to performing our duties regarding nature, such as the negative injunction not to wantonly damage and exploit nature.¹⁴¹ Destruction of beautiful nature degrades humanity's own moral perfection, which for Kant is an imperfect, though direct duty to oneself with regard to non-rational nature. In *Metaphysics of Morals*, Kant puts this quite succinctly:

A propensity to wanton destruction of what is *beautiful* in inanimate nature (*spiritus destructionis*) is opposed to a human being's duty to himself; for it weakens or uproots the feeling in him which, though not of itself moral, is still a disposition of sensibility that greatly promotes morality or at least prepares the way for it: the disposition, namely, to like something (e.g beautiful crystal formations, the indescribable beauty of plants) even apart from any intention to use it (MM 6:443).

This connection between an aesthetic attitude favorable to morality in *Critique of Judgment* and our duties to beautiful nature in *Metaphysics of Morals* can be bridged by considering Kant's discussion of beauty as a symbol of morality in *Critique of Judgment*. Paul Guyer in *Kant and the Experience of Freedom* establishes the connection between Kant's claims about our duties regarding nature and beauty (or taste) rather nicely:

Response to beauty is like the judgment of morality in being immediate, disinterested, free, and universal. It is unlike the latter in being represented to sense rather than through concepts. But since the pure idea of morality is not itself directly representable to sense,

¹⁴⁰ The "as if" qualification is important in the context of the critical philosophy. To avoid any unwarranted dogmatic or constitutive claims (such as were ruled out in *Critique of Pure Reason*), Kant's critical teleology of nature is considered a regulative epistemological device. That is, the purposiveness of natural beings should be understood more as a heuristic principle (CJ 20:205) or methodological tool, rather than the way things really are in themselves. For the originator of this classic interpretation of Kant, see Vaihinger, *Die Philosophie des als-ob* (1911).

¹⁴¹ For important work discussing and problematizing Kantian natural aesthetics and the moral implications for the appreciation of nature, see Malcolm Budd's *The Aesthetic Appreciation of Nature* (2002), especially Part 2 of Chapter 2 ("Kant on Natural Beauty and Morality").

this disanalogy does not undermine the analogy between beauty and morality but is rather what requires the former to become the symbol of the latter (Guyer 1993, 316).

Taste prepares us for disinterested attachments; that is, even if the [empirical] *content* of objects of taste is independent of morality, the *experience* of taste [through the interplay of our cognitive faculties in appreciating its form] is a cause of a disposition favorable to the performance of duty... Kant clearly believes that experience of the beautiful can be an instrument or means for the development of a subjective disposition—he here calls it “love”—which is intimately connected to moral duty (Guyer 1993, 317-318).¹⁴²

Thus, though duties cannot be generated directly from the aesthetic experience itself, the experience allows us to cultivate a virtuous attitude favorable for assisting us in discharging our duties, which include indirect duties to non-rational nature such as flora and fauna.

One immediate concern about the validity of a Kantian environmental ethic from the standpoint of Kant’s account of beauty regards its limited application. Beautiful nature, by virtue of its analogy with morality and its ability to prepare humanity for morality by teaching us how to disinterestedly value other entities (even if only from an aesthetic standpoint) allows us to value the beautiful in nature, and this indeed includes a vast amount of flora, fauna, and landscapes such as beaches (e.g. sunset) or caverns (e.g. crystal formations). Beautiful nature, however, is not the sole constituent of an ecosystem; in fact, many keystone species (i.e., species whose functions are essential for the healthy flourishing of an environment) are often aesthetically underwhelming, being ugly, small, or uninteresting. As I will later show, Kant’s account of sublimity can supplement the limited usefulness of his account of beauty for climate change. And still, not all nature is beautiful or sublime for the viewer. How can a Kantian deal

¹⁴² As far as I am aware, Guyer is one of the first Kant scholars to challenge the traditional reading of Kant vis-à-vis nature in Chapter 9 (“Duties Regarding Nature”) of *Kant and the Experience of Freedom* (1993). I do not fully lay out the argument connecting natural aesthetics and duties regarding beautiful nature in Kant in this chapter, since Guyer articulates it gracefully in his. I merely summarize this avenue a Kantian can take for environmental aesthetics.

with ugly or small nature from the standpoint of *Critique of Judgment*?¹⁴³ In the Analytic of the Sublime, Kant asserts how sublime nature, by virtue of its immense size or power, is humbling. Small nature, by contrast, is associated with contempt, namely disrespect (*Verachtung*), for Kant (CJ 5:249).¹⁴⁴ If the small is contemptible on Kant’s account and the small nonetheless often plays the most important foundational role in a functioning ecosystem (as in krill or zooplankton in an aquatic environment, for example), how can Kant’s *Critique of Judgment* be of any use for supporting a plausible environmental ethic?

Part 2: Reconsidering the Critique of Teleological Judgment

As a way of simultaneously linking the environmental resources of Kantian beauty to the regulative account of teleology and holism *and* responding to the question of ugly nature, I suggest that we consider how the experience of natural beauty presses humanity to investigate nature’s systematicity.¹⁴⁵ Though the Critique of Teleological Judgment doesn’t explicitly concern itself with beauty,¹⁴⁶ utilizing aspects of this part of *Critique of Judgment* that discuss organisms and nature as a system allows for a way for a Kantian to take the moral insights of the Analytic of the Beautiful and apply them to the beauty of nature *as a whole*; valuing the beautiful

¹⁴³ This problem is not new, and accordingly there is a great deal of literature on the status of the ugly in Kantian aesthetics. For more on this, see Paul Guyer, “Kant on the Purity of the Ugly” (2004), Christian Wenzel, “Kant Finds Nothing Ugly?” (1999), and Hud Hudson, “On the Significance of an Analytic of the Ugly in Kant’s Deduction of Pure Judgments of Taste” (1991).

¹⁴⁴ Interestingly, Leibniz allows for the infinitely small to be sublime (and this probably has to do, if speculation is in order, with his training as a mathematician).

¹⁴⁵ In the first introduction to the third *Critique*, Kant discusses how reflective judgment yields a regulative, or heuristic, understanding of nature’s systematicity. Judgment, for Kant, presupposes systematicity “in nature, as a presumption. This lawfulness is a formal purposiveness of nature that we simply *assume* in it...but it does give us a principle for judging and investigating nature: a principle by which to seek, for particular experiences, the universal [empirical] laws we must follow in engaging in such experiences in order to bring out that systematic connection [of them] which [we] need for coherent experience” (CJ 20:204).

¹⁴⁶ The Critique of Teleological Judgment rarely mentions pleasure or beautiful nature (cf. CJ 5:380).

in nature as a whole will, of course, also include the ugly and small nature not accounted for in the *Analytic of the Beautiful* or the Sublime. Even non-beautiful flora and fauna (and especially keystone species, which aren't always the paragon of beauty and cuteness) have important ecological roles to play in the flourishing and harmony of the whole. Through teleological reflective judgment, I claim we are able to judge the whole itself as systematically unified and, hence, as beautiful insofar as it promotes a kind of harmony in diversity as a system of nature. Moreover, this exploration will disclose other Kantian avenues of environmental resourcefulness in not only the *Critique of Teleological Judgment* but elsewhere, such as in, for example, Chapter 5 on Kant's teleological philosophical anthropology. For Kant's teleology and anthropology tend not to be the main object of investigation for proponents of the new environmental interpretation of Kant, despite their potential, as I will show, in supporting a green Kant.¹⁴⁷

Now, the main problem here is that, though Kant discusses beautiful objects (e.g. flora, fauna), he doesn't explicitly discuss the beauty of ecosystems or nature as a whole in the *Analytic of the Beautiful*; the question is thus how to bridge the two. The problem is to discern how a Kantian can transition from reflection of the beauty of a single object of nature (which is the main business of the *Analytic of the Beautiful*, CJ 5:243) to the beauty of nature as a whole (which ends up being the task of the *Critique of Teleological Judgment*, though not with regard to beauty but with regard to natural science, CJ 5:378-384). In *Universal Natural History*, Kant has no problem with judging the cosmos as beautiful. My goal is to try to connect these two in a plausible way. The way to bridge them is, I submit, through a detour into the *Critique of Teleological Judgment*. According to Kant, the appreciation of natural beautiful prompts

¹⁴⁷ For one exception to this trend with regard to teleology, see Svoboda's use of *Critique of Judgment* in Chapter 4 of *Duties Regarding Nature* (2015), "Teleology and Non-Human Flourishing."

scientific investigation into nature (CJ 5:185; 5:379-381). This may go in two ways, on my view: by reflecting on beautiful organisms we amplify our reflection to nature as a whole, or by reflecting on beautiful environments we amplify our reflection to nature as a system.

Reflecting on the beauty of organized beings (e.g., plants and animals) can lead one to investigate their organization and suitability for their environment (e.g., the way in which a fish's eyes are adapted to a murky or dark depth). Some might object that the association of an object's beauty with inquiry into its ecological context spoils the true appreciation of the former. Kant sometimes even talks this way.¹⁴⁸ Nonetheless, because of the crucial role of purposiveness and imagination in both natural inquiry and judgments of taste, this connection need not diminish the role for beauty. For in either teleological judgment (which stimulates investigation into nature as a system) or judgments of beauty (which disinterestedly appreciates the form of an object), the purposive role of the imagination and the free play of the cognitive faculties are key. In the case of the teleological judgments, this is focused more on external, determinate objects while with beautiful judgments, internal indeterminate concepts. In either case, formal relations and their connection to the power of imagination obtain.

Now, the appreciation of a beautiful natural object and the way it sparks an interest into how such an object is possible then obliges one to understand how these organized beings operate and have adapted to their locale; teleological reflection leads down a path to cognition of how various ecosystems overlap and are embedded in larger climes. Research beginning with the appreciation of beautiful organisms can thus, on Kant's view, facilitate a view of nature as a

¹⁴⁸ Of course, it is possible for the appreciation of beautiful flora—say, for instance, a flower—to fail to lead the judge to further investigate nature's organizational structure. Indeed, Kant often suggests that knowledge of an object sometimes makes it harder to judge the beauty of said object (e.g. CJ 5:231). For determinate knowledge of that object's natural end (e.g., the purpose of its colorful buds) makes it harder for the judge (e.g., the botanist) to abstract from this end in appreciating its beautiful form in the free play of our cognitive faculties.

whole (CJ 5:398). Of course, the role of beauty is not essential in stimulating an intellectual interest in ecosystems and nature as a whole, and this explains why beauty is not discussed in any great detail in the Critique of Teleological Judgment. And yet, one would be hard-pressed to find even a handful of natural scientists who deny that their impulse to enter their fields began with an aesthetic or romantic interest in nature's beauty.¹⁴⁹

The other way of connecting Kantian aesthetics to teleology is as follows: reflecting on the beauty of ecosystems or environments (e.g. ponds, coral reefs)¹⁵⁰ can motivate—by means of the stimulus of the free play of the imagination linking internal and external purposiveness—investigations into how these land- and seascapes function as macro-organic systems for organized flora and fauna. In this case as well, the aesthetic contemplation of nature can play a role in facilitating scientific inquiry into organisms. If reflective judgment continues to trace the teleological, self-organized links of nature, it eventually terminates in reflection on nature as a whole.¹⁵¹ In short, a holistic view of nature becomes manifest. Then, with this holistic and teleological scaffolding, it becomes possible to judge nature itself as beautiful, by way of its

¹⁴⁹ This is, of course, an empirical question and I merely speculate here. It does have philosophical precedent, however: Alexander von Humboldt, often thought of as the father of ecology, thought Kant's insight on the connection between beauty and scientific inquiry was monumental; in *Cosmos*, Humboldt continuously remarks on the role of beauty in the scientific investigation of nature.

¹⁵⁰ A qualification needs to be made here: though regions can be thought as beautiful, Kant is clear that so-called beautiful views where nothing remains still and graspable for the contemplative imagination—as in a “rippling brook”—are not beauties properly speaking (CJ 5:243).

¹⁵¹ Those familiar with the final sections of *Critique of Judgment* might object that the truly final end in the teleological chain is, for Kant, humanity as the final end of nature (CJ 5:429-436). This seems problematic for environmental ethics because it is decidedly anthropocentric. However, it must be borne in mind that for Kant when we think about nature in these sections it is not from the standpoint of determinative judgment yielding theoretical cognition of nature; rather, teleological judgment is reflective judgment, taking its standpoint from what must be posited by the human judge in order to make sense of how nature could actually be capable of being purposive for our faculties of judgment. Moreover, in these sections Kant adopts a practical perspective, which means that even if humanity is the final end of nature, we still have duties regarding nature to not wantonly exploit or damage it. See Guyer for more extensive attention to this objection (Guyer 1993, 330-334).

systematic harmonization of manifold and diverse flora, fauna, ecosystems, and environments in the free play of our imagination: organized nature as a teleological system is, in regulative terms, *Gaia*. With this synthesis of teleological and aesthetic judgment, even ugly nature gets accounted for,¹⁵² since objective, teleological judgment leads the observer to see how each organism, no matter how small or ugly, contributes to its diversity—to the harmonizing and flourishing of the whole of nature (CJ 5:379). Through the subjective lens of a judgment of taste, the whole of nature can be appreciated as the free play of the imagination harmonizes in reflection upon it. When nature is viewed only through the narrow lenses of the Analytic of the Beautiful, ugly nature is on the face an intractable problem from an environmental perspective, since we are only obliged to protect and conserve beautiful nature for Kant. Fortunately, with my integration of beauty in the context of teleological judgment regarding nature as a beautiful and harmonious Gaian system, the moral-aesthetic problem of ugly nature is resolved.

The scientific exploration and aesthetic appreciation of nature's systematicity thus facilitates the cognition and admiration of nature's unity in diversity; for example, we are inspired by the harmonious ways in which organisms are essential for their environments, by analogy to how our own organs function for us; or we appreciate the unity of nature in its heterogeneous diversity of empirical laws (CJ 5:185-87). The connection of natural beauty with Kant's regulative teleology can thus provide humanity with an incentive for valuing natural entities and nature as a whole:

¹⁵² This initially appears similar to Leibniz's early theodicy—specifically, in “On the Ultimate Origination of Things” (Leibniz 1989, 153), where he discusses his painting analogy for evil; even the ugly and splotchy part of a painting contributes, when one has a view toward the big picture, to the beauty of the whole. With Kant, however, caution should be exercised in taking the analogy of art and nature (apropos organisms) too far, as he warns of the limits of this comparison in the Critique of Teleological Judgment (CJ 5:374; 5:384-385).

Once nature has been judged teleologically, and the natural purposes that we find in organized beings have entitled us to the idea of a vast system of purposes of nature, then even beauty in nature, i.e., **nature's harmony with the free play of our cognitive powers as we apprehend and judge its appearance, can similarly be considered as objective purposiveness, namely, of the whole of nature [regarded] as a system that includes man as a member.** We may regard nature as having held us in favor when it distributed not only useful things but a wealth of beauty and charms as well; and **we may love it** for this, just as its immensity may lead us to **contemplate it with respect [Achtung]** and to feel that we ourselves are ennobled in this contemplation—just as it nature had erected and decorated its splendid stage quite expressly with that aim (CJ 5:380, boldface emphasis mine).

Judgments of the beautiful in nature attune us for reflecting holistically on nature's systematicity and appreciating it for its value. This bridge between Kantian aesthetics and teleology prepares the way humanity to love nature and regard¹⁵³ it with respect; all the while humanity is reminded of its embeddedness in nature, not as masters over it, but as members who should love and care for it. This appreciation compels humanity to avoid being complicit in unnecessary harm toward nature. If nature as a whole is considered beautiful, then we have a duty to ourselves to not wantonly destroy it (just as we have a duty not to wantonly destroy beautiful flowers or crystal formations).

Because judgments of beauty are singular judgments concerning singular objects, it might be objected that an attempt to view ecosystems (or nature as a whole) as beautiful is misguided because these are dynamic systems or aggregates, not singular objects. To the contrary, I claim that if 1) the insights of Kant's Critique of Teleological Judgment regarding how inquiry of organized beings lead to a larger view of nature as a whole as a singular, organized system, and

¹⁵³ It is interesting to note that in the *Metaphysics of Morals*, in particular, the “amphiboly in moral concepts of reflection, taking what is a human being's duty to himself for a duty to other beings” where one is “led to this misunderstanding by mistaking his duty *with regard to* [Ansehung] other beings for a duty *to* those beings” (MM 6:442), our rational faculties easily lead us to uncritically regard non-rational nature with respect that is, on Kant's account, only owed to rational beings (Svoboda 2012, 145). In this passage from the Critique of Teleological Judgment, however, “Ansehung” is not the term used. It is a curious question of how to interpret what Kant means by saying nature may be contemplated with respect.

2) if the Analytic of the Beautiful's injunction is to only consider those objects in nature beautiful that are singular, then objection may be discharged. For, take an organism such as a beautiful bird; Kant's view warrants judgment of such a bird beautiful, provided the proper occasioning conditions (e.g. disinterested harmony of the free play of the imagination in the face of an entity's apparent formal purposiveness) for a judgment of taste obtain. However, from the standpoint of the Critique of Teleological Judgment, the bird—as an organized system—is itself composed of an interrelated aggregate of purposive objects; internally, the cells function to make the organs function, and externally, the bird is a self-regulating, self-sustaining system. Is this not the same with regard to ecosystems and nature itself?¹⁵⁴ From the vantage of teleological judgment, flora and fauna are as it were reflectively viewed as the cells that compose the ecosystems, which are as it were the organs that compose the organism of Gaia itself, which is nature as a whole. If the Analytic of the Beautiful allows for judging fauna such as birds as beautiful, why not allow this judgment to expand to larger perspectives that include nature itself? And if the judgment of a bird as being beautiful entails a duty to avoid wantonly exploiting it, does not a judgment of the beauty of nature as a whole also entail a similar *prima facie* duty for avoiding wanton harm?

Paul Guyer and Allen Wood take similar courses for considering how a Kantian may value non-rational nature by means of connecting Kant's aesthetic and teleological judgment to morality. According to Wood, "Kant thinks we also have moral duties regarding nature in general as regards what is beautiful or purposive in it. We must not wantonly destroy what is beautiful in non-rational nature" (Wood 1998, 4). The Kantian emphasis on the importance of

¹⁵⁴ An self-regulating, teleological view of nature similar to Kant's was made famous in environmentalism with James Lovelock's famous Gaia Hypothesis. Gaia was discussed in Chapter 3 where I intimated that Kant's view of nature can be used as a moral framing device for conservation.

natural beauty has moral implications. Guyer supports this claim. On his reading, nature's beauty and purposiveness could not allow humanity to "interpret morality to require the denial or destruction of nature within or without our own skins" (Guyer 2007, 93). Reflective aesthetic and teleological judgments, as analyzed by Kant in *Critique of Judgment*, have environmental implications that many traditional readers of Kant fail to account for. The ethical connection of beauty to nature in Kantian aesthetics thus provides a motivation for valuing the beautiful in nature. Additionally, the teleological connection of beauty to nature as a whole proscribes the wanton destruction of even the non-beautiful parts of nature insofar as they are viewed as purposive from the standpoint of reflective judgment. But what about the contrapurposiveness of sublimity? Surprisingly, little has been said of this in relation to environmental ethics.¹⁵⁵ So, this is where I shall turn to next in order to see what kind of ecological importance it holds.

Part 3: Sublimity from an Environmental Perspective

Another route for connecting Kantian aesthetics to environmental considerations is through sublimity. Kant gives his official treatment of sublimity in a relatively short section¹⁵⁶—the Analytic on the Sublime—in *Critique of Judgment*. Kantian sublimity rests on a seeming formlessness or heteromorphism between the mental faculties of the viewer and the presentation judged sublime (CJ 5:244). The sublime experience is represented as limitless "and yet it is also thought as a totality," and the faculty of reason subjectively relates to the sublime presentation by means of the ideas of reason (CJ 5:244; 256), whether this totality be immensity, as in the

¹⁵⁵ For one of the best recent defenses of Kantian sublimity from an environmental perspective, see Emily Brady's *The Sublime in Modern Philosophy* (2013). Brady argues that the admirable feeling associated with natural sublimity can be a ground for a respect for nature, but the extent to which a Kantian could commit to such a claim hinges on the crucial distinction between admiration and respect—the former of which only pertains to nature properly speaking.

¹⁵⁶ The sections 23-29 and the general comment on sublimity are shorter, relative to the other two on beauty and teleology.

mathematical sublime (CJ 5:248-260), or great power, as in the dynamical sublime (CJ 5:260-264).

Because of the seeming boundlessness of the sublime presentation, the aesthetic feeling of sublimity differs markedly from beauty. The experience of sublimity, which we cannot sense or imagine but only think it, does violence to the imagination (CJ 5:245). The liking sublimity produces is a repelling *contrapurposive*,¹⁵⁷ simultaneously evoking feelings of respect.¹⁵⁸

For Kant, the feeling of sublimity

is a pleasure that arises only indirectly...produced by the feeling of a momentary inhibition of the vital forces followed immediately by an outpouring of them that is all the stronger. Hence, it is an emotion, and so it seems to be seriousness, rather than play, in the imagination's activity...since the mind is not just attracted by the object but is alternatively always repelled as well, the liking for the sublime contains not so much a positive pleasure as rather admiration or respect (CJ 5:244-45).

The sublime experience arouses in humanity a feeling of independence from nature (CJ 5:246). This feeling awakens an intimation of our free rational nature—we are able, at least in principle, to resist any natural inclination or force of nature by means of our power of freedom and respect for the moral law. Sublimity does not refer to an actual object in nature.¹⁵⁹ This is vital for how

¹⁵⁷ Paradoxically, the contrapurposive feeling produced by a judgment of sublimity feels *purposive* in the sense that we *like* the tension or constraint that such a judgment places on the senses and the imagination in attempting to grasp the totality.

¹⁵⁸ In the following, I shall argue that sublimity has an indirect moral function relevant for the ethics of climate change. It is important to note that the feelings engendered by sublimity can be utilized to drive numerous purposes—ethical or unethical—and thus it is important to consider how Kant limits the moral functions of sublimity. For the time being, I suggest that the moral function of the sublime for humanity can be constrained by Kant's moral account of beauty with regard to nature: if we ought not to destroy the beautiful in nature as a system (and we appreciate this nature disinterestedly and insofar as it sustains us) or be cruel to animals, then the sublime feeling would also not condone rationally the wanton destruction and exploitation of nature and animals. For a more in depth discussion on the moral functions and limitations of the Kantian sublime, see Joshua Rayman, *Kant on Sublimity and Morality* (2012).

