THE UNIVERSITY OF CHICAGO

CHRISTIAN REALIST ENVIRONMENTAL ETHICS

A DISSERTATION SUBMITTED TO

THE FACULTY OF THE DIVINITY SCHOOL

IN CANDIDACY FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

BY

DAVID ALLEN BARR

CHICAGO, ILLINOIS

DECEMBER 2019

For James and Benjamin

Table of Contents

Acknowledgments

I owe a debt of gratitude to many people without whom this project would have been impossible. I would like to thank my advisor, William Schweiker, whose enthusiasm for this project calmed my doubts and who refused to let me lower my sights or narrow my focus when I feared I had taken on too much. I owe Sarah Fredericks many thanks for her careful reading of my drafts and her conscientious feedback on them. This thesis is more restrained, careful, and generous because of her help, and where it fails to embody these qualities, it does so despite her best efforts. Robin Lovin's advice and encouragement were acts of pure generosity from a scholar whose legacy is secure.

I would like to thank Willis Jenkins and Fred Simmons, under whose tutelage and mentorship this effort began. Your original and critical thinking freed me from many of the errors I criticize here. Your support and examples allowed me to imagine myself continuing in this work and showed it to be a path worth following.

I am deeply grateful to the many colleagues and co-laborers whose intelligence, generosity, and friendship have sharpened and sustained this work. Willa Swenson-Lengyel forged a path through her graduate education that I have followed shamelessly in almost every detail, to my great benefit. Peng Yin has displayed an uncanny ability to be present at every critical juncture, providing calm support and clear thinking when it was most urgently needed. Russell Johnson read every chapter of this dissertation with care, insight, and encouragement. Without him, the result would have been less polished and the process far less fun.

Many thanks are due to the wonderful group of Schweiker students who read and improved this project along the way. This august company includes Michael Le Chevalier, Devin O'Rourke, Eun Hwang, Michelle Harrington, Sara-Jo Swiatek, Darryl Dale-Ferguson, Raúl

Zegarra, Kristel Clayville, Andrew Packman, Herbert Lin, and John Buchmann. Your accountability, commitment, and insight structured and refined the writing process and your examples inspired better, more careful work.

To James and Benjamin Barr, born in the final months of writing, I owe many thanks for the joy, distractions, and perspective you have given me. I am grateful for the lessons about human nature you will continue to teach me and for the stamp of happiness with which you have forever marked my memories of these final months of writing. May I always strive in my work to make the world you will inherit more peaceful, just, and beautiful.

This dissertation would never have arrived on time if it were not for the regiment of conscripts and volunteers who cared for the twins following their arrival. I will be forever grateful to Gloria Fernandez-Tearte, Robert and Rebecca Barr, Amora Mayo-Perez, Peng Yin (again), Jennifer Seigel, Sharon Banfield, Nivia d'Errico, Carlie Ewen, and Courtney Hattan for their generosity and willingness to drop everything and come when needed.

Finally, I want to thank my wife, Cherice. You have provided me with every form of support that support can take. Without your encouragement and belief in me, none of this would have been possible. Your generosity and earnest love for others have inoculated me against the cynicism toward which I am otherwise prone and have made me a better person and a better ethicist. The immediacy and depth of that love calls me to do better, more urgent work and reminds me of the moments when academic reflection should end and generous practice begin. If I could ever write about the ethical life as well as you live it, my work would be complete.

Chapter One: Introduction

Man has always been his own most vexing problem. How shall he think of himself? Every affirmation which he makes about his stature, virtue, or place in the cosmos becomes involved in contradictions when fully analysed. The analysis reveals some presupposition or implication which seems to deny what the proposition intended to affirm.

If man insists he is a child of nature and that he ought not to pretend to be more than the animal, which he obviously is, he tacitly admits that he is, at any rate, a curious kind of animal who has both the inclination and the capacity to make such pretensions. If on the other hand he insists upon his unique and distinctive place in nature and points to his rational faculties as proof of his special eminence, there is usually an anxious note in his avowals of uniqueness which betrays his unconscious sense of kinship with the brutes.

-Reinhold Niebuhr, The Nature and Destiny of Man, vol. 1

Man is, and yet is not, involved in the flux of nature and time. He is a creature, subject to nature's necessities and limitations; but he is also a free spirit who knows of the brevity of his years and by this knowledge transcends the temporal by some capacity within himself…

Man's ability to transcend the flux of nature gives him the capacity to make history. Human history is rooted in the natural process but it is something more than either the determined sequences of natural causation or the capricious variations and occurrences of the natural world. It is compounded of natural necessity and human freedom. Man's freedom to transcend the natural flux gives him the possibility of grasping a span of time in his consciousness and thereby of knowing history. It also enables him to change, reorder, and transmute the causal sequences of nature and thereby to make history…

History thus moves between the limits of nature and eternity. All human actions are conditioned on the one hand by nature's necessities and limitations, and determined on the other hand by an explicit or implicit loyalty to man's conception of the changeless principles which underlie change.