¹⁵⁹ Properly speaking, beauty is also only in the subject for Kant. However, Kant often seems inconsistent here, as he discusses “beautiful objects” in the *Analytic of the Beautiful* (cf. CJ 5:243), whereas in the *Analytic of the Sublime*, Kant is quite careful to restrict his language such that the reader is aware that sublimity is a subjective affectation rather than an external predicate.

Kant connects this aesthetic judgment to morality, since sublimity shows how humanity's free moral capacities are themselves sublime, capable of instilling respect.

The experience of sublime nature does violence to humanity's sensuous inclinations, exhibits the power of its freedom, generates a sense of self-respect, and makes possible the transition from nature to freedom by means of aesthetic reflective judgement (Rayman 2012, 54). By referring the feeling of sublimity back to the cognitive powers and moral determination of humanity, Kant attempts to bridge sublimity and morality. In other words, the contrapurposive feeling of sublimity reminds us of our own purposive nature with regard to the ends of morality. The connection between sublimity and morality is highlighted succinctly by Henry E. Allison in *Kant's Theory of Taste* and Joshua Rayman in *Kant on Sublimity and Morality*.¹⁶⁰ On Allison's reading,

[A]ccording to the terms of Kant's own analysis, the sublime stands in an even more intimate relation to morality than does the beautiful (Allison 2001, 303).

[Sublimity] is at least analogous to moral feeling, and this suffices to make it purposive for the mind as a whole, or, as Kant sometimes puts it, "*the whole vocation of the mind*" ([CJ] 5:259; 116), since it helps attune the mind to the uncompromising demands of morality (Allison 2001, 324).

In addition, Rayman makes the case that there is an even tighter relationship between sublimity and morality than mere analogy and attunement for morality:

The reflective judgment of sublimity generates the necessary conditions for determining the moral law, for it proves the existence of a moral sense, produces in the subject the necessary attunement of respect for the moral law and demonstrates to the subject that it possesses a determination (*Bestimmung*) surpassing nature—a moral power. Sublimity constitutes a necessary condition of moral choice; it does not show what morality or duty requires, either in general or in specific cases, for these are functions of reason and determinative judgment. While the experience of moral obligation is supposed to prove the existence of freedom for practical purposes, since 'ought' implies 'can', this experience cannot elevate the subject from the phenomenal to the supersensible sphere or

¹⁶⁰ The specifics of their arguments cannot be dealt with here. For a critical reading of Allison's account and a broader defense of the moral functions of sublimity in Kant, see Rayman, *Kant on Sublimity and Morality* (2012, especially Chapter 5, "Replies to Objections to Sublimity's Moral Functions" 93-140).

generate the morally necessary attunement of respect for the moral law, for the experience of obligation does not entail the exhibition of our supersensible moral power or the determination of respect for the moral law. Whereas the experience of moral obligation provides an indirect, practical link to our freedom, the experience of sublimity provides a direct, practical proof of freedom, in that it makes us aware of our supersensible power to act independently of nature... The experience of sublimity...establishes the conditions for the determinability of the moral subject in revealing the subject's powers and situating the subject in the paradigm case for morality (Rayman 2012, 138-139).

The contrapurposive feeling of nature's sublimity with regard to our reflective facilities and the realization of the purposiveness of our mind with regard to the demands of morality marks the key epiphanic moment, shifting our reflection inward toward our own power of freedom and the determinability of our will by the moral law. With sublimity, "we can feel a purposiveness within ourselves entirely independent of nature" (CJ 5:246). The feeling of powerlessness or awe in nature's vastness functions as a stark reminder of the mighty power of humanity's own rational faculties. Kant thus asserts that "if in judging nature aesthetically we call it sublime, we do so not because nature arouses fear, but because it calls forth our strength" (CJ 5:262).

Kantian sublimity presses us to overcome our own unethical practices by reminding us of our moral nature—that is, regardless of nature's immensity or might, we still can act morally and stand our ground. In the case of dynamical sublimity in particular, this allows us to understand how we can have the moral fortitude (CJ 5:261) to resist the mighty forces of nature—even if it should destroy us. The hurricane's sublimity, for instance, reminds us of our moral nature by letting us feel respect for the moral law; we know that we can remain steadfast in the face of nature's immense power, despite our imminent doom. Compared to its might, "our ability to resist becomes an insignificant trifle"—Sublimity elevates "the soul's fortitude above its usual middle range and allow us to discover in ourselves an ability to resist which is of a quite different kind, and which gives us the courage [to believe] that we could be a match for nature's seeming

omnipotence” (CJ 5:261). The reflective visualization of our demise attunes us to morality by reminding us of our freedom and the capacity we have to determine our will in accordance with the moral law rather than sensuous inclinations; we realize that we can remain moral even in spite of concerns for our own safety. For instance, a physician in the midst of the sublime storm is reminded of her duty to help the sick, even if this puts her life at risk by remaining in flood zones. The experience of the storm’s sublimity helps her double-down in performing her duty with moral courage.

Notwithstanding the strong connection Kant makes between sublimity and morality, Kant’s approach tends to follow in the anthropocentric¹⁶¹ tradition that many environmental ethicists deplore¹⁶² since he elevates human rationality above non-rational nature (CJ 5:264). Because of this prejudice, it is difficult for a Kantian account to allow for duties to what we would call sublime nature.¹⁶³ Despite this, the experience of natural sublimity on Kant’s view arouses in humanity self-respect. By bypassing the disinterested valuation of nature itself (as in this chapter’s discussion of the *Analytic of the Beautiful*), and doing violence to our selfish

¹⁶¹ Because Kant’s primary focus in the *Analytic of the Sublime* is how reason functions as an interplay with the aesthetic response, it might be argued that Kant’s account is not anthropocentric but, to use Wood’s phrase, “logocentric” (Wood 1998). Nonetheless, because humanity’s sensible faculties—idiosyncratic to the human species, play a key part in Kant’s aesthetic accounts, Kant’s anthropocentrism may still be considered as a potential obstacle.

¹⁶² Since environmentalist approaches to philosophy have tended to draw from empirical theories in ecology and the life sciences, they have also tended to favor naturalized visions of humanity, deploring anthropocentric or logocentric philosophical thinkers who separate the natural from the rational or moral. Kant—at least in his standard view from *Groundwork* and the first *Critique*’s transcendental idealism—appears to be opposed to any naturalized conception of humanity. For examples of non-anthropocentric environmental approaches, see figures in the deep ecological tradition, such as Naess, “Self-Realization: An Ecological Approach to being in the World” (1995) or eco-centrist proponents, such as Callicott, “In Defense of the Land Ethic” (1989). In Chapter 3, it was argued that the views of environmental ethicists of this sort are compatible with Kant’s early ontology of nature.

¹⁶³ Whenever I talk of sublime nature, I mean nature as experienced as sublime by the agent, since on Kant’s account, sublimity properly speaking precludes discussion of sublimity *as a predicate of nature*—rather, it is properly found “in the mind” (CJ 5:245; 5:250).

inclinations, sublimity attunes us to reconsider our unethical lifestyles. From this, then, the connection of irrational and undignified behaviors to unsustainable ones can be made. Herein lies one key for applying Kant's aesthetic-moral teachings to environmental concerns like sustainability and environmental degradation.

Sublimity allows us to have the moral courage to overcome the feeling of powerlessness against nature and to act properly in the face of something as massive or powerful as climate change. To wit, the experience of the sublimity of climate change's can establish the pre-condition for the determinability of our will by the moral law, adapting Rayman's account of the moral function of sublimity for present environmental concerns. The sublime experience can engender in us an impetus toward environmental protection, which could be a useful tool for grappling with the ethics of climate change; if we imagine¹⁶⁴ climate change and its effects as sublime—for example, sea-level rise and its devastation on maritime peoples; hurricanes and their monstrous power; or extreme heat the ensuing desolation—that is, if we consider the evocation of sublimity from climate change with its effects and feedback loops, this judgment can arouse in us the mettle to overcome it. The sublime aesthetic experience can *indirectly* motivate us in pursuing climate change adaptation and mitigation strategies, which in turn can facilitate concrete environmental praxis such as, for instance, conservation or sustainable and equitable development. The sublime phenomena constitute an emotion; this emotion moves us to moral action but does so without specifying our precise duties. Nonetheless, when we reflect on climate change and the impacts that it will have on present generations, future generations, and non-rational nature, the sublime experience of climate change lets us realize that we have the

¹⁶⁴ Michael Thompson, "Climate, Imagination, Kant, and Situational Awareness" (2011) provides a recent example of how one can connect Kant's account of imagination to the ethics of climate change. However, he doesn't grapple with Kant's account of sublimity for these ends as I do here.

power to act morally in the face of its immense power. Failure to engage in sustainable action is incompatible with our duty to act as if we were legislators in a kingdom of ends; precludes human progress; unjustly treats other ends in themselves—especially persons in developing countries who face the blunt of climate change—as a mere means for the sake of business-as-usual luxury emissions; and finally amounts to a vast diminution of the moral purity of individual moral agents—since countless species stand to be harmed or become extinct if we fail to contend with climate change.¹⁶⁵ Though Kantian sublimity supports the bifurcation of humanity from nature that many environmental ethicists deplore—in arousing in us the sense of our capacity to stand outside nature, to think it as a totality, and to resist its force—it still presents us with an emotion that morally attunes us to the environmental task at hand. Kantian sublimity thus has a moral function that aids us to combat our own moral evils and deficiencies that have engendered anthropogenic climate change in the first place.

Environmental Limitations of Kantianism

Despite the usefulness of Kant's account of natural beauty, it might be objected that Kantian sublimity is only indirectly helpful for human-related concerns like climate change, and this somehow makes it deficient for an environmental theory. In addition, the feeling of sublimity does not attune us for any specific duties. Aesthetic judgment provides a reason for valuing beautiful nature (including the beautiful harmony of biodiversity) from which inferences can be made about moral duties in relation to climate change. However, with Kantian sublimity, nature is not itself loved or valued, since sublimity ultimately refers to humanity's rational faculties.

¹⁶⁵ These three avenues—namely a duty to perfect the species, a duty to not treat those in developing nations as mere means for the sake of luxury, and duty to oneself to care and be concerned for the welfare of animal species affected by climate change—are pursued in more depth in Chapter 5. Presently, my point is merely to show how the experience of climate change as a sublime dynamic object helps *prepare the way* for thinking about such duties for sustainability in an indirect fashion.

Sublime nature possibly entails an instrumental view of nature where nature is valued as a means, and that means is for perfecting humanity. This has already been noted in much of the environmental aesthetics literature, where Kant is often seen as the eco-bogeyman because of this elevation of human reason over nature (e.g. Bilbro 2015, 137). Indeed, Kant says that sublimity makes us “conscious of our *superiority* to nature within us, and thereby also to nature outside us” (CJ 5:264). Notwithstanding my intended focus on the limitations of Kant’s *sublime* for environmental ethics, the bifurcation of human-rational nature from non-human irrational nature strikes to the core of the problematic relationship between his philosophy and the environment.¹⁶⁶ J. L. Bilbro is a contemporary commentator who has identified certain anthropocentric problems of Kantianism for environmental philosophy, but he is by no means the first person to make this observation. To be sure, critics of Kant have been making this and similar claims about the supposedly inhumane aspects of Kant’s philosophy for non-human animals since at least the 1980s.

Now, the two main thrusts of this objection, then, seem to concern the limited moral value of Kantian aesthetic judgment (and Kantianism in general) insofar as environmental issues only matter as they relate to humanity, and the contention that Kant separates humanity from nature in some deep normative or metaphysical sense. In the ‘70s and ‘80s, the first would indeed be a legitimate concern. However, as was argued previously, Kant’s apparent anthropocentrism is no longer a liability. Rather, in fact, it is now a resource; for in the age of the Anthropocene, failure to tackle the challenge of climate change also entails an imminent sixth

¹⁶⁶ As Holly L. Wilson addresses and attempts to refute in “Rethinking Kant from the Perspective of Ecofeminism,” many environmental ethicists (and especially ecofeminists) object to the normative dualisms they see as built into Kant’s critical philosophy, whereby “the mind appears to be superior to the body, and human beings appear to be superior to animals” (Wilson 1997, 385).

mass extinction. Hence, the old concerns of whether we have direct duties to animals and whether anthropocentrism is compatible with environmental ethics have become outdated. Addressing climate change—even if only from the vantage of preserving human ends in themselves—indirectly assists in protecting vast swathes of animal life, biodiversity, and ecosystems. With regard to the second concern, it is misguided. Kant’s aesthetic account indeed emphasizes how humanity is embedded in nature. According to Brady,

It is important to remember...that the disruption of the self that occurs here [in sublime judgment] is not a self standing outside nature. After all, in the *Critique of the Power of Judgment*, Kant does not argue from the position of human separation from nature, but from our inclusion in nature and nature’s inclusion in us, namely the sensible self with its inclinations.

He is not arguing for a dominion of humans over nature, and his view of nature is not one of a hostile environment to be conquered, even if it does threaten our well-being. Instead, he values nature for the challenges it presents to us, as something that is difficult for us to face, and against which morality provides the resources needed to cope (Brady 2013, 82-83).

With the sublime challenge of climate change, the recognition of humanity’s embeddedness in nature is even more urgent. So, although Bilbro’s Hoffian objection regarding the anthropocentrism of Kantian sublimity is well-taken, reframing Kant’s moral philosophy and aesthetics in light of the more pressing concern of climate change makes it largely inconsequential.

From Moral Views of Nature to Sustainable Cosmopolitanism

So far, I have defended a theoretical-aesthetic means by which a broadly Kantian approach can prepare us morally for thinking through potential duties regarding environmental issues like environmental degradation and climate change. Additionally, Chapter 3 and 4 focused on nature and the environment considered as a holistic totality and on ways of valuing and morally preparing for nature *presently*. To get a better picture of Kant’s holism and applicability to

environmental ethics for the greening of Kant, we need a vision that includes both spatial and *temporal* dimensions: a future-oriented view of Kant's thought is required to show his relevance to the pressing challenge of climate change and the fate of future generations. Our next task will thus take its point of departure from the evolutionary and cosmopolitan standpoint of Kant's philosophy of history, invoking Kantian anthropology and Kant's understanding of humanity as a moral species to develop the possibility for concrete duties in preparation for an ethics of sustainability (such as contributing to the project of perfecting the human species, which now should involve ecological stewardship and a concern for future generations). As Yirmiyahu Yovel notes (Yovel 1980, 72) the idea of the highest good developed out of Kant's moral-anthropological reflections—as an aspiration toward the harmonization of morality, happiness, and nature into a unified system—becomes not merely a lofty goal worth hoping for, but rather a social duty¹⁶⁷ and a historical task that Kant's vision of cosmopolitan progress requires.

Like Bilbro, Hoff's worry with regard to Kant's humanistic philosophy lies in his ostensibly impoverished environmental pretensions. Grappling with these worries requires, first, an investigation into Kant's view of humanity outside the abstract lens of *Groundwork* or Kant's aesthetics and second, a perspective with climate change in view. The worry with regard to an anthropocentric take on climate ethics is not yet overcome; humanity could, for instance, be motivated to save itself from climate change by experiencing its sublimity, yet remain indifferent for fostering nature's diversity. The sublime experience of climate change's dynamical might could perhaps impress humanity to save the planet, but to do so by means of geoengineering the

¹⁶⁷ Harry van der Linden in *Kantian Ethics and Socialism* (1988) interprets Kant's anthropological and moral works in order to show how Kantians have not only individual duties, but also social duties. The next chapter will consider how such social obligations arise and can be justified by Kant's philosophy.

planet into one of minimal biodiversity (the bare minimum for sustaining ecosystems).¹⁶⁸ Such is the invidious nature of the Anthropocene. It is obvious that many environmentalists will not accept this, as diversity in nature seems to be a key value in environmental ethics. Will sublimity as found in the *Analytic of the Sublime* remain limited here? It would appear that Kant's injunction in the *Analytic of the Beautiful and Critique of Teleological Judgment* to appreciate and preserve nature's unity-within-diversity could assuage such worries. Still, in order to gain more traction for the greening of Kant and persuade those unconvinced by Kant's pre-critical ontology or critical aesthetics, I suggest we now turn to Kant's anthropology and philosophy of history in order to show they can be a resource for the ends of sustainability. For the specter of Hoff returns: her problematization of Kantian humanism requires us to pursue the question of the value and limitations of Kantian anthropology for environmental ethics. I intend to show how many of the supposed problems with regard to Kant's view on animals can be resolved by thinking about how Kant's philosophy can be applied for the ends of climate ethics. Thus, we will make sense of Kant's holism and its environmental import by moving from the theoretical-aesthetic view of nature in the pre-critical ontology and *Critique of Judgement* to the political-cosmopolitan view of humanity in *Idea, Conjectural Beginning*, and *Anthropology*.

¹⁶⁸ Some conservation literature suggests that ecosystems can be sustained with very minimal variety in fauna. Many proponents of the so-called "bright-" or "neon-green" ecology embrace this implication, celebrating the Anthropocene as humanity's triumph over or escape from nature. For example, consider Erle C. Ellis, "Sustaining biodiversity and people in the world's anthropogenic biomes" (2013) for argument that anthromes are superceding biomes.

CHAPTER 5:

KANTIAN ANTHROPOLOGY: BLUEPRINTS FOR SUSTAINABILITY

The previous chapter was concerned with a holistic view of nature through the lens of Kantian reflective judgment. This chapter will shift gears to discuss human history in a similarly holistic way. Contributing to the moral development and progress of the species is, for Kant, analogous to the making of humanity and nature into a work of art. Indeed, what better analogy for perfecting the species than how a work of art is refined? In this chapter, we find ourselves in an ideal position to transition our discussion from nature and natural aesthetics to humanity and sustainability. For, morally perfecting humanity as art also means— in light of climate change— redesigning the human interface with nature toward sustainability *and* reshaping ourselves as environmental stewards: the fundamental task of the Anthropocene. This involves, even more fundamentally, a deep questioning of our values; just as the artist becomes one with the artwork, so also must humanity rethink the meaning of its relationship to nature. To be an artist contributing to the perfection of the species today requires, at a minimum, becoming a steward of nature. Regarding the Kantian holism issued in support of the greening of Kant, Chapters 3 and 4 were concerned with holism vis-à-vis the environment (interconnection in space) and natural aesthetics (moral views of nature). This final chapter will be concerned with holism vis-à-vis human history (evolving through time) and art (sustainability).

Revisiting Kant's Anthropology and Philosophy of History

An overarching motif of Kant's anthropology is the view of humanity as an essentially developmental species: humanity progresses on a pathway of perfection as it strives for an

enlightened, cosmopolitan future.¹⁶⁹ This chapter concentrates on the ethical insights of underappreciated anthropological texts from Kant’s critical period¹⁷⁰ with an eye for their contemporary application. Specifically, I argue that holistic aspects of Kant’s understanding of humanity have interdisciplinary and ethical relevance for the global challenge of climate change. Interestingly, these seemingly anomalous essays have received scant attention in contemporary Kant literature.¹⁷¹ The collective and evolutionary¹⁷² elements of Kant’s thought—such as the

¹⁶⁹ Kant is clear that the progress of the species is in no way guaranteed (e.g. CB 8:17), and it is quite possible that humanity will destroy itself by war (or, now, by the monster of its own creation: anthropogenic climate change). The stakes are real. Rather, progress is a regulative idea that has a useful moral function in helping us realize it. The commonly lodged claim that Kant is a naive optimist, like Leibniz, is thus misguided. This isn’t the best of all possible worlds, but it is possible to make it better.

¹⁷⁰ These essays sit at an interesting middle-point in the critical period. *Idea* was published shortly before “Enlightenment” in 1784, one year before *Groundwork*. *Conjectural Beginning* was published a year after *Groundwork*, in 1786—the same year that Kant attempted to incorporate the critical teachings into his reading of Newtonian mechanics in *Metaphysical Foundations* and prior to the B edition of *Critique of Pure Reason* (1787). Both of these essays precede the developments in the second and third *Critiques*, though in many respects they are inchoate anticipations of those later works. Connections can also be drawn to the later *Religion or Perpetual Peace* (Allison 2009). Scholars such as Ameriks (2009) note the tension found in *Idea* and *Conjectural Beginning* by their seemingly uncritical use of teleology and conflation of theoretical and practical cognition, the former of which would not be qualified by its regulative epistemological status until *Critique of Judgment* (1790), the latter, resolved in the second *Critique*’s (1788) elucidation of cognition from the practical point of view. For more reflections on *Idea* and its place in the Kantian canon, see the collection *Kant’s ‘Idea for a Universal History with Cosmopolitan Aim’: A Critical Guide*, edited by Rorty and Schmidt (2009).

¹⁷¹ There are numerous reasons for why these texts have been undervalued by Kantians. *Idea*, even with the first sentence of thesis I apparently asserts a dogmatic claim about teleology contrary to Kant’s teachings on the appropriate use of reason for possible experience. Yovel claims that *Conjectural Beginning* is an odd dogmatic text of only political value; he suggests that it is best complimented with *Critique of Judgment* as a way for resolving its dogmatism (Yovel 1980, 127; 186); if Yovel’s suggestion is heeded, this makes my discussion of humanity in this chapter flow seamlessly from the previous chapter’s discussion of the third *Critique*. *Conjectural Beginning*, as Lewis White Beck (1963) notes, was a polemical response to Kant’s student, Herder, whose romantic Spinozist pretensions contradict the first *Critique*’s transcendental idealism. Both texts also seem much more religiously oriented—with *Idea*’s “guiding hand of nature” as providence, and *Conjectural Beginning*’s use of the Bible. Part of my aim, then, is to show how there is more to be found in these texts than is usually thought. They indeed deserve our philosophical attention in the age of anthropogenic climate change.

¹⁷² By “evolutionary” I do not mean to imply that Kant’s thought relates to evolutionary theory as promulgated by Darwin and his followers (though there is an interesting passage in *Anthropology* where Kant supposes that it wouldn’t be contrary to a system of nature for humanity to have evolved from apes, 7:328); rather, by evolutionary I mean that natural entities—humanity included—have the capacity to develop from rudimentary forms into more complex and intellectually sophisticated ones. This includes

notion of a cosmic, cosmopolitan citizen—are brought into greater relief in these historical essays than others from the critical period, and humanity is viewed in holistic terms. Since his teleological views are progressive and future-oriented (interpreted within the secular problematic of the Enlightenment rather than theology), Kant’s philosophical views on the human species¹⁷³ can thus be a resource for the ethics of climate change and the notion of moral progress. As Yirmiyahu Yovel says, the telos of history for humanity is at its core that “which has to spread and embrace the whole human race” (Yovel 1980, 126-27). And yet, despite the affinity of the progressive ideas highlighted in Kant’s anthropological essays with past and later developments in Western philosophy—such as Rousseau on the one hand and Schiller, Hegel, and Marx, on the other—they remain fruitlessly interred.¹⁷⁴ I aim to show how these themes are of particular

evolution in a moral sense (as we sharpen our moral predispositions for the sake of aspiring to perfection in Kant’s philosophy of history), a cognitive sense (in the history of philosophy our ideas culminate to enlightened self-reflection), a socio-political sense (as humanity, by way of its unsocial sociability and propensity to culture, approximates perpetual peace), and a physical sense (via the emergence of the cosmos; e.g. UNH 1:312-14).

¹⁷³ See footnote 7 in the Introduction for my rationale for not addressing the lamentable racist and sexist tendencies in Kantian anthropology. In brief, I am concerned with the holistic elements of Kantian anthropology and the notion of the species as an intergenerational totality, not with the idiosyncrasies of Kant’s theory of race and etc. These certainly deserve consideration but fall outside the scope of this dissertation.

¹⁷⁴ A few relatively recent works suggest that these undervalued works are essential to the study of Kant’s ethical thought. Robert Louden’s *Kant’s Impure Ethics* (2000) and Yovel’s *Kant’s Philosophy of History* (1980) are two studies that place importance on Kant’s anthropological and historical texts for understanding Kant’s development and his thought as a whole, especially with regard to his moral philosophy. Despite these exceptions, in general Kant’s anthropological texts such as *Idea* and *Conjectural Beginning* have fallen by the way-side. There is other recent work on applying Kantian accounts of history vis-à-vis ethical and political theory to contemporary issues, such as the refugee crisis in Syria (Altman, “Limits of Kant’s Cosmopolitanism” 2017). However, little work has been done with regard to these specific essays and their relationship to the challenges of climate change. One exception is Casey Rentmeester, “A Kantian Look at Climate Change” (2010), who briefly mentions the connection of Kant’s collective view of humanity here with a league of nations and the potential of the UNFCCC. Rentmeester, however, devotes most of his attention to the standard ethical texts of Kant such as *Groundwork*, rather than these essays in particular.

importance today, especially with regard to addressing climate change: in short, they can be read as blueprints of sustainability.¹⁷⁵

Problems of considerable difficulty for climate change concern the representation of the world-system as a single object of cognition and, second, the utilization of such a representation for confronting the collective, international challenges of climate change. I argued for potential benefits of Kant's pre-critical ontology of nature for these issues in Chapter 3. In the present chapter, I claim Kant's anthropology can be an asset here as well, especially with regard to sustainability. For on Kant's anthropological views, nature is understood as the unity in which humanity unfolds in accordance with the idea of a teleological narrative. The human species and its potential for progress are viewed holistically by Kant in these works, internationally and intergenerationally: "Moral progress on the historical scale is," on Yovel's reading of Kant's anthropological view, "a *totalizing* concept, stretching beyond the boundaries of the single person to incorporate all rational beings in all their acts and decisions" (Yovel 1980, 197). Thomas E. Hill in "Humanity as an End in Itself" (1980) also highlights the holistic, social emphasis of Kantian ethics via Kant's view of humanity (Linden 1988, 31). Reconsidering Kant's holistic view of humanity and history with an eye to our global predicament makes his seemingly dated teleological views relevant to the contemporary world of ethics and politics, especially since "Kant's philosophy of history is," indeed, "praxis- and future-oriented" (Linden 1988, 114). This chapter's exploration into the environmental resources of Kantian anthropology indeed has important implications for the intergenerational, international ethics of climate change

¹⁷⁵ Schönfeld, "The Kantian Blueprint of Climate Control" (2008) also discusses how Kant's thought can be interpreted in light of current issues as blueprints. However, he differs from my approach here because I am concerned with political and evolutionary thought in Kant's anthropology and philosophy of history and its heuristic potential, whereas in that paper Schönfeld is concerned with interpreting *Groundwork's* formulation of universalizability with regard to sustainable actions and the formulation of respect for persons with regard to humane benevolence for present and future generations.

and gives us a heroic vision for a cosmopolitan world, as I shall explain below. In the last analysis, insights from Kant’s underappreciated anthropological texts are thus not only philosophically relevant with regard to Kant scholarship, since they underscore the collective, non-individualist elements of his thought, but they also have practical significance for the pressing global concerns humanity faces today. I argue that four specific aspects can be drawn from Kant’s vision of humanity that are helpful for application to climate ethics. These are sketched below and further developed in the body of this chapter.

First, when interpreted in light of the climate crisis, Kant’s heroic vision enjoins us to develop an attitude of solidarity needed for overcoming climate change and transitioning to sustainability. In other words, viewing the climate crisis through Kant’s anthropological texts can help us reinterpret humanity as a collective agent: a hero struggling with an obstacle impeding cosmopolitan progress. My use of the term “heroic” here is intentional, not hyperbolic. Not only is the fight against human-made climate change, so to speak, a battle¹⁷⁶ of epic proportions the likes of which humanity has never faced before—but it also is a collective endeavor in which we are forced to think of the species as a singular agent (or “hero”).¹⁷⁷ On the Kantian picture, humanity (mediated through the present generation) can be seen as a hero in the traditional sense, for two reasons: first, humanity is framed as a singular by Kant: “the actual subject of the history

¹⁷⁶ Naomi Klein in the popular *This Changes Everything: Capitalism vs the Climate* (2014) frames climate change as a battle between capitalism and the planet (Klein 2014, 22); I think, rather, that the heroic task from the Kantian perspective should be seen as the battle of humanity against its own self-incurred immaturity in creating the conditions for climate change: The heroic battle is humanity fighting for sustainability.

¹⁷⁷ Cf. to Kant’s analogical discussion of nations as a single rational agents (PP 8:344; MM 6:343), and his holistic view of humanity in Part 3 of TP (8:307-313). I am not the only one to discuss Kant’s view of human progress as a heroic view; Kleingeld discusses the heroic position in Chapter 6 of her *Kant and Cosmopolitanism* (2012). I am not as pessimistic as Kleingeld (e.g. “we must battle, with no hope of victory, to do as we ought”)—since I find in Kant reasons for thinking that, despite no guarantee of “victory” for human progress, humanity still has good reason to hope for a future of cosmopolitanism.

of reason is not the individual but the human race collectively” (Yovel 1980, 144). Second, a hero acts for the sake of something greater than itself—for the sake of future generations and a sustainable future; for Kant, this is precisely the way in which present humanity, as a collective entity, should act in pursuit of an enlightened kingdom of ends.

The mythology of the hero can be helpful for thinking about Kant’s heroic vision for humanity along the treacherous pathway of progress. As literature and comparative mythology scholar Joseph Campbell expressed in 1949 in *The Hero with a Thousand Faces*, though the hero has been portrayed in manifold ways across cultural time and space, there are a few unifying features of the mythological hero that converge in the idea of a “monomyth.” The monomyth can underscore how Kant’s view of humanity reflects the hero taking up the heroic task. For according to Campbell, “The standard path of the mythological adventure of the hero is the magnification of the formula represented in the rites of passage: *separation—initiation—return*: which might be named the nuclear unit of the monomyth” (Campbell 2008, 23). The hero must begin by alienating the world of comfort in order to set out on the heroic path. The hero acts beyond the present, oriented toward the future. With regard to Kant, this means that humanity must take up the difficult task of developing culture, science, and philosophy in order to supersede the limitations and obstacles for progress such as idleness, self-conceit, and war; today we must include unsustainability and a business-as-usual attitude as impediments to progress in an environmental sense. Now once the heroic task has been completed, the hero returns, grounded in a new significance and at home, in both literal and ecological senses, for the root of ecology means “home.” The hero doesn’t simply return to the way things were before. Rather, the hero’s return involves a qualitative, authentic shift—in both the self and the society as a whole. Indeed, for the mythological hero the return of the hero is “a world-historical,

macrocosmic triumph” (Campbell 2008, 30). Humanity understood by Kant must follow this trajectory of progress in order to secure a kingdom of ends on earth, which is such a qualitative shift. Not only ought all our external actions harmonize, as a “society of devils” could do alone (PP 8:366), but humanity’s inner state must change. In taking up the heroic task, we reorient ourselves with regard to our values and sustainability in how we treat nature and how we treat others. The structure of the heroic task—both in the mythological hero and in how it is mirrored in Kant’s vision of humanity—can be expressed today as the quest for overcoming climate change and returning home to a sustainable future.

On Kant’s view, like the mythological hero’s struggle, humanity must continually strive for the sake of the larger whole, despite being unable to reap the benefits of happiness or security in enduring the hardships that necessarily burden this difficult path. This includes working towards progressing the species, pursuing enlightenment, and fostering the education of youth. Striving heroically for humanity’s progress thus leads to an attitudinal shift toward universal solidarity, facilitating collective action. The heroic struggle is the beginning of the cognitive shift we find as the mythological hero returns home. With the onset of climate change—like war for Kant—this pathway of progress becomes all the more perilous: it is a heroic task. Humanity assumes the role of the hero and must live up to its task. Only time will tell if our hero must perish in the epic quest or if our hero’s sublime battle against climate change will be victorious.

Regarding the second aspect of Kant’s anthropological thought helpful for sustainability: as a result of this attitudinal shift toward solidarity, the heroic incentive inspires us to act as citizens of the world, which includes the cultivation of virtues such as mindfulness, courage, and responsibility. Extensive recent work has been done in environmental virtue ethics, and Kant’s

historical texts can be of some help for thinking how the ideal of moral progress is tied to virtues conducive for transitioning to a sustainable future.

Third, when we adopt Kant's heroic vision, engage with our world in a cosmopolitan manner, and cultivate environmental virtues, humanity can be seen in a different light, viz. defined by our relationship to the environment. Understanding what it means to be human changes, since climate change challenges the human-environment interface and the meaning of existence. Humanity's moral vocation, on Kant's view, is an essential aspect of the species. Accordingly, climate change requires a reconsideration of how this vocation can be adapted for the sake of transitioning to sustainability. Thus, an environmental re-examination of Kantian anthropology reminds us that our moral vocation, today, requires stewardship. In order to fulfill this vocation, humanity must strive for a kingdom of ends and treat moral agents with dignity. Since climate change creates inequitable and inhospitable environments, stewardship becomes a fundamental condition for realizing our moral vocation. Thus, from the perspective of the environment, this points us toward sustainable stewardship.

Last, on Kant's account, humanity has an obligation to contribute to the perfection of the species; failure to take part in this project is thus a moral failing. And with climate change, our moral failing also becomes an existential failing, as human lives stand to be lost. Because of our duties for moral purity and for realizing a kingdom of ends, a reawakening of the cause for cosmopolitan enlightenment is required. This reawakening shows how Kant's moral philosophy, when viewed through the lens of the anthropological works, is much more non-individualist than is usually thought. Rather, as some thinkers (hearkening to the neo-Kantian interpretations of

Hermann Cohen)¹⁷⁸ point out, Kant’s philosophy can be an adequate foundation for a moral socialism. Because of the well-known deadlock between capitalism and sustainability, a disclosure of the socialist tendencies in Kant’s thought can aid in thinking past the liberal-capitalist obstacles of sustainable progress.

This chapter consists of three parts. In Part 1, I outline Kant’s teleological vision of humanity as collective, historical, and progressive, focusing on *Idea* and *Conjectural Beginning* (but also drawing from “Enlightenment,” *Pedagogy*, and *Anthropology*). I address the tricky issue of interpreting Kant’s views on religion in a lengthy discussion that concludes Part 1; I make the radical suggestion that Kant’s religiosity is best explained in Gaian terms. In Part 2, I then utilize Kant’s heroic view of humanity to show that conceiving of climate change as a heroic task challenging humanity’s historical progression can instill a sense of courageous urgency for sustainability. Finally, with Part 3 I briefly discuss Kantian thought in relation to capitalism and the limits of liberalism; Kant’s understanding of humanity as collective and historical—spanning space (nations) and time (generations)—overcomes the unsustainable limitations of liberal thought.¹⁷⁹

¹⁷⁸ For some of the most historically influential socialist readings of Kant, see Hermann Cohen, *Kants Begründung der Ethik* (1877), Karl Vorlaender, *Kant und Marx* (1926) and “Kant und der Sozialismus” (1900), Thomas E. Willey, *Back to Kant: The Revival of Kantianism in German Social and Historical Thought* (1978), Timothy R. Keck, *Kant and Socialism: The Marburg School in Wilhelminian Germany* (1975), as well as Linden’s “Appendix: A Historical Note on Kantian Ethical Socialism” (1988).

¹⁷⁹ When I refer to “liberalism” in this chapter I am specifically referring to the classic economic-ideological conception of liberalism—where the notion of individuality is regarded to be of utmost importance and the belief in the virtue of unimpeded individual freedoms is apotheosized; this is to be distinguished from the contemporary social use of the term, where one distinguishes liberals from conservatives on a political spectrum, usually with regard to identity political issues. With regard to classic liberalism, one could be both a liberal in the classical sense and a conservative in the social sense. In Part 3 I will consider the extent to which Kant is a proponent of classic liberal thought, and how this may impede his usefulness as a philosopher of sustainability. The reader may wish to refer to John Stuart Mill’s *On Liberty* (1859), which is generally thought to be the best philosophical depiction of classical liberalism.

Part 1: Overview and Context of Kant's *Idea* and *Conjectural Beginning*

I focus my discussion of the philosophical and ethical relevance of Kantian anthropology by examining *Idea* and *Conjectural Beginning*.¹⁸⁰ These two peculiar and seemingly misplaced essays were written during the critical period. Both were published in the *Berlinische Monatsschrift*—a casual journal aimed more for learned citizenry than for theologians or philosophers (Rorty and Schmidt 2009, 4-5). In *Critique of Pure Reason*, Kant intends for his readership philosophers and academics, not laypersons (CPR Axviii-xix). *Idea* and *Conjectural Beginning*, by contrast, are clearly aimed to a more popular audience. In spite of this, the seriousness of Kant's claims should not be downplayed. For several central ideas in these essays indeed pervade the critical teachings, though some, perhaps, in inchoate form. For example, Kant subscribes to a “teleological doctrine of nature” in *Idea* as one of its guiding motifs (*Idea* 8:18), yet doesn't distinguish between the regulative and constitutive teleology of the other *Critiques*.¹⁸¹ In *Idea* and *Conjectural Beginning*, it may appear that Kant slips into dogmatism. This assumption is mistaken. Though Kant has yet to make the strong distinction between practical and theoretical cognition that he makes in the second *Critique* (CPrR 5:19-20), this is surely his intent when discussing the weak epistemic status of his heuristic claims in his philosophy of history (*Idea* 8:29; CB 8:109, 123). I will discuss both essays briefly in turn, to get to the core of Kant's philosophical understanding of humanity. This, as I will show, is how Kant's insights can be connected to contemporary climate issues.

¹⁸⁰ I focus on these texts because first, they have generally been scrutinized more in the literature than Kant's other anthropological texts, and second, because they best highlight the connections between Kant's view of humanity with his ethical theory. This is unsurprising, as they were written around the same time as Kant's *Groundwork* and shortly before *Critique of Practical Reason*.

¹⁸¹ See, for example, the Appendix to the Transcendental Dialectic of *Critique of Pure Reason*: “On the Regulative Use of the Ideas of Pure Reason” (CPR A642/B670-A668/B696) and *Critique of Judgment* (CJ 5:379).

Idea for a Universal History with Cosmopolitan Aim

Kant publishes *Idea* after the first edition of *Critique of Pure Reason* and shortly before “Enlightenment” (Beck 1963, viii). Not unsurprisingly, it addresses several aspects dealt with in those works, but deviates insofar as it does not focus on transcendental idealism or individual enlightenment. Instead, *Idea* takes a collective or social frame of reference when considering humanity’s orientation toward the future. Kant’s main concern in this essay is to reflect on whether it is possible—from a philosophical, not empirical, standpoint—to consider human history as going somewhere. Is it rational to think of humanity’s trajectory as a narrative on a developmental pathway, progressing toward excellence?¹⁸² What kind of pragmatic utility or experiential guidance can such an evolutionary narrative bestow us?

Kant begins *Idea* by suggesting that it is promising to depict “a pattern, indeed a progress, in human affairs through the development of humankind’s ‘original predispositions’” (Allison 2009, 26). Like his early ontological works in *Physical Monadology* and *Universal Natural History*,¹⁸³ Kant takes a grander point of view in *Idea*. Here, he attempts to reflect on the dynamic structures of human existence—not in relation to individual rational agents as in *Groundwork*, but from the perspective of humanity as a species. In the first proposition, Kant

¹⁸² Evidence that Kant took the progress of the species as a serious philosophic concern can be found from comments of Kant’s colleague and follower, Johann Schultz: “A favorite idea of Professor Kant is that the final end of humankind is the attainment of the most perfect political constitution, and he wishes that a philosophical historiographer would undertake to provide us in this respect with a history of humanity, and to show how far humanity has approached this final end in different ages, or how far removed it has been from it, and what is still to be done for its attainment” (from *Anthropology, History, and Education* 2012, 8:468).

¹⁸³ In *Physical Monadology*, Kant considers from a broader, natural-metaphysical perspective, how dynamic attractive and repulsive forces engender space, matter, and bodies. Similarly, in *Universal Natural History*, Kant takes a “big picture” view of the cosmos. The anthropological texts such as *Idea* are reminiscent of these pre-critical, cosmological and naturalistic texts insofar as they all utilize a dynamic, evolutionary view of the world and our place in it. The ecologically useful elements of Kant’s pre-critical ontology are still apparent in a more implicit form, even in the critical period.

endorses a form of natural teleology: all organic entities are destined to develop their natural predispositions. Then, he homes in on humanity and our unique predisposition toward reason. Why would nature furnish us with rational faculties and the ability to set our own ends, questions Kant, unless it would be possible for us to someday fully develop and utilize them? As Kant would later formulate in *Critique of Judgment*, it is a demand of reason (for judgment) and condition for the possibility of the rational investigation of nature¹⁸⁴ to assume that nature does nothing in vain (Förster 2009, 198). The problem for humanity, however, is that this process can never be completed in a single individual, as our lifetimes are short and often filled with strife. Moreover, “no single human being, not even any group of people, nor even all human beings living at any given time or up to any given time, will ever fully exhibit all the rational capacities of the human species” (Wood 1999, 211). To resolve this difficulty, Kant assumes a teleological progression in humanity *as a species*. That is, we develop our full capacities as a collective endeavor over an extended period, through the accomplishments, conflicts, and challenges of history.

¹⁸⁴ As was argued previously, this reflective capacity of judgment on nature’s holism and systematicity from the third *Critique*—in conjunction with Kant’s insights on natural beauty—can function as preparation for considering nature in a moral sense. The theoretical and aesthetic preparation in Chapters 3 and 4 becomes instantiated in a more determinate sense toward the end of the present chapter.

In *Idea* Kant also presents his account of “unsocial sociability,”¹⁸⁵ which is his response to Rousseau and Hobbes.¹⁸⁶ Human nature, on Kant’s view, is unique in that it is inherently dialectical. Humans are self-interested and seek solitude, yet possess an inherent collective-nature that attracts cooperative and communicative interaction (Wood 1999, 212). This dialectic is the driving-force behind cultural achievements and the perfection of our rational predispositions, on the one hand, and our seemingly unending lapse into barbarism and war, on the other (*Idea* 8:24). Only when enlightened humanity has grasped the narrative guiding-thread of nature and human history through *philosophy* can it make sense of our destiny on the treacherous pathway of progress. After humanity has matured and become capable of thinking for itself, philosophy reveals itself as one of the keys for perfecting the species. This is because philosophical reflection, by way of the ideas of reason, allows humanity to project itself into the future: the regulative idea of history’s teleological narrative, under the auspices of philosophy, is seen *as* a mere idea with crucial moral import. This is why philosophy is so important for cultural progress and, in the Anthropocene, philosophy (in a sense), makes or breaks humanity:

¹⁸⁵ Unsociable sociability is just one instantiation of a recurring evolutionary motif in Kant’s philosophy. We see it elsewhere in various forms, as one of Kant’s favorite means for thinking through concepts: that is, in terms of a linear revolution in thought, history, and science (Michael Morris, “The French Revolution and the New School of Europe: Towards a Political Interpretation of German Idealism” 2011, 540). For example, in the works on natural science we witness dynamic attractive and repulsive forces; in cosmology, the evolutionary unfolding of the cosmos in the Kant-Laplace nebular hypothesis; in ethics, we can interpret the categorical imperative and its various formulations as unfolding into more complex variations, with the formulation of a kingdom of ends being the most substantive since it connects the form of law and the intrinsic value of ends in the themselves (Wood 1999, 167). Moreover, with the categorical imperative, all the formulations holistically interrelate into a system (Wood 1999, 187); and in *Critique of Pure Reason*, the dialectical tensions and resolution between the historical development of science on the one hand, and philosophy on the other. Thus, when interpreted against the larger backdrop of Kant’s evolutionary thought, unsocial sociability in *Idea* and *Conjectural Beginning* takes on a new, holistic meaning pregnant with potential for environmental issues today.

¹⁸⁶ For an interesting study on Kant’s philosophical tensions with Rousseau and Hobbes vis-à-vis humanity, cosmopolitanism, and political philosophy see Howard Williams, *Kant’s Critique of Hobbes: sovereignty and cosmopolitanism* (2003).

“*seeing* the social world as tending toward a final end is essential to making it true that it reaches it” (Herman 2009, 164). Therefore, we can conclude that when enlightened humanity orients its actions for the sake of perfecting the species and striving for cosmopolitan sustainability along the teleological narrative of progress, it can begin to actualize it. Today, climate change is the crucial hindrance blocking this pathway. If Kant’s historical narrative is adopted—despite its weak epistemic justification—the aspiration to a world of peace and flourishing (i.e., the highest good) is seen as not only possible, but morally demanded. Obviously, this essay has clear connections to *Groundwork*’s formulation of a kingdom of ends, the later political works on cosmopolitanism, and Kant’s follow-up anthropological essay which he wrote as a response to his student, Herder (Beck 1963, ix)—namely, *Conjectural Beginning*. Before discussing my interpretation of this essay and how it may be applied for the ends of environmental ethics, the following section outlines the main ways it has been interpreted, especially in light of Kant’s contentious views on religion and morality.