-Niebuhr, The Nature and Destiny of Man, vol. 2

We are our own most vexing environmental problem. We are obviously a problem for our fellow creatures on the planet, but we are also a problem for our own attempts to make sense of our environmental situation. We are in and out of the flow of nature, dependent on and immersed in biotic communities, which we nevertheless transcend and transform. Every assertion we make about ourselves in ecological context becomes involved in contradictions when fully analyzed. We require the functioning of ecosystems to live, but we find in our own

experience of life that we are creatures who cannot merely live: we have drives toward self-realization and development, toward innovation, the creation of novelty, and the transformation of the forms we inherit. We cannot but break natural harmonies, harmonies on which we depend for life. Every assertion of uniqueness stands in contradiction to the clear fact of our continuity with the rest of nature, of which we are obviously a part. Every assertion of continuity stands in contradiction to the clear fact that we alone have the freedom to threaten nature, from which we are obviously distinct.

The goal of this project is not to motivate Christians to behave better in response to our environmental situation, though I will not consider it a failure if this happens. The goal is to help any interested person think systematically about the vexing problem of our environmental existence. The proposal is not to establish a set of Christian incentives to do what is already clear to all observers of good will that we must, but to offer a way of making sense of our condition as agents in environmental context. The hope is that a theological perspective can help a general audience make sense of the problem of human life within ecosystems, not just to react to the challenges that flow from it.

A main pillar of the argument is that our environmental problems have their roots in the sort of creatures we are, not merely in the way we imagine ourselves; we need to grasp the former, not just change the latter. We do not have an environmental crisis because we *think* we are unique in nature; we have an environmental crisis because we *are* unique. If a man keeps hitting his head on low-hanging branches, the responsible thing to do is not to convince him he is short, but to show him he is tall. The responsible way to analyze our environmental condition is not convince us we are just another animal, but to understand the ways in which we are not. Human beings, from our emergence as a species, have carved a path of destruction across the

globe. Our long history of interactions with the rest of nature has proceeded as if designed to leave no doubt about our uniqueness and the unique threat we pose. We do not need theology to persuade us we are merely a part of nature; we need theology to help us grasp the paradox that such a creature of nature can stand out from it in such dangerous and deadly ways.

The main thesis of this dissertation is that the most helpful contribution a theological perspective can make to the effort of responding to environmental problems is by helping us make coherent sense of our existence within our environmental situation. The most important challenge of thinking theologically about the environment is interpreting clearly the profound problems of our context, not removing those problems through fixes to the theological imagination. Bad theology is not the cause of environmental disaster and good theology is not the solution. The point is to understand how to act responsibly in a deeply ambiguous moral situation, not to deliver us from such ambiguity.

Many works of ethics, not just environmental ethics, are about grounding and describing how we ought to behave in a given context and why. The implicit or explicit understanding is that, were the recommend norms to be promulgated widely enough and practiced consistently enough, the problem would be solved. For example, a Christian thinker might argue for a pacifist ethics based on the life of Jesus. She could have doubts, perhaps serious doubts, that this ethics will ever be (or even that it *could* ever be) widely adopted and practiced. However, she will usually suppose that, *if* everyone adopted and practiced such an ethics, the world would be at peace.

This dissertation does not offer such an argument. I do not claim that, were its recommendations adopted, our environmental crisis would be resolved. The right environmental ethics or theological account is not going to fix the environment. The cause of our environmental

problems is not that there are too few of us with the right view of the environment. While such an approach would have the convenient effect of assuring us that we are not part of the problem, it does not fit the evidence. As we will see, all human societies have affected their environments drastically, whatever their values and beliefs. The argument here is that, unlike issues like violence in human society, at least some major part of human disruptions of the natural world is unavoidable, even if we act consistently from the most pristine and perfect environmental ethics. At no point will this dissertation suggest that its way of thinking about the environment would end environmental destructiveness if carried out consistently. Instead, it proposes a way to coordinate systematically our thinking about the moral life in an environmental context. The ways forward it does recommend are all about maximizing human and nonhuman goods in our sinful, tragic, fallible, and ironic condition. Most of what follows, however, is not about a way forward, but about understanding what is going on.