Kant on Religion and the Historical Education of Humanity

Like *Idea*, *Conjectural Beginning* is very unusual by comparison with the *Critiques*. Kant attempts to provide a plausible (though by no means certain)¹⁸⁷ account of the origins of human history through a conjectural “philosophy of nature” (CB 8:109). This philosophy of nature aims to characterize the beginnings of a possible philosophy of history (such as is found in *Idea*) and the trajectory of the moral development of humanity. For his point of departure, Kant takes the biblical story of Genesis as a “map” for his trip, “which I make on the wings of the power of

¹⁸⁷ The weak epistemic status of this essay’s conjectures is quite apparent. It is even weaker than the regulative guiding thread of nature that we may assume in *Idea*; On Kant’s view, these conjectures are merely therapeutic. For “they cannot announce themselves as serious business, but at best only as a permissible exercise of the imagination guided by reason, undertaken for the sake of relaxation and mental health” (CB trans. Beck, 8:109).

imagination, though not without a guiding thread attached by reason onto experience” (CB 8:110). On an initial reading, it might seem like Kant’s main aim is to reconcile his critical project with Holy Scripture since he utilizes this text as an experiment for framing humanity’s origins. On a more detailed reading with consideration for his other anthropological texts, I submit that Kant’s main purpose is not religious apologetics. Rather, he is attempting to reflect on the ways in which humanity *could have* intelligibly developed its predispositions to reason and morality under the presumption of *Ideas*’s teleological conception of nature. The main concern, then, is a philosophical consideration of how a supposedly atemporal or noumenal understanding of reason can be reconciled with the idea of humanity progressing and evolving as a rational and natural species. On this reading, Kant can square his account of reason in *Groundwork* (namely, with regard to our *individual* duty for pursuing a kingdom of ends) with the historical idea of perfecting the *species as a whole* (which is his main concern in the cosmopolitan texts). On my view, then, Kant doesn’t offer a biblical interpretation or justification of his views from Christian doctrine, but instead uses these stories as a pedagogical vehicle for his own philosophy of history.

There are some commentators, however, who do read Kant as a deeply Christian thinker. For instance, Michel Despland in *Kant on History and Religion* (1973) takes Kant’s historical texts seriously as I do, although he interprets them to suggest that Kant was at heart a religious thinker. Despland submits that the neutral or secular reading of *Religion* according to which Kant sets boundaries to religious activity by means of morality is “unnecessarily extreme and suspiciously lacking in nuances” (Despland 1973). *Pace* Despland, proponents of the secular view of Kant on religion read Kant “in true Enlightenment fashion,” claiming that “all that is essential in religion can be reduced to morality” (Kuehn 2001, 250). The main tenets of

organized religion, on this reading, are only valuable as “articles of belief.” Despland argues that the secular reading of religion in Kantian scholarship is mistaken. Through a reinterpretation of *Religion* from the standpoint of Kant’s philosophy of history (rather than his critical teachings), Despland makes the case that the problem of theodicy indeed weighed heavily on Kant’s mind and that his *Religion* offers a positive, rather than destructive, contribution to the philosophy of religion. On the secular interpretation of Kant’s philosophy of religion, *Religion* is primarily seen as a negative project, setting in greater relief the rational constraints on religious practices that follow from the dismantling of dogmatic metaphysics in *Critique of Pure Reason* and the rational dependency of all religious beliefs—such as the existence of God and the immortality of the soul—on morality in *Critique of Practical Reason* and *Critique of Judgment*. Despland, by contrast, since he takes his point of departure from the historical writings (which often appear to shirk the warnings of the critical teachings), finds room for a reinterpretation of Kant’s philosophy of religion that makes him out to be more religious than commenters from the secular reading concede.

In support of his argument that the secular reading is mistaken and that a new one is required, Despland traces the use of Kant’s teleological language throughout his works, especially *Conjectural Beginning*. He relies on Kant’s ambiguous use of the term “Nature” (or “Providence”), especially when it is used in a pseudo-intentional sense. When Kant makes use of agential language regarding Nature, Despland suggests that Kant is here alluding to the monotheistic God of traditional Christianity. He points to Kant’s reliance on theological musings in pre-critical works like *Universal Natural History* and argues that Kant’s reservations about the “dead” Newtonian view of nature led him to seek a philosophical reconciliation between the theological, Leibnizian picture of nature, the moral heart of Rousseau’s humanism, and the

mechanistic pretensions of the moderns (Despland 1973, 25-27). He then traces the teleological-moral use of language throughout Kant's works spanning from the pre-critical to the historical and religious writings to set the foundations of his interpretation of Kant's positive philosophy of religion. As was argued previously, Kant's early ontology presents a dynamic and interconnected view of nature. On this view, nature's parts interact in a reciprocal, harmonious network. As Despland rightly observes, Kant's reliance on teleological premises in these works easily lends itself to a theological, religious interpretation.

However, Despland seems to conflate the teleological with the theological; Kant's holistic vision of nature harkens back to the pre-critical period in that it has an ontological flair, making it easily viewed in religious terms, but it is then emended in *Critique of Judgment*, where Kant clearly states how appealing to a self-organizing, purposive Nature remains a regulative epistemic device for the pursuit of theoretical knowledge of nature (CJ 5:383). Moreover, though Kant does appeal to theological premises in the pre-critical works (especially in *New Elucidation*), the historical context and status of censorship must be borne in mind here: Kant was not yet tenured, and as such had to speak carefully; contradicting orthodox Pietist or Protestant views would certainly mean career suicide, and so Despland's evidence from the early works must be taken with a grain of salt.

Fortunately, there has been much recent research into Kant's *Religion* and its connection to morality, history, and Kant's religiosity since Despland's study was published in 1973. Manfred Kuehn's *Kant: A Biography* (2001) has delved deeper into the nuances of Kant's life, the contradictions of his three contemporaneous biographers, and his writings across his works in order to show how Kant is perhaps better seen as a non-religious philosopher. This chapter is not specifically concerned with the extent of Kant's religiosity or his contribution to the philosophy

of religion and, accordingly, I will not pursue a thorough examination of Kuehn's work, the *Religion*, or Despland's reinterpretation of the secular view. I will, however, briefly mention some provisional reasons why I think Despland's reading, though astute and original, is potentially in tension with central features of *Religion*, which evidences that Kant was not a deeply religious thinker (at least, not in the orthodox sense of the term). Manfred Kuehn observes of Kant that "religious observances played no part in his life" (Kuehn 2001, 318), that he was called an "indifferentist" with regard to religion, and that he disliked religious people (Kuehn 2001, 5).¹⁸⁸ The caricature of Kant as a highly devout, punctual, and uninteresting individual was, as Kuehn convincingly argues, a political imposition contrived by three theologian biographers to hide Kant's rather unorthodox (and even hostile) personal views of organized religion (Kuehn 2001, 7-16). At the most, a culling of Kant's philosophical writings and personal letters suggests Kant was probably closer to a deist of the pre-Christian, stoic sort (Kuehn 2001, 151), where God is viewed as the immanent ordering and unifying principle of the cosmos. Kant indeed had philosophical concerns about religion, but was likely not very religious himself as Despland seems to suggest.

In *Religion* there is plenty of textual evidence to counter the religious interpretation and suggest that Kant thinks that organized religion, like war in *Idea*, is only a temporary historical

¹⁸⁸ Further evidence for Kant's disdain for orthodox Christianity can be found in *Anthropology*. For example, in Ak 7:188 Kant alludes to the biblical story of the fall and calls it an "absurdity." And at 7:189, Kant asserts—in his popular lectures (!)—that the "extreme limit of absurdity, or of deception" relates to the seer or prophet. Interpreting this section in light of Christianity is difficult, since the prior paragraph discusses the soothsayers of antiquity; and yet, the paragraph directly before Kant's condemnation of prophecy seems to reference the fall: "All prophecies that foretell an inevitable fate of a people, for which they are themselves still responsible and which therefore is to be brought about by *their own free choice*, contains an absurdity—in addition to the fact that the foreknowledge is *useless* to them, since they cannot escape from it" (*Anthropology* 7:188). In either case, Kant's antipathy toward revelation and prophecy is clear, rendering a stronger orthodox Christian or literalist interpretation of Kant's views of religion implausible.

phenomenon—an early vehicle of progress. Instrumentally, organized religion is important; but philosophically, it doesn't require a thorough treatment for its own sake. Instead, all religion requires of philosophy is to provide an historical account of its role in humanity's maturation toward moral cosmopolitanism:

[S]ince this last—namely the moral improvement of human beings—constitutes the true end of all religion of reason, it will also contain the supreme principle of all scriptural exegesis (*Religion* 6:112).

[O]nly the pure faith of religion, based entirely on reason, can be recognized as necessary and hence as the one which exclusively marks out the *true* church. Thus...a historical faith [e.g. Christianity] attaches itself to pure religion as its vehicle, yet, if there is consciousness that this faith is merely such and if, as the faith of a church, it carries a principle for continually coming closer to pure religious faith until finally we can dispense of that vehicle, the church in question can always be taken as the *true* one (*Religion* 6:115).

[I]n the end religion will gradually be freed from all empirical determining grounds and from all statutes which rest on history and which though the agency of ecclesiastical faith provisionally unite men for the requirements of the good; and thus at last the pure religion of reason will rule over all... The leading-string of holy tradition with its appendages of statutes and observances...becomes bit by bit dispensable, yea, finally, when man enters upon his adolescence, it becomes a fetter (*Religion*, cited from Linden 1988, 156).

In these sections (which support the secular reading, *pace* Despland), Kant's religion of reason is earthly: it is the realization that the moral law unites all of humanity, obliges us to pursue a kingdom of ends on earth, and gives us the heroic incentive to strive for an enlightened, cosmopolitan future. All religious interpretation, therefore, only serves a pedagogical purpose for cultivating the moral ideas that lie within the breast of humanity. God isn't needed.¹⁸⁹ In *Religion*, as in *Conjectural Beginning*, connections can be made from Kant's discussion of an ethical commonwealth as a moral ideal and the notion of a moral society or kingdom of ends in

¹⁸⁹ In *Critique of Practical Reason*, Kant asserts that morality requires the practical postulate of the existence of God (which is similar to *Critique of Judgment's* use of a "moral argument" for the existence of God). However, as Beck notes in his famous commentary on the second *Critique* (1960), Kant is clear that though this postulate is a necessary belief for rational faith, it is only *subjectively* necessary.

Groundwork. The ideal moral society becomes an historical possibility only after humanity has grown up. For humanity to grow up means that it must make use of the vehicles of enlightenment and disciplined culture, sloughing off any final semblance of dogmatic theism or religious orthodoxy (*Religion* 6:115-118). Moreover, metaphysical “Scriptural exegesis,” Kant himself asserts, “lies outside the boundaries of the competence of mere reason” (*Religion* 6:44n). In the same passage, Kant claims that, despite our metaphysical incompetence in religious exegesis, there is still a “moral use” for philosophically interpreting the text. This use is as a pedagogical device, which is supported by Kant’s belief that education is the most important secret of moral progress (*Pedagogy* 9:444). My criticism of the strong religious reading of Kant lends support to Wood’s claim that Kant makes use of scripture in his conjectures in a twofold manner: first, as a way to satirize “the vehicle Herder used to present his views in Book 10 of the *Ideas*” (Wood 1999, 233), since Herder’s text made dogmatic religious-exegetical claims. And second, my reading of *Conjectural Beginning* as a pedagogical-moral device supports Wood’s view that “Kant’s conjectural history is a kind of thought experiment” (Wood 1999, 234).

Now, in order to resolve the tensions between Despland’s astute reading of Kant as a religious philosopher and Kuehn’s new findings that Kant was likely very much against organized religion, the debate must simply be framed in the proper context. First, it is undoubtedly true that Kant writes extensively on religion throughout his life; he refers to God in the early works and toward the end in *Opus Postumum*; he reinterprets God as a moral-epistemic device in the critical works; and he constantly makes use of religious or spiritual language when discussing teleology (e.g. Providence, “Nature’s wise arrangement,” the creation). How are we to make sense of all this? First, it must be understood that Despland is indeed right on two counts: First, Kant was very much concerned with theological questions throughout his life; a

commitment to the importance of rational faith, the limits of reason, and hope pervades his thinking, and this can readily be seen in what he takes to be one of the key questions of philosophy: for what may humanity hope? (CPR A805/B833). And second, Despland is wise in appealing to Kant's historical texts in order to flesh out Kant's views on religion. In these texts, Kant generously discusses his admiration for Providence and Nature's wisdom. Kant is indeed a *spiritual* thinker, since he tries to understand the sacred within the secular, the providential wisdom guiding humanity along in nature. And yet, evidence from *Religion, Anthropology*, and his letters also suggests that he had little respect for organized Christianity, had little patience for superstition, revelation, or prophecy, and argued that divine command theory was a deadlock for morality. In this sense, then, Kuehn is also correct: "All-crushing Kant" was in many respects anti-religious. The tension between these two scholars' interpretations can be resolved if Kant's suggestion about a world-soul in "Whether the Earth is ageing, from a physical point of view" is taken seriously (FE 1:211-212). Perhaps Kant's religiosity or spiritual faith is better understood to be a faith placed in the "secret driving force" or world-spirit of Nature (FE 1:203). Though this perhaps conflicts with some of Kant's epistemological complaints against pantheism in *Critique of Judgment*¹⁹⁰ and transcendental realism in *Critique of Pure Reason*, it certainly fits more securely with the biographical observations articulated by Kuehn. Kant's seemingly uncontroversial religious language then starts to make more sense; it is an evasive, esoteric

¹⁹⁰ In *Critique of Judgment* Kant claims that Spinozism is "only a more determinate version of pantheism" (CJ 5:421). Here, Kant argues that Spinozism is untenable (e.g. CJ 5:391-394). A recent study of Kant's more intricate relationship with Spinoza and pantheism can be found in Omri Boehm's *Kant's Critique of Spinoza* (2014), where it is argued that Kant is committed (though esoterically) to a Spinozist metaphysics in the pre-critical philosophy.

maneuver.¹⁹¹ Kant utilizes the standard theological language of his time in accordance with the requirements of Prussian censorship, but his meaning is of a different sort. For Kant, God is Gaia.¹⁹² As discussed in Chapter 3, Nature is the energetic manifestation of the totality of the cosmos in all its manifoldness, diversity, harmony, and beauty. Kant's unwavering humanistic hope with regard to humanity's plight in the face of evil then makes sense, for humanity is a divine expression of Gaia's infinite complexity. The highest good is a goal to be sought on earth (*Religion* 6:134-136), not the life beyond, for Gaia is immanent. On the Gaian reading, Kant's interminable discussions of God in *Opus Postumum*—whose goal is to bridge the metaphysics of nature with natural science—become more intelligible; they are not the senile expressions of a genius mind faltering, but are instead the laborious attempts to synthesize the theological with the physical, the sacred with the natural, for God is Gaia. Though I am aware that my suggestion is a provocative one, it at the very least helps make sense of the seeming contradictions in Kant's thinking on religion and morality, and helps resolve the tensions between the readings of Despland and Kuehn; on my interpretation, both scholars have hit on an important aspect of Kant's thought: his spirituality and his humanism are indeed two sides of the same coin because they are grounded in a conception of nature as a Gaian system.

¹⁹¹ To be sure, I am aware of the justificatory difficulties for the “esoteric method” made famous by Leo Strauss. The issue on Kant is by no means settled, though the esoteric reading certainly has a certain provocative allure for mediating the contradictions in Kant's views on religion.

¹⁹² If the Gaian invocation initially sounds too much like enthusiasm (*Schwärmerei*) for an enlightenment philosopher like Kant to accept, perhaps it is best to think about what, exactly, is meant by Lovelock's Gaia Hypothesis. Though it indeed has many affinities to animistic views of nature, we need not take such a dogmatic view and instead just consider that by Gaia, we understand nature as a complex, self-regulating, system on analogy with a living organism. Even without a strictly religious or animistic view of Gaia, it still makes sense to look toward it with admiration and appreciation, and such a view does not preclude a spiritual relation to nature provided it does not make claims to justified theoretical cognition.

A further discussion of Kant vis-à-vis religion would deserve its own individual study, and so now I suggest that the best course of action is to return to Kant's *Conjectural Beginning*. Let it be stipulated for the sake of argument, then, that Kant makes use of Scripture as a sort of pedagogical or analogical device through which he can better articulate his views on history. I am not alone in my interpretation of *Conjectural Beginning* as a pedagogical device. Yovel, for example, views Kant's stance on religion as primarily oppositional,¹⁹³ and argues that Kant's use of the Bible is an offensive weapon and a defensive strategy: it is offensive because it can be used as a useful rhetorical strategy for helping his religious reader convert to Kant's rational religion, and it is defensive because it can provide political immunity from charges of heresy. Yovel sees Kant's use of "Providence" in the historical essays as secular or methodological; "God" (like the use of noumenon in *Critique of Pure Reason* as an epistemological "limiting concept") is a "systematical device" whose use is "merely an analogy" (Yovel 1980, 97, 100, 126). Indeed, on Yovel's reading, "the philosopher has to employ religious metaphors while transforming and reinterpreting their meaning" in order to "take an active part in promoting the historical process which he recommends" (Yovel 1980, 172); similarly, Linden reads Kant's pseudo-religious use of terms like "Providence" in *Idea* and *Conjectural Beginning* as "just a manner of speech, reflecting the common discourse of his time" (Linden 1988, 117). Linden views Kant's historical works not as theodicies, but as secular blueprints for moral-historical progress: they are philosophical foundations that rationally justify hope for the flourishing of

¹⁹³ In a rather strong reading, Yovel contends that "Almost every positive idea that Kant has to express under the title of rational religion has already been expressed in his ethics, while what is new in *Religion within the Limits of Reason Alone* (1793) is mainly an uncompromising attack upon existing religions and an attempt to eliminate them from the historical scene... the role of the philosophy of religion is to abolish religion as an independent sphere and reduce it to rational morality alone" (Yovel 1980, 202). Though I am more partial to this reading than Despland's, it seems to me to betray Yovel's Hegelian-Marxist leanings more than anything else.

humanity. I think this is a helpful reading, and I intend on pushing these secular blueprints into the realm of sustainability. If Kant's use of the biblical story is understood as a useful pedagogical device or thought experiment rather than serious biblical exegesis or apologetics, the way in which *Conjectural Beginning* sits in relation to *Idea* and the later developments in the third *Critique* make better sense. This reading also illuminates how Kant's collective view of humanity can be better applied appropriately for the heroic project of climate change.

Conjectural Beginning of Human History

In this essay, Kant conjectures how humanity (understood as a collective species) transitions through three main epochs in its evolution toward cultural enlightenment: the stage of nature, of freedom, and finally of culture.¹⁹⁴ As the stages unfold, humanity gains a more nuanced perspective on how it is collective and future-oriented. In the first stage, inexperienced humanity obeys the call of nature (CB 8:111). It is self-interested, instinctual, and amoral; this stage is associated with biblical Eden. However, once reason begins to stir within it, humanity steps into the world anew with prudential freedom—becoming capable of resisting short-term desires for the sake of attaining second-order ones; this stage is associated with the forbidden fruit (CB 8:111-2). Once roused from its rational slumber, humanity experiences the first glimmers of the power of imagination and self-consciousness. These simultaneously engender the proto-figurations of love and beauty, as well as shame and modesty (*Sittsamkeit*). On Kant's view, feelings of love and beauty for humanity *and* in nature are the earliest signs of morality (CB

¹⁹⁴ Wood identifies only two main epochs of human history for Kant (Wood 1999, 244). The third and last epoch that I identify is qualitatively different from the epoch of freedom (from the standpoint of enlightenment and moral discipline) and thus, I think, deserves its own status in the division of Kant's philosophy of history.

8:113).¹⁹⁵ The last stage in humanity's moral development is the stage of culture. With culture and education,¹⁹⁶ humanity becomes aware of itself as a temporally oriented being.¹⁹⁷ Humanity as a moral species understands prospects of the future, reflected through the present and past. Moral self-consciousness brings with it the anxiety of death, as well as a care and concern for posterity; this expectation of the future is crucial for humanity's understanding of its moral vocation (CB 8:113). Later I connect Kant's historically conditioned realization of our vocation with sustainability and stewardship. Finally, humanity becomes aware of itself qua reason, deserving of dignity and respect as an end in itself (CB 8:114). Humanity is now in this stage, Kant very stoically asserts, yet we have not quite refined and disciplined culture to its ultimate enlightened form (CB 8:121 Wood 1999, 298). This stage reflects the biblical story of the fall and humanity's moral endeavor toward salvation. I now draw from these essays to sketch an image of Kant's view of humanity, capable of bridging Kant's anthropological claims with the *Groundwork* and their applicability to the difficulties present in the ethics of climate change.

¹⁹⁵ An interesting connection can be drawn here from Kant's statements of morality and *love for nature* with those found throughout *Critique of Judgment*. See, for example, CJ 5:380; 5:267; and 5:299). Love for nature may also be connected to appreciation for beautiful nature as discussed in Chapter 4. Biasetti draws from these passages in his defense of Kantian environmental aesthetics (Biasetti 2015).

¹⁹⁶ This is also supported in Kant's lectures on pedagogy, where he asserts: "A human being can become human only through education. He is nothing but what education makes of him" (*Pedagogy* 9:443). Kant also holds that the development of our human predispositions is a social process, a result of the collective actions of society" (Wood 1999, 203).

¹⁹⁷ This passage of *Conjectural Beginning* reads very proto-Heideggerian to me. As is well known, Heidegger was heavily influenced by the first *Critique* and especially the A-deduction and schematism. It would be interesting to find out if he was also familiar with Kant's anthropological texts (especially, given that *Being and Time* is often accused of being a sort of anthropological philosophy). I was pleased to learn that Yovel has similar suspicions in this regard: "It is noteworthy that most of the basic 'existentials' that Heidegger ascribes to the being of man—*anxiety, care, future-directedness* (temporality), and the consciousness of death—can be found in Kant's account of 'the state of humanity'" (Yovel 1980, 191f42).

The Progressive and Evolutionary side of Kantian Anthropology

There are a number of progressive and evolutionary¹⁹⁸ aspects in Kant's teleological account of humanity that are relevant for its application as blueprints for sustainability. Though Kant adheres to the orthodox language of teleology, he employs it in a radical Enlightenment fashion to defend a secular, humanistic cosmopolitanism. This progressive use of teleology can be, I claim, of value for us today with regard to climate change. Most importantly (and from which others follow), Kant views humanity holistically, as an essentially collective species on a pathway of progression toward moral perfection (*Idea* 8:21; CB 8:123). We are different from animals because human progress requires intergenerational evolution, as Kant notes in

Anthropology:

It must be noted that with all other animals left to themselves, each individual reaches its complete destiny; however with the human being only the *species*, at best, reaches it; so that the human race can work its way up to its destiny only through *progress* in a series of innumerable many generations (*Anthropology* 7:323-325).

“Infinite perfectibility,” on Kant's view, “is not a characteristic of the human individual, but applies only to the human species” (Kuehn 2009, 83). From the historical perspective, humanity must be seen as a common, collectively united subject projecting along an overarching evolutionary pathway (Förster 2009, 193). As a collective species, humanity has one single, overarching telos that transcends individuals (Ameriks 2009, 46) and unites all humankind. This “collective purposiveness” (Wood 2009 112) enjoins our species to progressively perfect and cultivate its dispositions toward goodness (CB 8:115; 8:120). In pursuit of the realization of this end, humanity must orient itself toward a future goal of cosmopolitanism (*Idea* 8:26) and bring

¹⁹⁸ Yovel (1980, 80) agrees that humanity is dynamic and evolutionary (it is historical and projects itself into the future); cf p. 129; Linden takes a similar stance, characterizing Kant's views on humanity with regard to its “social evolution” (1988, 188).

about the end of domination (Herman 2009, 157). This requires humanity to work together internationally and intergenerationally to realize this task. *Idea* “implies an ideal end that is pre-given for all of us, one that, in several senses, we ‘must’ all work to bring about” (Ameriks 2009, 49). In the end of *Conjectural Beginning*, Kant teaches how every human being has a duty (as part of her moral determination) to contribute to this project of progress:

This, then, is the lesson taught by a philosophical attempt to write the most ancient part of human history: contentment with Providence, and with the course of human affairs, considered as a whole. For this course is not a decline from good to evil, but rather a gradual development from the worse to the better; and **nature itself has given the vocation to everyone to contribute as much to this progress as may be within his power** (CB trans. Beck, 8:123, boldface emphasis mine).

Such a task—because it challenges humanity’s moral resolve and will require generations to fulfill—can be seen as a heroic project for the betterment of the species as a whole. This project commands our respect and fills us with hope for future generations (CB 8:113), despite the seeming ubiquity of human narcissism. Enlightenment is also requisite for the facilitation of moral progress; this involves an openness to information, the capacity to think for oneself, and the ability to self-legislate the moral law. Enlightenment, as the cultural vehicle of progress for escaping the cunning of nature (Yovel 1980, 153), is relevant to the climate crisis today. In order to face up to the heroic task of overcoming climate change, humanity must become receptive to information from climate scientists, learn to think beyond the claims of “fake news” and climate skeptics, and act responsibly and sustainably.

Kant’s view of humanity—because of its collective, progressive, and goal-oriented status—makes it surprisingly different from most liberal approaches. This may be surprising for those who read Kant only through the lenses of the abstract, individualist-perspectives of

Groundwork.¹⁹⁹ From the vantage of these historical essays, however, Kant’s non-individualist historical thought (Ameriks 2009, 50) looks much closer to Hegel and Marx rather than the liberal box into which he is usually forced (Wood 1999, 319); the way Kant’s views navigate the channels of the Enlightenment thought and German romanticism anticipates the historical turn in Hegel’s philosophy of history and Marx’s historical materialism, yet is not tied to the potential problems of conservative Hegelian or radical Marxist ideology. Because of these interesting aspects (and their tension with individualist and capitalist appropriations), I now consider how they can be applied to the contemporary issue of most pressing concern: namely, the ethics of climate change. First, however, I must briefly describe some of the ethical, cognitive, and cultural challenges of climate change. Then, in Part 3, it will be suitable to discuss the supposed liberalism of Kantian thought and its ability to aid humanity in transitioning to sustainability.

Part 2: Climate Ethics, Kantian Anthropology, and the Heroic Incentive

From the standpoint of ethics, climate change is a particularly difficult collective problem because it has intergenerational and international causal significance. No single individual can be meaningfully held culpable. Unlike standard ethical issues where it is possible to impute an individual with praise, blame, or responsibility, the very nature of climate change eludes such an approach.²⁰⁰ This is because fossil fuel emissions—the primary drivers of human-made climate

¹⁹⁹ On Wood’s view, “Kant’s anthropology involves a complex individual psychology, but it is one arrived at only through a teleological theory about the collective tendencies of the human species in history” (Wood 1999, 200). Accordingly, “the common characteristic of Kant as a moral ‘individualist’ could not be more mistaken” (Wood 1999, 204, see also 319). Moreover, the connection between Kantian ethics and Kantian non-individualist anthropology is not a coincidence: “Kant’s ethical thought is fundamentally about the human race’s collective, historical struggle to develop its rational faculties” (Wood 1999, 296).

²⁰⁰ To be sure, one could convincingly argue that CEO’s of fossil fuel giants bear a larger degree of moral blame than average automobile operators; however, given the further complications in climate change regarding the time-lag of carbon and other emissions, this approach would perhaps lead us to hold long-dead fossil fuel tycoons from centuries ago accountable—this, though plausible, doesn’t seem to help our

change²⁰¹ which stay in the atmosphere²⁰² (or other regions, such as in the ocean or permafrost) for an unbelievably long time—are produced by all of us. For example, 10-15% of carbon dioxide lasts in the atmosphere for 10,000 years (Gardiner 2010, 6). This means that we are still feeling the effects from the industrial revolution. The effects of our unabated emissions, in turn, will be experienced by future generations for decades, if not centuries. Additionally, the very nature of feedback loops exacerbate global heating and food depletions, creating vicious, unpredictable cycles.²⁰³ This makes strictly individualist approaches to climate ethics insufficient, since the causes and effects of climate change “are smeared out in time as well as space” (Garvey 2008, 60). Even if responsibility can be assigned—say, to an affluent fossil-fuel dependent nation—the nation itself must still be considered as a single entity. Each individual contributes little and yet, added up, the results are devastating. In addition, there is the epistemic challenge of informing individuals about the moral implications of their emissions and the action-oriented challenge of making this information a real motivator for adequate lifestyle changes, all before we end up with runaway, abrupt climate change. Clearly, then, individualist normative theories are ill equipped to deal with climate change because of its complex spatial

current predicament; sure, we have inherited an “original sin” (Garvey 2008, 79) of unsustainable technologies, but we now have an obligation to restructure our maladaptive inheritance.

²⁰¹ For climate ethics, carbon dioxide is often the primary item of focus since it is the major driver (70% by comparison with other greenhouse gases) of human-caused heating; methane released from melting ice clathrates and peat bogs as well as factory farming also contribute significantly to global warming (Garvey 2008, 20; Gardiner 2010, 6).

²⁰² Carbon dioxide can last in the atmosphere for anywhere from 5-200 years; methane—whose effects are more deleterious but less long-lived—12 years (Gardiner 2010, 6).

²⁰³ This is not to say that climate science (which is, ultimately, a project of consilience between myriad disciplines such as climatology, geology, biology, economics, and so on) is inaccurate. Rather, by unpredictable I mean difficult to comprehend from the standpoint of the non-specialist layperson and involves huge uncertainties for the scientist and economist (Broome, *Climate Matters* 2012).

and temporal structure.²⁰⁴ Garvey discusses the difficulties of climate ethics as centering around three problems:

There are global features of climate change: the relevant causes and effects and the agents behind them are spatially dispersed throughout the globe. There are intergenerational aspects too: the relevant causes and effects and the agents involved are temporally dispersed. Finally, reflection on the problems attending climate change is hampered by our theoretical ineptitude which, when combined with the spatial and temporal features of climate change, can lead to a kind of moral corruption...we're not much good at thinking about our long-term future (Garvey 2008, 59-61).

Since individualistic approaches appear deficient, we must rethink how we interface with the environment. Because our moral vocation influences how we understand our humanity, climate change requires us to reconsider how this vocation can be integrated into a new framework for transitioning to sustainability. In what follows, I will argue that Kantian anthropology can be an asset for thinking about how we can address or resolve these difficulties in climate ethics.

Kant's Anthropology, Solidarity, and the Heroic Project

Climate change is a collective problem, requiring international effort and intergenerational solidarity. Fortunately, one strength of Kant's views as found in *Idea* and *Conjectural Beginning* is its emphasis on a teleological perspective of the human species, one which is hopeful for instilling a sense of solidarity and hope for our predicament. In *Idea*, Kant claims that we have a rough moral and existential project impeding the path toward cosmopolitanism (*Idea* 8:28).

Indeed, climate change, like war in Kant's account, is a unique challenge and opportunity for testing humanity's moral mettle. Just as war exaggerates humanity's unsociable tendencies but creates conditions for peace through its revelations, so also the realization that human-made

²⁰⁴ Standard approaches in Kantian ethics are no exception to this challenge. In fact, the traditional interpretation of Kantian ethics makes it particularly ill-equipped for dealing with the complexities of climate change (for challenges to this view, see Schönfeld's "The green Kant: environmental dynamics and sustainable policies" (2008). This explains the dearth of Kantian approaches to this problem and, moreover, my reason for thinking about how the insights of Kant's less individualist-oriented works may be integrated with the strengths of his deontology.

climate change is an obstacle for human history can help in the reconsideration of our place among other members of humankind and the world-system as a whole: in short, viewing climate change as a heroic task has direct implications for the human-environment interface (which is, currently, malfunctioning into obsolescence).

Climate change challenges our very ways of life. We can either remain in a mode of selfish, conceited disregard for the plight of humanity and the harms that will ensue, or we can gather, like the mythological hero, the strength to face the sublime might of climate change²⁰⁵ and foster an attitude of solidarity for resisting it. Such a realization can be a theoretical tool for achieving solidarity not only with our fellow citizens facing the plight of climate change, but with all humanity as it has culminated up to this point. In brief, the heroic project of climate change helps us to realize that we are, ultimately, despite spatial and generational gaps, on the same heroic battlefield. In *Conjectural Beginning* Kant tells us that laboring for the sake of social evolution will involve great toil and hardship, yet we must remain courageous in the face of our moral responsibility to perfect the species (CB 8:121). Kant's injunction to cultivate virtues²⁰⁶ such as courage for the sake of humanity's plight are, furthermore, a way of connecting his cosmopolitanism to environmental virtue.

²⁰⁵ In Chapter 4, I argued that the experience of climate change's sublimity is a key starting point in our moral preparation for seeing the environment in an ethical light. The reader may gather that this sublime experience is but the first glimmer of our moral project that is illumined in this chapter, and indeed both the aesthetic experience of climate change and our recognition of humankind as collective and holistic function in tandem as ways for thinking about alternative approaches for viewing Kant's philosophy as an asset for climate change and environmental ethics.

²⁰⁶ Since Kant isn't concerned, strictly speaking, with morality in these historical essays (except, perhaps, for the possible moral benefits of considering a progressive vision of history), he discloses several virtues but fails to give a systematic account of how they fit into his moral teachings. These would, later, be incorporated into *Metaphysics of Morals*, but they can be seen throughout his Lectures on Ethics and anthropology. Accordingly, in the following section I will cite from those texts when necessary in order to elucidate the implicit kernels of virtue found in the historical essays.

The Cosmopolitan Orientation and Environmental Virtue

In the anthropological texts, Kant underscores several virtues conducive for progress. Virtues such as courage (which is connected with the moral sense of honor), perseverance, and a stoic mindfulness of humanity's embeddedness in nature help us transform ourselves into cosmic citizens.²⁰⁷ These virtues, on my view, can be appropriated in an environmental way once we see ourselves as citizens of an earth-system that is in trouble. For climate change shows us how we should orient these virtues for the sake of sustainable stewardship so that we can perfect the species and fulfill our duties to ends in themselves. Now, traditional agent-centered perfectionist theories have aroused suspicion for climate and environmental ethicists.²⁰⁸ Nonetheless, environmental virtue theories have been on the rise: taking a point of departure from Kantian philosophy of history, I submit that we may also be able to consider virtues that are relevant from an environmental standpoint. Engaging with Kant's heuristic of humanity's evolutionary progression emboldens us with a heroic attitude, which in turn inspires us to pursue and cultivate traditional virtues that have a new significance when interpreted in light of the challenge of climate change.

The Kantian virtue of courage (CB 8:121) is one such virtue that can aid the heroic task for mitigating climate change and facing the challenges of human corruption and disregard for

²⁰⁷ Kant never explicitly discusses virtues in these historical texts, but they are implied. For passages in *Idea* and *Conjectural Beginning* where Kant discusses the virtues that I suggest are necessary for becoming cosmic citizens, see the following: courage (CB 8:121; *Anthropology* 7:257), honor (CB Ak. 8:113, *Idea* 8:30-31; *Anthropology* 7:257), perseverance and stoic mindfulness of our place in nature (*Idea* 8:27; CB 8:123).

²⁰⁸ For a brief account of why virtue ethics and perfectionistic theories are potentially limited for climate change and environmental issues, see Robert Elliot, "Normative Ethics" (2003). For proponents of the recent resurgence of virtue theoretic approaches vis-à-vis environmental philosophy, see Ronald L. Sandler, "Environmental Virtue Ethics" (2013) and Dale Jamieson, "When Utilitarians Should be Virtue Theorists" (2007).

nature. Courage is necessary not only for stepping up to the challenge in the battle against climate change, but also to overcome inclinations to laziness, cowardice, and contentedness with the business-as-usual paradigm of infinite economic growth. On Kant's view, when courage is rectified by reason, it "gives the resolute man strength that nature sometimes denies him" (*Anthropology* 7:256, cf. MM 6:406). For with courage, "he who in reflecting on danger does *not* yield; brave is he whose courage is *constant* in danger" (*Anthropology* 7:256). The virtue of courage, discussed explicitly and connected with honor in the *Anthropology* and *Metaphysics of Morals*, pervades *Idea* and *Conjectural Beginning*. With regard to climate change, courage and a proper *love of honor*—which is a negative disposition to act morally, because we wish not to be deserving of contempt (Collins LE 27:408-412.)²⁰⁹—allows us to engage in battle, heroically, for the progress of the species and the stewardship of nature.

When moral courage is properly connected with honor, humanity stands to be motivated to shift to sustainability; by considering how future generations might regard us if we leave them with a bleak outlook, we use the feeling of honor to guide us (*Idea* 8:30-1).²¹⁰ The dignity we have for ourselves repels the possibility of being despised by our youth: "If, in doing something worthy of honor," such as, for example, cultivating courage in the heroic battle of climate change,

²⁰⁹ Kant also connects *love of honor* with the virtue of proper pride, which is an unyielding concern for rectifying one's own dignity as a moral being (MM 6:465). In the Herder Lectures on Ethics, Kant warns that a pursuit of honor *for its own sake* "is more harmful to morality than any other passion" since it makes us slaves to our own selfish delusions (LE 27:45). The proper sense of honor that I am claiming is helpful for climate change concerns the *love of honor* connected to *moral courage* in achieving sustainable progress for future generations.

²¹⁰ Cf. to Kant's *Idea* (8:30-31)—how will future generations regard us? If we see ourselves as part of the collaborative goal of the species, we become capable of acting honorably for the sake of subsequent generations. Cf. Korsgaard (2004, 185f14) who cites the TP as a place where Kant conceives of morality as a "collaborative" endeavor.

we do not allow ourselves to be intimidated by taunts and derisive ridicule of it...but instead pursue our own course steadfastly, we display a moral courage which many who show themselves as brave figures on the battlefield or in a duel do not possess. That is to say, to venture something that duty commands...requires resoluteness, and even a high degree of courage; because *love of honor* is the constant companion of virtue (*Anthropology* 7:257).

When we think of how future generations will perceive our actions, we should “so act as to be worthy of honour, to deserve respect and esteem from all, if it were generally known... That man is worthy of positive honour, whose actions are meritorious, and contain more than they are due to contain” (Collins LE 27: 281). If we continue with a business-as-usual mindset, rather than strive to cultivate virtue and perfect the species, we will not be worthy of honor from the perspective of future generations. We would be wise to apply Kant’s “honor-imperative” to the future-oriented challenge of climate change.

The Kantian virtue of perseverance²¹¹ has environmental significance as well. Through the hardships and toil, despite not reaping personal benefits for happiness in our current situation (*Idea* 8:20), we gain a sobering²¹² appreciation for the task at hand (CB 8:123) and understand our rootedness in nature as cosmic citizens of the world (*Anthropology* 7:120). As Genevieve Lloyd puts it, “reading the *Idea* can make us aware of unfamiliar connections between modern ideals and old ideas of human beings as part of an interconnected cosmos” (Lloyd 2009, 211). This traditionally stoic virtue provides a cosmic context that is indeed helpful for sustainable

²¹¹ Perseverance, on a Kantian view, should not be confused with patience. The latter, according to Kant, is passive and has quietist implications (*Anthropology* 7:258), whereas perseverance (as is implicitly expressed in the historical essays) is active. An active, engaged perseverance is the ideal stance for the battle of climate change, because quietist patience is decidedly complicit with business-as-usual. The hero actively engages the world with perseverance.

²¹² The virtue of perseverance, implicitly discussed in the historical texts, can easily be connected to the *Metaphysics of Morals*. Kant discusses how the pursuit of virtue is a kind sobering “apathy” that can be regarded as moral strength of will, much like a stoic outlook: “The true strength of virtue is a *tranquil mind* with a considered and firm resolution to put the law of virtue in practice” (MM 6:409). With climate change, we need to cultivate this sobering strength in order to persevere and transition to sustainability.

cosmopolitanism. Cosmic-citizenship means, first and foremost, that humans see themselves as citizens of the world-system. Viewing Kant's virtues with this ecological perspective allows for a translation of traditional virtues into environmental ones, because they help humanity understand—as natural beings pushed along by the guiding hand of nature—their embeddedness in the world-system itself. And “As human culture grows,” on Wood's reading,

the degree of peace and order required for further progress also tends to increase...increasing interdependence and cooperation...This means that as culture progresses, human reason is challenged to devise ways of creating a well-ordered society in which people's antagonistic tendencies can be kept in check (Wood 1999, 213).

The virtuous acceptance of humanity's embeddedness in nature gleaned from the anthropological texts, connected with contemporary concerns for a sustainable maintenance of the planet, is indeed requisite for perfecting the species and securing a well-ordered society. Confronting the collective project of overcoming climate change and developing the heroic attitude of solidarity elucidates the virtues needed to create conditions for sustainable cosmopolitanism.

Ecological Stewardship as a Condition for Pursuing our Moral Vocation

Climate change is a challenge to humanity's place in the world: relations to persons, to non-rational nature, and with regard to humanity's moral vocation. From an environmental perspective, Kant's cosmopolitan vision has much to offer for progress, sustainability, stewardship, and a paradigm shift in human history. Whereas the notion of civil progress in Kant is explicit, my connections of Kant's heroic vision to sustainability, stewardship, and the environmental paradigm shift are, rather, *implied* connections that can be drawn from his thought.²¹³

²¹³ Matthew C. Altman in “Kant's Strategic Importance for Environmental Ethics” (2011) also hints at the resourcefulness of Kant's philosophy for facilitating a “stewardship model of nature” (Altman 2011, 48-51), but he does not expand upon this in much detail and draws mainly from the *Critique of Judgment* rather than the anthropological writings.

In *Conjectural Beginning*, Kant asserts that “the vocation of the species consists in progressing toward perfection” which includes “the progress of culture” (CB 8:115-17). And in the *Anthropology* and *Pedagogy*, Kant warns that because humanity is destined to be a social species, the human moral vocation can only be realized if humanity strives together, collectively (*Anthropology* 7:323-325; *Pedagogy* 9:445). This, of course, counters the standard views of his moral philosophy as strictly individualistic. Thus, in the historical texts²¹⁴ part of humanity’s vocation includes not only duties to self and duties to others, but a vast social project of progress for enlightening and harmonizing humanity with nature in aspiration for the highest good or realm of ends.

Kant’s discussion of the moral progress of the species inevitably leads to considerations of humanity’s overarching moral vocation. The heroic project of progressing the species, when conjoined with humanity’s moral vocation, has implications for the moral necessity of transitioning to sustainability and pursuing a stewardship role vis-à-vis nature. In light of climate change, humanity’s vocation must be aligned with the ends of ecological stewardship, or else progress will dwindle and humanity will suffer. Without stewardship as a prevailing attitude in the Anthropocene, humanity will continue on the path of unsustainable disenlightenment.²¹⁵ Climate change threatens the welfare of humans across the globe. Thus, sustainability is required for moral progress because unsustainability is indelibly tied with injustice and inequity—many humans will suffer as a result, precluding progress. Hindering the transition toward sustainable

²¹⁴ As well as the *Critique of Practical Reason* and *Religion*, where Kant introduces the duty of pursuing the highest good as a social duty.

²¹⁵ For a discussion on the idea of American “disenlightenment” as a cognitive and cultural disconnect from the realities of our current environmental predicament, see Schönfeld, “American disenlightenment, or climate change made in USA” (2016). Schönfeld draws the term from Kevin Philips, *American Theocracy: The Peril and Politics of Radical Religion, Oil, and Borrowed Money in the 21st Century* (2006).

stewardship not only ignores the collective duty of perfecting the species, but cruelly flouts our duties to others (for example, people in poorer countries who will face the brunt of the initial climate impacts such as heat waves, food shortages, and water depletion).²¹⁶ Additionally, without a benevolent, stewardship attitude toward nature, the disinterested appreciation and care of beautiful nature is thwarted, and an attitude of domination toward nature leads humanity down the vicious path of inhumaneness.²¹⁷ The ecological view of nature discussed in Chapter 3 and the aesthetic-moral preparation for it discussed in Chapter 4 thus point toward a stewardship attitude of nature.

That humanity's moral vocation requires sustainable and humane stewardship in turn requires a reexamination of what is valued (not just ends in themselves) and those that do the valuing (how humanity interfaces with the world). The implication, I claim, is that drawing from Kant's heroic vision of humanity can be of assistance in making the paradigm shift of human history. Kant's heroic vision—by allowing humanity's moral vocation to be seen in collective terms as a progression of the species as a whole in the face of a monolithic obstacle—can thus facilitate the required holistic paradigm shift for sustainability. The radical individualist paradigm, propped up and reinforced by developments since the industrial revolution, capitalism, and individualist moral philosophies inherited from the early modern period have led to a

²¹⁶ For a survey of the current and projected existential impacts of climate change on humanity and how they unjustly affect poorer nations, see the IPCC's Fifth Assessment Report (AR5).

²¹⁷ In the Collins Lectures on Ethics, Kant warns that an attitude of cruel domination toward animals leads to immoral treatment of humans, and that living responsibly according to our moral vocation requires stewardship of non-rational nature: "Since animals are an analogue of humanity, we observe duties to mankind when we observe them as analogues to this, and thus cultivate our duties to humanity. If a dog, for example, has served his master long and faithfully, that is an analogue of merit; hence I must reward it, and once the dog can serve no longer, must look after him to the end" (LE 27:459). Cf. to the Vigilantius Lectures on Ethics: "[I]t cannot be denied that a hard-heartedness towards animals is not in accordance with the law of reason, and is at least an unsuitable use of means. Any action whereby we may torment animals, or let them suffer distress, or otherwise treat them without love, is demeaning to ourselves. It is inhuman" (LE 27:710).

disintegration of the collective bonds of society. As a result, exploitation and corruption have all run amok, climaxing with the climate crisis.

Part 3: Kant's Holistic View of Humanity: Antidote to Liberalism?

Before making the transition to potential duties for sustainability, a discussion of Kant and the question of liberalism is paramount. By liberalism, I refer to the political ideology centered on the inviolability of individuality and the free pursuit of self-interest. This minimally regulated sense of individuality can best be understood by reference to the tripartite motto of the French Enlightenment: liberty, equality and solidarity. According to classic liberalism, liberty—understood in the sense of economic and moral freedom *from* external constraints—is vital for securing an enlightened populace and a flourishing society. This was certainly the view of liberalist forefathers and proponents, such as Bernard Mandeville, Adam Smith and J.S. Mill,²¹⁸ who believed that individuals pursuing their own self-interest, under minimal constraints, will in the end maximize the welfare of society as a whole. This obsession with liberty at the expense of equality and solidarity is problematic for a number of reasons. Without the mutual support of a free society collectively pursuing each other's ends in equal stead, corruption, economic stratification, and environmental exploitation hold sway. By the same token, a society that places too much emphasis on equality and solidarity without liberty is equally problematic, since it can foster totalitarian tendencies that render many voiceless. A balance of all three is key. Though in his later political writings Kant was weary of the enthusiasm of political solidarity (Williams

²¹⁸ Liberalism comes in many flavors, and I would be remiss if I didn't clarify that I do not intend to conflate the views of these thinkers and other liberals. Liberals from John Locke to J.S. Mill vary on many positions, including the extent to which regulation on, for instance, monopolies should be instituted, or whether there should be limits on free trade. However, despite the variances among these and other thinkers, they can conveniently be categorized as liberal insofar as they all admit individualism as one of the most, if not *the* most important considerations with regard to governance, policy, economic views, and rights.

2003, 131) which he sees as the seed for the French Revolution's Red Terror, Kant's philosophy is—as Wood and I myself claim—less liberal than many would suspect. In fact, his moral anthropology in many ways conflicts with the neoliberal outlook, since unregulated exploitation reduces humanity to a mere means and ignores humanity's collective-character. The ecological relevance of this claim, to be defended below, is best understood when put in the context of today regarding climate change and governance.

In the realm of contemporary sustainable policies, it is unsurprising that the most sustainable (and the most just) societies with respect to planetary boundaries and social foundations tend to be Democratic Socialist or collectivist-oriented countries (in particular, the Scandinavian countries, but also others such as Taiwan).²¹⁹ Individual freedoms and rights are important in these countries. However, they also focus on the safety and care of the people as a whole (i.e. equality) and, thus, emphasize the importance of constraints on inequitable and unsustainable liberal freedom. With regard to making the necessary changes for sustainability, certain individual freedoms must be challenged with an eye for the nation (or better, species) as a whole, and these can often best be achieved by unifying the public under the ideal of the collective good (i.e. solidarity), such as flourishing in accordance with sustainability.²²⁰

²¹⁹ For a discussion on the connections between just and sustainable economic and political policies, see the Worldwatch Institute's *State of the World 2013: Is Sustainability still Possible?* Carl Folke, "Respecting Planetary Boundaries and Reconnecting to the Biosphere" (2013) discusses planetary boundaries in relation to sustainability. For discussions on the connection between planetary boundaries and human equity and well-being, bringing forth the moral and political dimensions of planetary science with regard to social foundations, see Kate Raworth, "Defining a Safe and Just Place for Humanity" (2013). Steffen et. al. in "Planetary Boundaries: Guiding Human Development on a Changing Planet" (2015) discuss how planetary boundaries should not be seen as synonymous with ecological tipping points, but that the former are rather to be thought of as the fence of a safe operating space where it is possible to, as it were, halt the brakes on ecological catastrophe.

²²⁰ In China (which perhaps leans too much on the side of solidarity without protections for liberty and equality), collective effort is shored up to garner solidarity by emphasizing that the goal of sustainability is best framed in terms of "ecological citizenship." One example of eco-citizenship is the call for green burials, such as the utilization of the deceased for growing a tree. This gesture not only reinforces the

There has been much recent discussion of the question about whether classic liberalism or neoliberal ideologies are compatible with the economic, political, and cultural values that a sustainable society requires. Without directly challenging these views in this chapter (which, though interesting, would perhaps lead me too far astray), let it be granted for the sake of argument that liberal societies will at the very least face severe challenges and impediments in preserving their values during the necessary transition to sustainability. If this is the case and, moreover, if Kant's thought is in fact liberal to the core, is there not a real deadlock in the imagining of Kantianism as a blueprint for sustainability? The assumption that Kant is a classic liberal is what needs to be questioned. To be sure, many aspects of Kant's thought are liberal—especially where Kant seems to suggest that moral agents are discrete, individual ends in themselves and that government may not constrain their freedom (e.g., TP 8:290-291). However, to paint Kant as a mere individualist or mere liberal with regard to his political and ethical thought is to miss the whole picture; it is, as it were, to miss the forest for the trees.

Drawing from Kant's anthropological thought can aid in disabusing the misconception of Kant as an unswerving proponent of liberalism. For, Kant's understanding of humanity drawn from his historical, teleological, and anthropological writings—though individuals play a crucial part of his theory—questions the legitimacy and extent of liberal individualism, as well as the unsustainable and exploitative economic and political systems they entail/are associated with. Indeed, many philosophers such as Hermann Cohen and scholars such as Harry van der Linden and Allen Wood read between Kant's liberal lines in their interpretations.

unity of humanity with nature and the relevance of previous generations for future ones, but also increases valuable carbon sinks in the form of forests. For more on this, see Zeng et. al, "Ecological Citizenship and Green Burial in China" (2016). The notion of an ecological citizen—one who strives to achieve one's ends sustainably in accordance with the notion of a kingdom of ends (unifying liberty, equality, and solidarity)—is an instantiation of what I discussed previously in on the section reevaluating Kant's understanding of humanity's moral vocation vis-à-vis climate change.

Cohen expresses the incompatibility of Kant's ethics (especially the respect for persons formulation of the categorical imperative) with capitalism. The two are at odds because exploitation is an essential structural feature of capitalism (Linden 1988, 223). Since it is generally acknowledged that capitalism (and its paradigm of infinite growth and exploitation of people and the land) is incompatible with the transition to sustainability and cultivation of a stewardship ethic, it would likewise be wise to understand how the green Kant is incompatible with capitalism for similar reasons.

Harry van der Linden in his study *Kantian Ethics and Socialism* (1988) argues that not only does Kant's thought contain elements of a proto-communistic vision that Marx's later thought lacks (with regard to ethics), but Linden also argues that Kant's ethical thought provides the core for considering how a just and realistic transition to socialism is possible.²²¹ And, if socialistic or collectivist-oriented societies are required, as was granted, for the transition to sustainability, then perhaps Kant's thought isn't a mere limitation after all. Rather, the ideal republic that Kant's ethics obliges humanity to pursue is in fact incompatible with capitalism (Linden 1988, 198-205).

Wood argues throughout *Kant's Ethical Thought* (1999) that, much to the surprise of the liberal fans of Kantian ethics, Kant's thought is in fact much more non-individualist than is

²²¹ To be sure, van der Linden does take some liberties in his interpretation of Kant—perhaps, as Manfred Kuehn observes (“Review” 1991) by whiggishly reading the socialist neo-Kantian Hermann Cohen back into Kant's thought. Nonetheless, even if Kant cannot be read as a communistic thinker like Marx, I submit that many aspects of Kant's anthropological thought function as proto-socialist, sustainable building-blocks. This is especially true with regard to Kant's injunction to view humanity holistically, as a species perfecting itself in accordance with the requirements of morality and a view to the flourishing of the whole. Nonetheless, it is important to bear in mind that Kant was also a champion of liberal ideas, so one could read him less favorably for socialism if one were to highlight these aspects. The key point is that Kant's philosophy sits at an interesting middle-point between socialist and liberal ideals, and has been appropriated by both sides in post-Kantian political philosophy. I merely wish to highlight the socialist sides amenable to sustainability. A more in-depth study of the liberal and socialist aspects and influence of Kant falls outside the scope of this chapter.

usually supposed. Lamenting the standard approach of commentators of Kant's thought who ignore his anthropology, Wood suggests that

Perhaps Kant's undeserved reputation as an "individualist" is due in part to the fact that the community in which he placed his strongest hopes is of a kind to which we now find it impossible to relate. A philosopher who views the coercive powers of the state with suspicion, and advocates a religion of reason as the only true human community is easily perceived as condemning individuals to loneliness and advocating social atomism. From a Kantian standpoint, however, the right conclusion to draw is that the state was always the wrong institution in which to place one's hopes and that religion has thus far failed humanity.

Looking back to the century that preceded it, Kant's view of history looks like a rationalistic version of the apocalypse expected by egalitarian German Pietism. Looking ahead to the next two centuries, it might just as easily be interpreted in terms of Marxian communism or, as some neo-Kantians did in the late nineteenth and early twentieth centuries, as a radical *socialist* vision lying at the heart of Kantian ethics...if we are to fulfil our collective historical vocation, we will need to find (or invent) a form of ethical community that is capable of gradually reshaping our deeply corrupt social life (Wood 1999, 319-320).

Wood's claims regarding the non-individualist, socialistic-leaning tendencies in Kant's philosophy might shock those who have only been exposed to the traditional reading of Kant's philosophy. Wood's reading—though perhaps contentious—is really nothing new. For, in fact, Kant's philosophy has been subject to appropriations both on liberalist and socialist lines and for good reason. Followers of Adam Smith are not unjustified in painting a liberal Kant, as there are plenty of passages to suggest such a reading. Kant says, for instance, in *On the Common Saying*,

No one can coerce me to be happy in his way (as he thinks of the welfare of other human beings); instead, each may seek his happiness in the way that seems good to him, provided he does not infringe upon that freedom of everyone in accordance with a possible universal law (i.e., does not infringe upon this right of another). A government established on the principle of benevolence toward the people like that of a *father* toward his children—this is, a *paternalistic government (imperium paternale)*, in which the subjects, like minor children who cannot distinguish between what is truly useful or harmful to them, are constrained to behave only passively...—is the greatest *despotism* thinkable (TP 8:291).

On the liberal reading, the government may not redistribute one's wealth (which would amount to coercion) or determine the subjective ends of autonomous agents. And, moreover, Kant does cite *Wealth of Nations* in multiple places (Kleingeld 2012), so there is a clear liberal influence in his thinking. Yet on the other side, there are less liberal passages, such as in *Metaphysics of Morals*, where Kant argues that the government may apply progressive taxes or redistribute the wealth as a condition for the possibility for its less affluent citizens to exercise their autonomy:

The general will of the people has united itself into a society which is to maintain itself perpetually; and for this end it has submitted itself to the internal authority of the state in order to maintain those members of the society who are unable to maintain themselves. For reasons of state the government is therefore authorized to constrain the wealthy [*die Vermögenden*] to provide the means of sustenance to those who are unable to provide for even their most necessary natural needs. The wealthy have acquired an obligation to the commonwealth, since they owe their existence to an act of submitting to its protection and care, which they need in order to live; on this obligation the state now bases its right to contribute what is theirs in maintaining their fellow citizens. This can be done either by imposing a tax on the property or commerce of citizens, or by establishing funds and using the interest from them, not for the needs of the state (for it is rich), but for the needs of the people...it will do this by way of coercion, by public taxation, not merely by *voluntary* contributions, some of which are made for gain (MM 6:326).

In addition, Kant was not surprisingly (given passages like these) appropriated by socialists in the 20th century on two fronts. This suggests that a non-individualist view of Kant is not implausible, in concert with Wood's view. In *Der Marxismus: Seine Geschichte in Dokumenten* (1967), political scientist and historian of ideas Iring Fetscher notes that there were not only Marxists who imported Kantian ideas, but there were also neo-Kantians who argued that Marxist-flavored ideas made Kant stronger. The list of individuals noted by Fetscher on the neo-Kantian side includes Eduard Bernstein, Nikolai Berdjajew, Max Adler, and Peter von Struve (Fetscher 1973). Linden, in supporting Wood's non-individualist reading of Kant by means of an invigoration of socialist Hermann Cohen's neo-Kantian approach, simply brings to mind the older socialist appropriators of Kantian thought. In line with Wood's contention of a non-

individualist, socialist-oriented Kant, this evidence suggests that Kant’s philosophy has potential for both sides; thus, Wood’s reading of the non-individualist Kant is not completely at odds with Kantianism, though there is a tension between Kant’s liberal claims and his more socialist-leaning ones. In the end, then, the socialist Kant indeed has textual evidence, historical precedent, and contemporary defenders on its side.²²²

Not only is Kant’s collective vision of humanity readily compatible with socialism, but also now—with the climate crisis—I claim that Kant’s collective historical vocation can be a philosophical resource to the corruption of political regulatory capture and the capitalistic incentives of greed that block sustainable change. If Kant’s philosophical anthropology has more positive affinities to socialism than capitalism *and* if capitalism and the urge for endless growth, exploitation, and destruction of nature are intricately related, a Kantian critique of capitalism is readily possible given my defense of the green Kant’s sustainable outlook. A more in-depth discussion of the non-individualist elements of Kant’s anthropology, its connection to his ethics, and the unsustainability of capitalism, however, clearly exceeds the scope intended for this chapter; the reader is urged to draw his or her conclusions about potential implications of a Kantian critique of neoliberalism’s domination of humanity and nature and as it pertains to climate change. At this juncture, I shall conclude by discussing some concrete Kantian duties that may be instrumental for making sustainable change.

²²² For an example of a rejection of the liberal view and defense of the socialist side of Kant’s ethics, see Altman’s chapter “Moral and Legal Arguments for Universal Health Care” in *Kant and Applied Ethics* (2011). Altman presents a contemporary defense of a Kantian argument for social welfare programs such as universal health care. Contemporary liberal readers of Kant typically argue, among other reasons, that redistributing the wealth treats the affluent as a mere means in infringing on their liberty (Altman 2011, 77; Nozick 1974, 30-31). For liberal readings of Kant, see Robert Nozick, *Anarchy, State, and Utopia* (1974) and Friedrich A. Hayek, *Law, Legislation and Liberty* vol. 2, *The Mirage of Social Justice* (1976). Finally, some scholars highlight the liberal aspects of Kant but do so with a critical caution. For this middle approach, see Kenneth N. Waltz, “Kant, Liberalism, and War” (1962) and Paul Guyer, “Kantian Foundations of Liberalism” (1997).

The Heroic Project and Duty: Connecting the Foregoing to Kantian Ethics

Is it possible to generate any explicit duties regarding sustainability by taking Kant's holistic insights seriously? If not, my exploration would seem to offer only theoretical assistance for the present challenges regarding climate change. I claim that at least two Kantian duties can be utilized to prevent the moral and existential failing of climate change and the hindering of progress—one direct but imperfect duty of perfection to oneself, drawn from *Metaphysics of Morals* in a recent reading by Svoboda (2015); and one imperfect duty toward contributing to the progression of the species,²²³ interpreted apropos of the kingdom of ends formulation from *Groundwork*, drawn from Allen Wood (1999). The former can be helpful for the moral concern of biodiversity loss. The latter, since it is a social obligation, has important implications for the specious overemphasis on Kantian liberalism previously discussed.

According to Kant in the *Metaphysics of Morals*, moral agents have an imperfect though direct duty to cultivate their own moral perfection (MM 6:446). On Toby Svoboda's view, this has several implications for how we ought to treat non-human animals, with his central claim maintaining that

²²³ In *Creating the Kingdom of Ends* Korsgaard discusses Kant's claim that we cannot have duties of perfection to agents other than ourselves, because perfection can only be demanded of oneself (Korsgaard 2000, 220n36). Cf. "Enlightenment" on the notion of enlightened individualism (this would seem to undermine my claim that we have a duty to promote the perfection of the species). Properly speaking, one cannot have duties of *perfection* to others (MM 6:386). However, living in accordance with the kingdom of ends' formulation of harmonizing humanity's ends thereby promotes the perfection of the species. This duty is instrumental to facilitating humanity's perfection. Indeed, in accordance with the formulation of a kingdom of ends, this duty of species-perfection involves perfecting culture and education such that individuals in society are in a realistic position to foster their own perfection. As Korsgaard puts it, "Granted, that it would be both disrespectful to you, and unfair to me, to hold me responsible in a general way for your moral character. Yet it is clear that we have a duty to provide for the moral education of our children, and, Kant himself insists, our intimate friends [MM 6:470]. Choosing ends on another's behalf is as impossible as it would be disrespectful, but putting others in a good position to choose for themselves, and to choose them well, is the proper work of parents, teachers, friends, and politicians; providing for someone's moral education as well as nurturing her self-respect is an important part of the way we do this" (Korsgaard 2000, 220n36).

Animal cruelty and wanton destruction of flora are both proscribed in virtue of one's duty to increase her own moral perfection. Moreover, this duty gives human beings good moral reason to practice kindness toward animals and to engage in aesthetic appreciation of flora because such actions are ways to increase one's moral perfection (Svoboda 2012, 157).

In Kant's sense, passing on an opportunity to be kind to animals, or to go out of one's way to benefit animals, is a missed chance to fulfill one's duty. By ignoring the plights of animals whose suffering one could alleviate, for example, one misses a chance to cultivate virtuous dispositions that would be constitutive of one's moral purity and hence increase one's moral perfection. Kind actions toward animals can cultivate virtuous dispositions, such as benevolence... Similarly, passing on an opportunity to appreciate the beauty of plant life is also a missed opportunity to increase one's moral perfection, insofar as such appreciation could cultivate virtuous dispositions, such as the disposition to love something apart from its utility (see *MM*, AA 6:443) (Svoboda 2012, 158).

If Svoboda is right that the duty of perfection toward oneself entails a real concern for non-human nature, then a failure to contribute to the heroic project against climate change will threaten the moral purity of innumerable moral agents, since climate change threatens the well-being of flora and fauna on a massive scale: It has been suggested that we are on direct track for a sixth mass extinction. Despite flora and fauna having no intrinsic value on a traditional Kantian reading, Svoboda shows how we still have a moral duty to oneself to avoid harm and preserve the interests of such entities when possible (Svoboda 2015, 159). Failure to mitigate climate change thus precludes and even massively decreases the perfection of individual moral agents. This moral damage makes prospects for perfecting humanity as a species—as per the obligations of *Idea* and *Conjectural Beginning*—dubious. This is because, as I argued previously, Kant considers humanity as a collective, intergenerational species; moral progress cannot be completed by a single individual, let alone a single generation. Thus, Kant thinks, it is a moral task for each individual to contribute toward this moral project as fully as possible. This contribution involves not only an adherence to strict duties (such as treating ends in themselves with respect), but also a pursuit of wide duties of virtue (such as striving to become morally pure

and making use of one's cognitive abilities). If we allow a mass extinction to ensue without resisting climate change, we not only engage collectively in the self-destruction of moral purity, but we lose a wealth of biological and ecological knowledge. With the loss of purity, we become morally vicious, and with the loss of naturalistic knowledge, we miss out on opportunities to expand and cultivate our mental talents. Both make the moral progress of the species dubious. For these moral and intellectual reasons, then, a Kantian should worry about the detrimental effects climate change will have on biodiversity loss.

On Allen Wood's view, the formulation of a kingdom of ends—rather than the negative test in the formulation of universal law—asserts a positive aspirational duty toward agents, viz. that we should unite our ends for the sake of attaining a harmonious, organic system (Wood 1999, 185); The end of one member of humanity is tied up with the aim of the species. Kant's formulation of a realm of ends, understood in this way, neatly connects to his injunction in the historical texts to pursue a world of cosmopolitan order and perfecting humanity. Climate change poses a threat not only to future generations, but also current generations. Failure to address climate change harms most of the developing world who will suffer from extreme weather, displacement, disease, and food shortage. It also precludes the harmonization of human ends. Ignoring climate change treats impacted peoples as mere means and prevents the realization of a kingdom of ends as the harmonization of humanity with nature. If *Groundwork's* formulation of a kingdom of ends is to be taken seriously, then these historical texts ought to be taken seriously as well since they flesh out this notion more determinately.

As I have shown, part of the task for perfecting humanity involves taking on the heroic project in the fight against climate change. Thus, failure to partake impedes our duty to secure a realm of ends. And, drawing from Svoboda, it also makes one less morally perfect from the

standpoint of virtue, since climate change's impacts will irreparably damage biodiversity and the beautiful in nature. These Kantian injunctions for perfecting humanity by way of perfecting oneself and harmonizing our ends clearly have implications for climate ethics, insofar as they involve no distinction between the nationality of moral agents (as humanity as a species is the focus). On Kant's philosophical view of humanity, we are in the same boat and ought to work together, collectively. Similarly, climate change involves a collaborative effort on the part of nations. Perfecting the species also necessarily concerns the welfare of future generations, since they too considered morally on Kant's holistic view of humanity.²²⁴ This generation's handling of climate change will, for better or worse, determine the fate of these future generations. Those of this generation need to ask themselves: Do we want to be remembered honorably or as the moral bunglers of humankind?

To summarize: the ethical insights of Kantian anthropology relevant to climate ethics lead to two concrete duties for progressing and perfecting the species. The historical essays enjoin the perfection of the species, yet this is not possible unless individual agents strive for self-perfection and individual enlightenment, both morally and cognitively. Yet perfecting individual moral purity involves, as Svoboda has shown, a moral duty to promote the well-being of flora and fauna and avoid their unnecessary destruction. Thus, concern for human progress involves a concern for biodiversity that is imminently threatened by climate change. Moreover, as Wood shows, the perfection of the species is not possible unless the kingdom of ends—in which we harmonize our purposes for the sake of cosmopolitan peace—becomes a moral

²²⁴ Kant's holistic view of humanity is fleshed out in further detail in section III of Kant's essay on praxis (TP 8:307-313). Here, Kant contrasts his holistic view of humanity with Mendelssohn's individualist position. Since Kant is taking the defensive here (and the section is rather short), I chose to focus on *Conjectural Beginning* and *Idea*.

aspiration. However, this kingdom remains a mere whimsical fantasy so long as climate change threatens the lives of others and impedes their educational development,²²⁵ especially those of developing nations. In order to honor this formulation of the categorical imperative and put humanity on the pathway of perfection, anthropogenic climate change must be combated. For the impacts of climate change directly affect the possibility of a safe, just, and equitable human habitat. And so, connecting Kant's philosophical insights with regard to human progress with Svoboda and Wood's accounts provides reasons for considering how Kantian ethics can, and indeed, must become a blueprints for sustainability. This is the green Kant of sustainability.

Objection and Concluding Remarks

I conclude with a single menacing objection. It goes as follows: in *Conjectural Beginning*, Kant discusses how, during its rational awakening, humanity realizes that animals such as the lamb are mere tools for its use, and this is when humanity first gets elevated to the status of end in itself.²²⁶ The worry is that if non-human animals cannot be valued, how will environments and

²²⁵ Climate change is yet another enabler of humanity's continued "self-incurred minority," to draw from Kant's essay on enlightenment. The kingdom of ends not only requires humanity to be healthy and physically flourishing (for one cannot perform one's duty if one is malnourished, MM 6:388), but it also has strict demands for culture and education. Ignoring climate change and its harms to many nations threatens both of these from being actualized. In the *Pedagogy*, Kant claims that "Perhaps education will get better and better and each generation will move one step closer to the perfection of humanity; behind education lies the great secret of the perfection of human nature" (9:444). With regard to climate change, there is an interesting feedback loop: ignorance and poor education preclude people from accepting the reality of climate change, and as climate change worsens, education in many areas becomes even more limited and ineffective. It would be wise to follow Kant, and focus on cultivating a free-thinking, enlightened populace as a vehicle for striving for the perfection of the species and facing the heroic task of climate change. For a recent collection of essays addressing the challenges of education in the Anthropocene, see the Worldwatch Institute's *EarthEd: Rethinking Education on a Changing Planet* (2017).

²²⁶ "But there was yet a fourth and final step which reason took, and this raised man altogether above community with animals. He came to understand, however obscurely, that he is the true end of nature, and that nothing that lives on earth can compete with him in this regard. The first time he ever said to the sheep 'nature has given you the skin [*Pelz*] you wear for my use, not for yours'...from then on he looked upon them, no longer as fellow creatures, but as mere means and tools to whatever end he pleased...Thus man had entered into a relation of equality with all rational beings, whatever their rank (3:22), with

nature be given any moral consideration? Since climate ethics is a subset of the broader field of environmental ethics, this seems like a hard challenge for drawing from these historical texts, as Kant is explicit here that animals are mere tools. There are at least two ways to respond to this:²²⁷ first, despite climate ethics being a subset of environmental ethics, the two are quite opposed and proponents of each disagree on many things. For example, many environmental ethicists claim that standard anthropocentric normative ethics are problematic and often espouse more radical anti-anthropocentric positions.²²⁸ Climate ethicists, in contrast, tend to be more analytic, drawing upon consequentialist traditions.²²⁹ Even if it's granted that Kant's treatment of animals is problematic in this text, it doesn't follow that Kant's insights fail to be of value for climate ethics, since the latter is decidedly anthropocentric. And moreover, the concerns of climate ethics

respect to the claim of being an end in himself, respected as such by everyone, a being which no one might treat as a mere means to ulterior ends" (CB trans. Beck, 8:114).

²²⁷ Wilson (2008) grapples with this same objection in a different manner. She asserts that the passage of CB 8:114 is intended to be descriptive rather than normative: "The story of using sheepskin is not about how we ought to relate to animals but rather about how we can indeed use animals as mere means, because we are superior in our ability to compete with animals" (Wilson 2008, 8). While convincing, this interpretation fails to account for the fact that Kant uses this scriptural passage in order to introduce our awareness of ourselves as ends in themselves; it isn't simply descriptive, since this realization has a normative, binding force. I take Kant to be using this as a depiction not of humanity's skillful cunning, but rather as the first major stage in the evolution of humanity's disposition toward morality.

²²⁸ See, for example, the classic text "Is there a need for a new, and environmental ethic" (1973) where Routley argues that classic normative theories are deficient for environmental concerns. Other radical anti- and non-anthropocentric positions in environmental ethics include Callicott's *In Defense of the Land Ethic* (1989), which presents an ecocentric take on Leopold's land ethic, and proponents of the deep ecology tradition, such as Naess, "The shallow and the deep, long-range ecology movement: A summary" (1973).

²²⁹ For a good representation of a classic climate ethic approach from the standpoint of utilitarian, economic, and analytic traditions, see John Broome, *Climate Matters: Ethics in a Warming World* (2012). For a more recent approach in light of new empirical information, a useful guide is *Climate Ethics: Essential Readings* edited by Gardiner, Caney, Jamieson, and Shue (2010). It is unsurprising that the vast majority of approaches to climate ethics take their point of departure from a consequentialist standpoint. For climate change as a concept includes innumerable variables in calculating its potential trajectories, impacts, and outcomes, which require international effort from citizens, politicians, an interdisciplinary approach in the sciences the likes of which has never been witnessed in human history. Because of all these collaborative and probabilistic considerations, consequentialism is a safe normative strategy for tackling the ethics of climate change.

have, arguably, superseded the classical concerns of environmental ethics, such as species preservation and pollution mitigation;²³⁰ that is to say, since climate change is a looming sublime force that threatens all of life—not just humans, but biodiversity and species-welfare, tackling climate change will indirectly be a means for saving those species. This is why climate ethics focuses less on animal concerns and more with the big picture, dealing with climate change, which is how Kant’s anthropological insights will aid us if we grant his reading of animals as wanting.

Second, this objection doesn’t contextualize Kant’s understanding of humanity’s progression in the historical texts.²³¹ To be sure, Kant does discuss how humanity first discovers its end in itself status through the use-value of animals. However, Kant is clear that this is not the culmination of humanity’s development.²³² The beginning stages of culture are achieved as a result of this realization that it is an end in itself, but this stage of culture is still incomplete: “culture, considered as the genuine education of man and man as citizen, has perhaps not even begun properly, much less been completed” (CB trans. Beck, 8:116). Kant urges in *Conjectural*

²³⁰ Martin Schönfeld in “Plan B: global ethics on climate change” (2011) argues that the concerns of classic approaches to environmental ethics are largely moot given the new realities of anthropogenic climate change. Thus, they should be reintegrated into the new perspective of climate philosophy, which includes climate ethics on the one hand and new metaphysical orientations (such as from philosophical Daoism or the holistic vision of Heidegger) and ideology critique (such as materialistic, capitalistic, and Randian obsessions of Western culture) on the other hand.

²³¹ I am not alone in urging us to read Kant’s *Conjectural Beginning* in light of his larger orientation in philosophy and ethics. For other proponents of this holistic approach to Kantian thought, see Allen Wood, *Kant’s Ethical Thought* Part 2 and especially Chapter 6, (1998) and “The Unsociable Sociability: The Anthropological Basis of Kantian Ethics” 1991) and Pauline Kleingeld, “Kant, History, and the Idea of Moral Development” (1999).

²³² Seeing animals as mere means is essential (from the perspective of humanity’s historical development) for humanity to become aware of the moral law as binding upon it and conferring of dignity and respect. However, this historical contingency need not be construed as the completion of humanity’s development. The stage of viewing animals as mere means lacks the maturity of enlightened culture, and this final state is capable of disinterestedly valuing and loving nature (cf. CJ 5:380). Cf. *Conjectural Beginning* to Kant’s *Idea*: just as strife and war are historically necessary for peace and enlightenment, perpetual war is not the final state of society.

Beginning and elsewhere that humanity has to attain a stage of enlightened cosmopolitanism in order for it to live up to its true vocation.²³³ This enlightened position will necessarily include stewardship of nature and gentleness²³⁴ toward animals in line with Kant’s arguments in the *Metaphysics of Morals* against wantonly damaging beautiful nature (MM 6:443)—whether beautiful flora and fauna or the beauty of harmonious, flourishing environments. Even ugly flora and fauna have some ecological function to play (and contribute to the harmony and beauty of said ecosystem), when investigated through the auspices of teleological judgment (as was shown in Chapter 4). Likewise, enlightened humanity will have good reason not to exploit animals as mere tools. A Kantian could justify *prima facie* reasons for using animals,²³⁵ but implications of Kant’s discussion of animals for environmental and climate ethics are not as worrying as might appear if this passage in *Conjectural Beginning* is read out of context. Instead, it should be

²³³ For evidence that enlightened cosmopolitanism lies at the final stages of humanity’s development or that it has a place of central importance to the study of anthropology and philosophy, on Kant’s view, see *Idea* (8:26), *Conjectural Beginning* (8:117-118), *E* (8:39), *PP* (8:365), *TP* (8:309-313), *Anthropology* (7:120) and *Lectures on Anthropology* (25:734; Wood 1999, 199).

²³⁴ On Herman’s reading, our pursuit of a cosmopolitan civil society “shuts down some of the arenas of domination” (Herman 2009, 157). Surely, these would include an air of benevolence toward non-human animals and nature.

²³⁵ That we can be *prima facie* justified in using animals, especially in the midst of ethical dilemmas, is how I read the first lines of *Anthropology*, where Kant asserts that “The fact that the human being can have the ‘I’ in his representations raises him infinitely above all other living beings on earth...an entirely different being from *things*, such as irrational animals, with which one can do as one likes” (*Anthropology* 7:127). Though Kant seems to contradict himself with regard to his statements in *Metaphysics of Morals* and *Critique of Judgment* about not treating animals as *mere* tools, it must be borne in mind that, though *Anthropology* was among the last things Kant published in his lifetime (1798), he had been teaching its course and reworking the material for decades; it would be unsurprisingly if he didn’t, at times, forget to modify a statement he had qualified in a different treatise elsewhere. This course was intended for a popular audience; though I suggest we should look at the anthropological works for their value, we should bear in mind that their less systematic nature more readily lends itself to issues of consistency and interpretive trouble. This problem is resolved if we simply interpret “with which one can do as one likes” as true but understood in a qualified sense—for instance, so long as the animal is cared for and not treated maliciously.

considered in the larger scheme of Kant's thought as one of the first major stages in the evolution of humanity's disposition toward morality.

To conclude, a reconsideration of Kant's philosophical understanding of humanity (as expressed, for instance, in *Idea* and *Conjectural Beginning*) shows that his seemingly dated views of nature, humanity, and history are relevant for the ethical and political challenges of climate change. My exploration into Kant's anthropological texts indeed has important implications for the intergenerational, international ethics of climate change. For if humanity is viewed from a holistic standpoint, including all generations across all places; that is, as a collective species pursuing a progressive narrative for achieving a sustainable cosmopolitan world, Kant can then be seen as a helpful resource for dealing with tricky ethical and cognitive issues of climate change. Kant's texts give us a heroic vision for a cosmopolitan world: in short, they can be read as blueprints of sustainability. They are thus not only philosophically relevant with regard to Kant scholarship since they articulate the collective, non-individualist elements of his thought that aren't as clear from the standpoint of *Groundwork*, but they also have practical significance for the pressing concerns we face today, namely with regard to the climate crisis and the environmental deadlocks associated with liberalism and capitalism.

From Blueprints of Sustainability to an Environmental Ethic

We have established a firm theoretical foundation for the greening of Kant—both with regard to nature and aesthetics as well as humanity and sustainability. Though we have discussed several duties with regard to humanity, for example—the duty to perfect the species and Svoboda's indirect duty view of animals—we have yet to discuss the possibility of a new Kantian environmental ethics. Can a Kantian-inspired approach generate or justify actual environmental duties in applied ethics? In this dissertation's conclusion, I will indicate how the theoretical,

aesthetic, and political-cosmopolitan insights of this dissertation provide us with a promising outlook for applied ethics, thus securing the fate of the green Kant.

CONCLUSION

THE FATE OF THE GREEN KANT

I conclude this dissertation with a summary and outlook on Kant's fate. In Chapter 1 and 2, I characterized the traditional, anti-environmental reading of Kant, summarized the varied responses of proponents of the new reading of Kant, and then suggested that the divergences of the two Kants—as well as my own contributions to the literature—can be best understood by reframing the question of Kant's resourcefulness for environmental ethics in terms of climate change. Then, I began a three-pronged approach in my defense for how Kant is an environmental resource rather than a liability. This included a discussion of the ecological relevance and framing potential of Kant's pre-critical ontology of nature. Then, I explored Kant's critical aesthetics and teleology of nature in order to articulate indirect environmental duties regarding flora, fauna, and ecosystems. I also showed how a Kantian approach to environmental ethics can be helpful for the moral preparation of humanity for sustainability. This led to a defense and application of the usefulness of Kant's philosophical anthropology and philosophy of history for environmental virtue and sustainability. Finally, I defended how Kantianism can assist humanity as a blueprint for ecological stewardship, orienting humanity for a sustainable, enlightened future. In the last analysis, I have given reasons for why non-humans and nature in the broader sense can be seen from a moral perspective on Kant's view, why a Kantian account can provide defensible indirect duties toward non-rational nature, and why humanity has a collective and intergenerational duty as part of its moral vocation to strive for sustainability in the

Anthropocene.²³⁶ All of these converge into a new vision showing that the greening of Kant is not only possible, but that Kantians must indeed become green today. Moreover, environmental ethicists now have another environmental ally and theoretical resource from which to draw. They can thus give up their moot quarrel with the traditional Kant. Both sides indeed have much to gain from these contributions.

In Chapter 3 and Chapter 4 I argued that teleological judgment can help us to see nature itself as an organized Gaian system. These conclusions can fortify the apparent weakness of Korsgaard's account for environmental ethics, namely, that she cannot account for collectives such as species, ecosystems, or planetary systems, since her account hinges on the idea of the "nature goods" of animals. On my view, self-regulating systems such as ecosystems, environments, and Gaia itself are viewed as if they were organized beings and have, in some sense, a natural good corresponding to the maintenance and flourishing of their systems. My exploration into the pre-critical view of nature and the teleology of the third *Critique* helps her view to consider these sorts of entities from a Kantian perspective.

In Chapter 5 I built upon Wood's insight that ecosystems matter for Kant. With my discussion of humanity's moral vocation in light of sustainability, I sharpened Wood's account by arguing how a Kantian should reframe humanity's moral vocation in line with stewardship and preservation rather than lordship and domination. In addition, Chapter 3 deviates from Wood's account by considering how the pre-critical view of nature leaves greater potential for moral reflection of proto-rational nature. I refined Wood's discussion by factoring in the relevance of climate change and the Anthropocene with regard to our duties to non-rational

²³⁶ It is well known that Kant claims that humanity is the end of nature. In a nice play of irony, this turns out to be empirically true in the Anthropocene now, where humanity is truly the dominant force of the planet. This also means that humanity has a responsibility to own up to its vocation. To be authentically Kantian in the Anthropocene means, then, to be responsible stewards of nature.

nature, since climate change and our new role require us to think seriously about sustainability and the fate of both humanity and non-humans.

Chapter 4 and Chapter 5 also reinforced Svoboda's virtue theoretic account of Kantian ethics for our moral and aesthetic consideration of flora and fauna by considering it in light of the existentially pressing terms of climate change. For if we have duties to ourselves toward flora and fauna and also should be concerned for the natural good of such entities, the exigency of climate change with regard to the imminent sixth mass extinction presses us to take seriously Svoboda's reading of Kant and think about its relevance in relation to the climate crisis.

Finally, I interfaced with Wilson's account in two ways. First, I took her insight about the ecological embeddedness of humanity on Kant's view seriously, taking it one step further, since in Chapter 3 I showed how Kant's pre-critical ecological ontology is even more environmentally resourceful than the regulative view of nature from which she draws. Second, in Chapter 5 I took Wilson's suggestion for taking the anthropological works seriously, articulating how Kant's holistic view of humanity in those texts has relevance not only for the ecofeminist concerns that Wilson discusses, but for the even more pressing heroic challenge of climate change.

In sum, this dissertation has drawn from and expanded upon the aforementioned influential proponents of the new, green reading of Kant in order to explore alternative avenues for the greening of Kant. These avenues, as noted above, in many ways strengthen their approaches and in other ways illuminate important implications of a Kantian environmental ethic applied to climate change. In doing all this, I have made my case for the green Kant at the intersection of environmental ethics and Kant scholarship.

Is the green Kant not just a theoretical asset for climate change, but a practical one as well? Can the greening of Kant have any use for concrete issues in applied ethics? If this

dissertation has been successful, I submit that the answers to these questions are in the affirmative. I leave the specifics to these queries unanswered. They are tasks for a later time. My goal was simply to lay the foundation. In my exploration of the undervalued and underexploited environmental vistas of Kant's works, I have shown how Kant's philosophy can prove to be helpful and relevant as a theoretical resource for the climate crisis and the shift toward sustainability. The old views of Kant aren't necessarily wrong, but the times are changing; they require us to take a different perspective on these philosophical texts and what they offer us today. In light of these considerations, the fate of the green Kant is secured.

REFERENCES

- Allison, Henry E. 2001. *Kant's Theory of Taste: A Reading of the Critique of Aesthetic Judgment*. Cambridge; New York: Cambridge University Press.
- . 2009. "Teleology and History in Kant: The Critical Foundations of Kant's Philosophy of History." In *Kant's Idea for a Universal History with a Cosmopolitan Aim: A Critical Guide*, edited by Amélie Oksenberg Rorty and James Schmidt, 24-45. Cambridge: Cambridge University Press.
- Altman, Matthew C. 2011. *Kant and Applied Ethics: The Uses and Limits of Kant's Practical Philosophy*. Malden: Wiley-Blackwell.
- . 2017. "The Limits of Kant's Cosmopolitanism: Theory, Practice, and the Crisis in Syria." *Kantian Review* 22 (2): 179-204.
- Ameriks, Karl. 2009. "The Purposive Development of Human Capacities." In *Kant's Idea for a Universal History with a Cosmopolitan Aim: A Critical Guide*, edited by Amélie Oksenberg Rorty and James Schmidt, 46-67. Cambridge: Cambridge University Press.
- Assadourian, Erik, Lisa Mastny, and Worldwatch Institute. 2017. *EarthEd: Rethinking Education on a Changing Planet*. Washington, DC: Island Press.
- Ayres, Ed. 2000. "The Four Spikes." *Futures* 32 (6): 539-554.
- Beck, Lewis White. 1960. *A Commentary on Kant's Critique of Practical Reason*. Chicago: University of Chicago Press.
- Bell, David. 1987. "The Art of Judgment." *Mind* 96 (382): 221-244.
- Biasetti, Pierfrancesco. 2015. "From Beauty to Love: A Kantian Way to Environmental Moral Theory." *Environmental Philosophy* 12 (2): 139-160.
- Bilbro, J. L. 2015. "Sublime Failure: Why we'd Better Start Seeing our World as Beautiful." *South Atlantic* 80: 133-158.
- Blackburn, Simon. 2016. *The Oxford Dictionary of Philosophy*; . 3rd ed. Oxford: Oxford University Press, accessed 28 September, 2018, <http://www.oxfordreference.com/view/10.1093/acref/9780198735304.001.0001/acref-9780198735304-e-1088?rskey=QChXVo&result=1>.
- Boehm, Omri. 2014. *Kant's Critique of Spinoza*. Oxford; New York: Oxford University Press.
- Brady, Emily. 2013. *The Sublime in Modern Philosophy: Aesthetics, Ethics, and Nature*. New York: Cambridge University Press.

- Brennan, Andrew. "Environmental Ethics." Stanford Encyclopedia of Philosophy, accessed 22 October, 2018, <https://plato.stanford.edu/entries/ethics-environmental/>.
- Broome, John. 2012. *Climate Matters: Ethics in a Warming World*. New York: W.W. Norton.
- Budd, Malcolm. 2002. *The Aesthetic Appreciation of Nature: Essays on the Aesthetics of Nature*. Oxford; New York: Clarendon Press; Oxford University Press.
- Byrd, Jeremy. 2008. "Kant's Compatibilism in the New Elucidation of the First Principles of Metaphysical Cognition." *Kant-Studien* 99 (1): 68-79.
- Callicott, J. Baird. 1989. *In Defense of the Land Ethic: Essays in Environmental Philosophy*. Albany: State University of New York Press.
- . 2013. *Thinking Like a Planet: The Land Ethic and the Earth Ethic*. New York: Oxford University Press.
- . 2010. "Conceptual Foundations of the Land Ethic." In *Technology and Values: Essential Readings*, edited by Craig Hanks. Oxford: Wiley-Blackwell.
- Campbell, Joseph. 2008. *The Hero with a Thousand Faces*. Novato: New World Library.
- Cohen, Hermann. 1877. *Kants Begründung Der Ethik*. Berlin: F. Dümmers.
- Cohen, Marc S. "Aristotle's Metaphysics." Stanford Encyclopedia of Philosophy, <https://plato.stanford.edu/entries/aristotle-metaphysics/>.
- de Spinoza, Benedictus, Samuel Shirley, and Michael L. Morgan. 2002. *Complete Works*. Indianapolis: Hackett.
- Despland, Michel and Immanuel Kant. 1973. *Kant on History and Religion, with a Translation of Kant's "on the Failure of all Attempted Philosophical Theodicies"*. Montreal: McGill-Queen's University Press.
- Drengson, Alan. 1995. "Shifting Paradigms: From Technocrat to Planetary Person." In *The Deep Ecology Movement: An Introductory Anthology*, edited by Alan Drengson and Yuichi Inoue, 74-100. Berkeley: North Atlantic Books.
- Drengson, Alan R. and Yuichi Inoue. 1995. *The Deep Ecology Movement: An Introductory Anthology*. Vol. 50. Berkeley: North Atlantic Books.
- Eagleton, Terry. 1990. *The Ideology of the Aesthetic*. Oxford, UK ; Cambridge: Blackwell Publishers.
- Elliot, Robert. 2003. "Normative Ethics." In *Companion to Environmental Philosophy*, edited by Dale Jamieson, 177-191. Oxford: Blackwell Publishers.
- Ellis, Erle C. 2013. "Sustaining Biodiversity and People in the World's Anthropogenic Biomes." *Current Opinion in Environmental Sustainability* 5 (3-4): 368-372.
- Fetscher, Iring. 1967. *Der Marxismus. Seine Geschichte in Dokumenten. Philosophie, Ideologie, Ökonomie, Soziologie, Politik*. 2 Aufl ed. München: Piper.

- Folke, Carl. 2013. "Respecting Planetary Boundaries and Reconnecting to the Biosphere." In *State of the World 2013: Is Sustainability Still Possible?*, edited by Erik Assadourian and Tom Prugh, 19-27. Washington, Covelo, London: Island Press.
- Förster, Eckart. 2009. "The Hidden Plan of Nature." In *Kant's Idea for a Universal History with a Cosmopolitan Aim: A Critical Guide*, edited by Amélie Oksenberg Rorty and James Schmidt, 187-199. Cambridge: Cambridge University Press.
- Friedman, Michael. 1992. *Kant and the Exact Sciences*. Cambridge: Harvard University Press.
- . 2013. *Kant's Construction of Nature: A Reading of the Metaphysical Foundations of Natural Science*. Cambridge; New York: Cambridge University Press.
- Frierson, Patrick. 2014. "Kant, Individual Responsibility, and Climate Change." *Ethics, Policy and Environment* 1: 35-38.
- Garber, Daniel. 1995. "Leibniz: Physics and Philosophy." In *The Cambridge Companion to Leibniz*, edited by Nicholas Jolley, 270-352: Cambridge University Press.
- Gardiner, Stephen Mark. 2010. *Climate Ethics: Essential Readings*. Oxford; New York: Oxford University Press.
- . 2011. *A Perfect Moral Storm: The Ethical Tragedy of Climate Change*. New York: Oxford University Press.
- Garvey, James. 2008. *The Ethics of Climate Change: Right and Wrong in a Warming World*. London; New York: Continuum.
- Ginsborg, Hannah. 1997. "Lawfulness without a Law: Kant on the Free Play of Imagination and Understanding." *Philosophical Topics* 25 (1): 37-81.
- Gleyzer, Roman, Alan R. Felthous, and Charles E. Holzer. 2002. "Animal Cruelty and Psychiatric Disorders" *The Journal of the American Academy of Psychiatry and the Law* 30 (3): 257-65.
- Greaker, Mads, Per Espen Stoknes, Knut H. Alfsen, and Torgeir Ericson. 2013. "A Kantian Approach to Sustainable Development Indicators for Climate Change." *Ecological Economics* 91: 10-18.
- Guyer, Paul. 1993. *Kant and the Experience of Freedom: Essays on Aesthetics and Morality*. Cambridge; New York: Cambridge University Press.
- . 2004. "Kant on the Purity of the Ugly." *Kant E-Prints* 3: 1-21.
- . 1997. "Kantian Foundations for Liberalism." *Jahrbuch Für Recht Und Ethik: Themenschwerpunkt: 200 Jahre Kants "Metaphysik Der Sitten"* 5: 121-140.
- . 2005. *Kant's System of Nature and Freedom: Selected Essays*. Oxford: University Press.

- . 2007. "Natural Ends and the End of Nature: Naturalizing Kant's Teleology." In *Hans Christian Ørsted and the Romantic Legacy in Science: Ideas, Disciplines, and Practices*, edited by Robert M. Brain, Robert S. Cohen, and Ole Knudson, 75-96: Springer.
- Haeckel, Ernst. 1866. *Generelle Morphologie Der Organismen: Allgemeine Grundzüge Der Organischen Formen-Wissenschaft, Mechanisch Begründet Durch Die Von Charles Darwin Reformirte Descendenz-Theorie*. Berlin: G. Reimer.
- Haezrahi, Pepita. 1967. "The Concept of Man as End-in-Himself." In *Kant: A Collection of Critical Essays*, edited by Robert Paul Wolff, 291-313. Garden City, New York: Anchor Books.
- Heil, Martin and Richard Karban. 2010. "Explaining Evolution of Plant Communication by Airborne Signals." *Trends in Ecology & Evolution* 25 (3): 137-144.
- Herman, Barbara. 2009. "A Habitat for Humanity." In *Kant's Idea for a Universal History with a Cosmopolitan Aim: A Critical Guide*, edited by Amélie Oksenberg Rorty and James Schmidt, 150-170. Cambridge: Cambridge University Press.
- Hill, Thomas E. Jr. 1980. "Humanity as an End in Itself." *Ethics* 91 (1): 84-99.
- Hoff, Christina. 1983. "Kant's Invidious Humanism." *Environmental Ethics* 5 (1): 63-70.
- Hudson, Hud. 1991. "On the Significance of an Analytic of the Ugly in Kant's Deduction of Pure Judgments of Taste." In *Kant's Aesthetics*, edited by Ralf Meerbote, 87-103. Atascadero: Ridgeview Publishing Co.
- Iltis, Carolyne. 1971. "Leibniz and the Vis Viva Controversy." *The University of Chicago Press on Behalf of the History of Science Society* 62 (1): 21-35.
- James, Aaron. 2007. "Constructivism about Practical Reasons." *Philosophy and Phenomenological Research* LXXIV (2): 302-325.
- Jamieson, Dale. 2014. *Reason in a Dark Time: Why the Struggle Against Climate Change Failed--and what it Means for our Future*. Oxford; New York: Oxford University Press.
- . 2007. "When Utilitarians should be Virtue Theorists." *Utilitas* 19 (2): 160-183.
- Jesseph, Douglas M. 2002. "Hobbes's Atheism." *Midwest Studies in Philosophy* 26 (1): 140-166.
- Jolley, Nicholas. 1995. *The Cambridge Companion to Leibniz*. Cambridge; New York: Cambridge University Press.
- Kain, Patrick. 2010. "Duties regarding Animals." In *Kant's Metaphysics of Morals: A Critical Guide*, edited by Lara Denis, 210-233: Cambridge University Press.
- . 2018. "Kant on Animals." In *Animals: A History (Oxford Philosophical Concepts)*, edited by Peter Adamson and G. Fay Edwards, 211-232. New York: Oxford University Press.
- Kant, Immanuel and Lewis White Beck. 1963. *On History*. Indianapolis: Bobbs-Merrill.

- Kant, Immanuel, Mary J. Gregor, and Allen Wood. 1996. *Practical Philosophy*. New York: Cambridge University Press.
- Kant, Immanuel, Mary J. Gregor, and Jens Timmermann. 2012. *Groundwork of the Metaphysics of Morals*. Revis ed. Cambridge: Cambridge University Press.
- Kant, Immanuel, Paul Guyer, and Allen W. Wood. 1998. *Critique of Pure Reason*. Cambridge; New York: Cambridge University Press.
- Kant, Immanuel, Peter Heath, and J. B. Schneewind. 1997. *Lectures on Ethics*. New York: Cambridge University Press.
- Kant, Immanuel and Werner S. Pluhar. 1987. *Critique of Judgment*. Indianapolis: Hackett.
- Kant, Immanuel, David Walford, and Ralf Meerbote. 1992. *Theoretical Philosophy*. Cambridge; New York: Cambridge University Press.
- Kant, Immanuel, Eric Watkins, and Immanuel Kant. 2012. *Natural Science*. Cambridge: Cambridge University Press.
- Kant, Immanuel, Allen W. Wood, and George Di Giovanni. 1996. *Religion and Rational Theology*. Cambridge; New York: Cambridge University Press.
- Kant, Immanuel, Günter Zöller, and Robert B. Loudon. 2007. *Anthropology, History, and Education*. Cambridge; New York: Cambridge University Press.
- Karban, Richard, Kaori Shiojiri, Satomi Ishizaki, William C. Wetzel, and Richard Y. Evans. 2013. "Kin Recognition Affects Plant Communication and Defence." *Proceedings of the Royal Society B* 280 (1756). <http://rspb.royalsocietypublishing.org/content/280/1756/20123062>.
- Keck, Timothy R. 1975. *Kant and Socialism: The Marburg School in Wilhelminian Germany*. Madison: University of Wisconsin.
- Klein, Naomi. 2014. *This Changes Everything: Capitalism vs. the Climate*. New York: Simon & Schuster.
- Kleingeld, Pauline. 2012. *Kant and Cosmopolitanism: The Philosophical Ideal of World Citizenship*. Cambridge; New York: Cambridge University Press.
- . 1999. "Kant, History, and the Idea of Moral Development." *History of Philosophy Quarterly* 16 (1): 59-80.
- . 2007. "Kant's Second Thoughts on Race." *The Philosophical Quarterly* 57: 573-592.
- . 1993. "The Problematic Status of Gender-Neutral Language in the History of Philosophy." *The Philosophical Forum* XXV (2): 134-150.
- Korsgaard, Christine M. 1996. *Creating the Kingdom of Ends*. Cambridge; New York, NY, USA: Cambridge University Press.
- . 2004. "Fellow Creatures: Kantian Ethics and our Duties to Animals." The Tanner Lectures on Human Values, 6 February 2004.

- . 2012. "Introduction." In *Groundwork of the Metaphysics of Morals*. Cambridge: Cambridge University Press.
- Kuehn, Manfred. 2001. *Kant: A Biography*. New York: Cambridge University Press.
- . 2009. "Reason as a Species Characteristic." in *Kant's Idea for a Universal History with a Cosmopolitan Aim: A Critical Guide*, edited by Amélie Oksenberg Rorty and James Schmidt, 68-93. Cambridge: Cambridge University Press.
- . 1991. "Kantian Ethics and Socialism (Review)." *Journal of the History of Philosophy* 29 (2): 318-321.
- Kuhn, Thomas S. 1962. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Latour, Bruno. "Gifford Lectures Facing Gaia: A New Enquiry into Natural Religion." Resilience Science., accessed 22 October, 2018, <http://rs.resalliance.org/2013/03/22/bruno-latour-thinks-about-the-anthropocene/comment-page-1/>.
- Leibniz, Gottfried Wilhelm, Roger Ariew, and Daniel Garber. 1989. *Philosophical Essays*. Indianapolis: Hackett.
- Leopold, Aldo, Charles Walsh Schwartz, and Aldo Leopold. 1966. *A Sand County Almanac. with Other Essays on Conservation from Round River*. Enl ed. New York: Oxford University Press.
- Lloyd, Genevieve. 2009. "Providence as Progress: Kant's Variations on a Tale of Origins." In *Kant's Idea for a Universal History with a Cosmopolitan Aim: A Critical Guide*, edited by Amélie Oksenberg Rorty and James Schmidt. Cambridge: Cambridge University Press.
- Louden, Robert B. 2000. *Kant's Impure Ethics: From Rational Beings to Human Beings*. New York: Oxford University Press.
- Mace, Georgina M. 2014. "Whose Conservation? Changes in the Perception and Goals of Nature Conservation Require a Solid Scientific Basis." *Science* 345 (6204): 1558-1560.
- Massimi, Michela and Silvia De Bianchi. 2012. "Cartesian Echoes in Kant's Philosophy of Nature." *Studies in History and Philosophy of Science* 44 (3): 481-492.
- Mathews, Freya. 1995. "Conservation and Self-Realization: A Deep Ecology Perspective." In *The Deep Ecology Movement: An Introductory Anthology*, edited by Alan Drengson and Yuichi Inoue, 124-135. Berkeley: North Atlantic Books.
- Mill, John Stuart. 1859. *On Liberty*. London: J. W. Parker and Son.
- Monk, Ray. 1990. *Ludwig Wittgenstein: The Duty of Genius*. American ed. New York: Free Press: Maxwell Macmillan International.
- Morris, Michael. 2011. "The French Revolution and the New School of Europe: Towards a Political Interpretation of German Idealism." *The European Journal of Philosophy* 19 (4): 532-560.

- Naess, Arne. 1995a. "Self-Realization: An Ecological Approach to being in the World." In *The Deep Ecology Movement: An Introductory Anthology*, edited by Alan Drengson and Yuichi Inoue, 13-30. Berkeley: North Atlantic Books.
- . 1973. "The Shallow and the Deep, Long-Range Ecology Movement. A Summary." *Inquiry: An Interdisciplinary Journal of Philosophy* 16 (1): 95-100.
- . 1995b. "The Shallow and the Deep, Long-Range Ecology Movement. A Summary." In *The Deep Ecology Movement: An Introductory Anthology*, edited by Alan Drengson and Yuichi Inoue, 3-11. Berkeley: North Atlantic Books.
- . 1977. "Spinoza and Ecology." *Philosophia* 1: 45-54.
- Nisbet, Matthew. 2009. "Communicating Climate Change: Why Frames Matter for Public Engagement." *Environment* 51: 12-23.
- Nozick, Robert. 1974. *Anarchy, State, and Utopia*. New York: Basic Books.
- Nussbaum, Martha C. 1997. "Kant and Stoic Cosmopolitanism." *The Journal of Political Philosophy* 5 (1): 1-25.
- O'Neill, John, Alan Holland, and Andrew Light. 2008. *Environmental Values*. London; New York: Routledge.
- O'Neill, Onora. 1975. *Acting on Principle: An Essay on Kantian Ethics*. New York: Columbia University Press.
- . 1998. "Kant on Duties regarding Nonrational Nature." *Supplement to the Proceedings of the Aristotelian Society* 72 (1): 211-228.
- Phemister, Pauline. 2016. *Leibniz and the Environment*. London; New York: Routledge, Taylor & Francis Group.
- Philips, Kevin. 2006. *American Theocracy: The Peril and Politics of Radical Religion, Oil, and Borrowed Money in the 21st Century*. New York: Viking Penguin.
- Plumwood, Val. 1993. *Feminism and the Mastery of Nature*. London; New York: Routledge.
- Rachels, James. 1999. *The Elements of Moral Philosophy*. Boston: McGraw-Hill College.
- Raworth, Kate. 2013. "Defining a Safe and just Space for Humanity." In *State of the World 2013: Is Sustainability Still Possible?*, edited by Erik Assadourian and Tom Prugh, 28-38. Washington, Covelo, London: Island Press.
- Rayman, Joshua. 2012. *Kant on Sublimity and Morality*. University of Wales Press.
- Regan, Tom. 2004. *The Case for Animal Rights*. Berkeley: University of California Press.
- Rentmeester, Casey. 2010. "A Kantian Look at Climate Change." *Essays in Philosophy* 11 (1): 76-86.
- Rolston, Holmes. 1988. *Environmental Ethics: Duties to and Values in the Natural World*. Philadelphia: Temple University Press.

- Rorty, Amélie and James Schmidt. 2009. *Kant's Idea for a Universal History with a Cosmopolitan Aim: A Critical Guide*. Cambridge; New York: Cambridge University Press.
- Roulter, Scott. 2004. *Kantian Virtue at the Intersection of Politics and Nature: The Vale of Soul-Making*. Vol. 7. Rochester, NY: University of Rochester Press.
- Routley, Richard. 1973. "Is there a Need for a New, an Environmental Ethic?" *Sofia Press*, 17-22 September, 1973.
- Sandler, Ronald L. 2018. *Environmental Ethics: Theory in Practice*. Oxford ; New York: Oxford University Press.
- . 2013. *Environmental Virtue Ethics*. Blackwell Publishing.
- Schönfeld, Martin, ed. 2016. *American Disenlightenment, Or Climate Change made in USA*. Environmental Ethics for Canadians, edited by Byron Williston. 2nd ed. Oxford/Toronto: Oxford University Press.
- . 2006. "Animal Consciousness: Paradigm Change in the Life Sciences." *Perspectives on Science* 14 (3): 354-381.
- . 2008a. "The Green Kant: Environmental Dynamics and Sustainable Policies." *Environmental Ethics: Readings in Theory and Application*, edited by Louis P. Pojman and Paul Pojman. 5th ed.: Thomson Wadsworth.
- . 2018. "Kant on Animals." In *Encyclopedia of Animal Cognition and Behavior*, edited by Jennifer Vonk and Todd Shackelford. Berlin: Springer (Forthcoming).
- . 2008b. "The Kantian Blueprint of Climate Control." In *Global Warming and Climate Change: Ten Years After Kyoto and Still Counting*, edited by Velma I. Grover. Vol. 1, 201-215. Enfield: Science Publishers.
- . 2000. *The Philosophy of the Young Kant: The Precritical Project*. New York: Oxford University Press.
- . 2009. "Phoenix of Nature: Kant and the Big Bounce." *Collapse* 5.
- . 2011. "Plan B: Global Ethics on Climate Change." *Journal of Global Ethics* 7 (2): 129-136.
- . 1992. "Who Or what has Moral Standing?" *American Philosophical Quarterly* 29 (4): 353-362.
- Schott, Robin May. 1997. *Feminist Interpretations of Immanuel Kant*. University Park, Pa.: Pennsylvania State University Press.
- Schulting, Dennis. 2011. "Kant's Idealism: The Current Debate." In *Kant's Idealism: New Interpretations of a Controversial Doctrine*, edited by Dennis Schulting and Jacco Verburgt, 1-25. Netherlands: Springer
- Singer, Peter. 1990. *Animal Liberation*. New York: New York Review of Books : Distributed by Random House.

- . 1993. *Practical Ethics*. Cambridge ; New York: Cambridge University Press.
- Skidmore, J. 2001. "Duties to Animals: The Failure of Kant's Moral Theory." *The Journal of Value Inquiry* 35: 541–559.
- Smith, Norman Kemp. 1918. *A Commentary to Kant's 'Critique of Pure Reason'*. London: Macmillan.
- Stach, Reiner and Shelley Laura Frisch. 2005. *Kafka, the Decisive Years*. Orlando: Harcourt.
- Stan, Marius. 2013. "Kant's Third Law of Mechanics: The Long Shadow of Leibniz." *Studies in History and Philosophy of Science* 44 (3): 493-504.
- Starke, Linda, Erik Assadourian, Tom Prugh, and Worldwatch Institute. 2013. *State of the World 2013: Is Sustainability Still Possible?*. Washington, DC: Island Press.
- Strawson, P. F. 1966. *The Bounds of Sense: An Essay on Kant's 'Critique of Pure Reason'*. London: Methuen.
- Svoboda, Toby. 2012. "Duties regarding Nature: A Kantian Approach to Environmental Ethics." *Kant Yearbook* 4 (1): 143-163.
- . 2015. *Duties regarding Nature: A Kantian Environmental Ethic*. Vol. 32. New York; London: Routledge, Taylor & Francis Group.
- Taylor, Paul W. 1986. *Respect for Nature: A Theory of Environmental Ethics*. Princeton: Princeton University Press.
- Thompson, Michael. 2011. "Climate, Imagination, Kant, and Situational Awareness." *Journal of Global Ethics* 7 (2): 137-147.
- Timmermann, Jens. 2005. "When the Dog Wags the Tail: Animal Welfare and the Indirect Duty in Kantian Ethics." *Kantian Review* 10: 128-149.
- Vaihinger, Hans. 1911. *Die Philosophie Des Als Ob*. Berlin: Reuther & Reichard.
- Van der Linden, Harry. 1988. *Kantian Ethics and Socialism*. Indianapolis: Hackett.
- Von Hayek, Friedrich A. 1976. *The Mirage of Social Justice*. Vol. 2. Chicago: University of Chicago Press.
- Vaughn, Michael C., Qiang Fu, Matt DeLisi, Kevin M. Beaver, Brian E. Perron, Katie Terrell, and Matthew O. Howard. 2009. "Correlates of Cruelty to Animals in the United States: Results from the National Epidemiologic Survey on Alcohol and Related Conditions." *Journal of Psychiatric Research* 43 (15): 1213-1218.
- Vorländer, Karl. 1900. *Kant Und Der Sozialismus Unter Besonderer Berücksichtigung Der Neuesten Theoretischen Bewegung Innerhalb Des Marxismus*. Berlin: Reuther & Reichard.
- . 1926. *Kant Und Marx; Ein Beitrag Zur Philosophie Des Sozialismus*. 2, neubearb Aufl ed. Tübingen: Mohr.

- Waltz, Kenneth N. 1962. "Kant, Liberalism, and War." *The American Political Science Review* 56 (2): 331-340.
- Warren, Karen. 1990. "The Power and Promise of Ecofeminism." *Environmental Ethics* 12 (2): 125-146.
- Watkins, Eric. 2003. "Forces and Causes in Kant's Early Pre-Critical Writings." *Studies in History and Philosophy of Science* 34: 5-27.
- . 2005. *Kant and the Metaphysics of Causality*. Cambridge; New York: Cambridge University Press.
- . 2014. "Kant's Philosophy of Science." Stanford Encyclopedia of Philosophy, accessed 22 October, 2018, <https://plato.stanford.edu/entries/kant-science/>.
- Wenzel, Christian. 1999. "Kant Finds Nothing Ugly?" *British Journal of Aesthetics* 39 (4): 416-422.
- White, Lynn Jr. 1967. "The Historical Roots of our Ecologic Crisis." *Science* 155 (3767): 1203-1207.
- Willey, Thomas E. 1978. *Back to Kant: The Revival of Kantianism in German Social and Historical Thought, 1860-1914*. Detroit: Wayne State University Press.
- Williams, Howard. 2003. *Kant's Critique of Hobbes: Sovereignty and Cosmopolitanism*. Cardiff: University of Wales Press.
- Wilson, Holly L. 2008. "The Green Kant: Kant's Treatment of Animals." In *Environmental Ethics: Readings in Theory and Application*, edited by Paul Pojman and Louis Pojman, 5-13.
- . 1997. "Rethinking Kant from the Perspective of Ecofeminism." In *Feminist Interpretations of Immanuel Kant*, edited by Robin May Schott, 355-372. University Park, Pennsylvania: The Pennsylvania University Press.
- Wood, Allen. 1998. "Kant on Duties regarding Nonrational Nature." *Proceedings of the Aristotelian Society Supplement* LXXII: 189–210.
- . 2009. "Kant's Fourth Proposition: The Unsociable Sociability of Human Nature." In *Kant's Universal History with a Cosmopolitan Aim: A Critical Guide*, edited by Amelie Oksenberg Rorty and James Schmidt, 112-128. New York: Cambridge University Press.
- . 1999. *Kant's Ethical Thought*. Cambridge; New York: Cambridge University Press.
- Wulf, Andrea. 2015. *The Invention of Nature: Alexander Von Humboldt's New World*. First American Edition ed. New York: Vintage Books.
- Yovel, Yirmiyahu. 1980. *Kant and the Philosophy of History*. Princeton: Princeton University Press.
- Zeng, Chen, William Sweet, and Qian Cheng. 2016. "Ecological Citizenship and Green Burial in China." *Journal of Agricultural and Environmental Ethics* 29 (6): 985–1001.