To anyone of good faith who pays any attention to the state of the biosphere, it should be obvious that there is an urgent need for action. However, beginning a work of environmental ethics with an argument from urgency can lead to errors (some of which we will explore in detail). The Christian moral life is typically serious about what it takes to be true of God and the created order in relation to God. Making sense of novel situations thus requires serious reflection about how what is new relates to what is known. This dissertation proposes that how we are to see ourselves, our situation, and our obligations is clarified when we see our context in relation to what is discerned through faith, even as what we learn can drive revisions of what we have heretofore taken to be true. It argues that we cannot take from our observation of ecological disaster a clear and urgent moral demand and then just change radically what we have always taken to be true for the sake of responding appropriately. Any effort to do so leads to errors and

dissonance in our thinking. This is also not how morally and religiously serious people normally operate. We do not voluntarily decide what to believe is true of the world because we hope it will improve the outcomes of our behavior. We have to make sense of what is new within an epistemological and hermeneutic framework that makes it possible to see our moral obligations as true statements of fact, not useful postulates to save the earth.

If we start from the urgency of the situation and propose theological innovations on the basis that we think they will make us behave better, we have neglected to do the difficult task of relating our proposals organically to the rest of our belief structure. More basically, we have made a miscalculation about human agency. Christianity has a rich tradition of thinking about human nature, our powers, propensities, and problems. Much of it expresses deep reservations about humanity's ability to act consistently selflessly in response to a given problem. It presents us as prone to sin and particularly to blindness about our sin. It also often interprets the fundamental challenges to human life together as not finally eradicable without the consummating work of God at the end of human history. If, in a search for evocative symbols to motivate environmental behavior, we look long enough and carefully enough at Christian moral theology, what we will find instead are an abundance of reasons to doubt that human behavior is shaped determinatively by our symbolic imagination.

Beginning with the capacities and limits of human beings, rather than the exigencies of our crisis, can help us avoid the errors of what David Orr calls "giddy and breathless talk of new ages and paradigm shifts."[1] What we often lack is a way to think about our environmental existence that achieves coherence through depth, rather than motivation through simplification. The need is to bring coherence to all the facts of our environmental context, particularly the most

[1] David W. Orr, *Ecological Literacy: Education and the Transition to a Postmodern World*, First edition (Albany: SUNY Press, 1991), 19.

inconvenient and discouraging ones, and through these facts—rather than in spite of them—find a realistic basis for action.[2]

The effort to make sense of a novel problem in light of Christian beliefs about human nature, moral ideals, and God makes this dissertation an example of "Christian realism," a way of thinking that combines realism about politics, morality, and theology. Specifically, this dissertation instantiates a mode of Christian realism influenced by the work of Reinhold Niebuhr. Niebuhrian Christian realism takes the complexity of the human situation as its starting point, interpreting the center of human personhood as a paradox that exceeds human rational reflection.[3] To the Christian realist, we are an inscrutable, supra-rational combination of rationally incommensurable traits. Our attempts to isolate and manipulate aspects of our lives do violence to our complexity and lead to political miscalculation. Christian realism interprets the paradox of human nature in relation to the paradox of God, making room for contradiction and mystery in our thinking. The need to resolve all ambiguity thus removed, we are able to view our full situation with open eyes, even the discouraging aspects, and thus act prudently in light of this more complete picture. Christian theology does not provide Christian realists with all the answers; but, at its best, it makes us able to tolerate and accept what we cannot know and hold together coherently what we can. It allows us to act responsibly within the bounds of our knowledge and the limits of our capacity to remove the problems of our collective lives.

---

[2] This section is inspired by Walter Marshall Horton's definition of realism: "The word 'realism' suggests to me, above all, a resolute determination to face all the facts of life candidly, beginning preferably with the most stubborn, perplexing, and disheartening ones, so that any lingering romantic illusions may be dispelled at the start; and then, *through* these stubborn facts and not *in spite of them*, to pierce as deep as one may into the solid structure of reality, until one finds whatever ground of courage, hope, and faith is *actually* there, independent of human preferences and desires, and so casts anchor in that ground [emphasis original]" as quoted in Robin Lovin, *Reinhold Niebuhr and Christian realism* (Cambridge: Cambridge University Press, 1995), 46. :

[3] I will mean Niebuhrian Christian realism when I use the term "Christian realism" for the remainder of this project. "Christian realism" is almost always associated with his thought. At times I will indicate when I am reconstructing or extending Christian realism beyond what Niebuhr wrote.

This dissertation focuses on description, over prescription, but it is not a creative reimagining of our situation in religious terms for the sake of spurring the religious to act. It is an attempt to think about the history and structure of our environmental lives, from a Christian perspective, but not on the basis of Christian authority in a way that would be persuasive only to a Christian audience. Christian realism gives us a starting point, a set of insights and expectations, from which to interpret our shared set of experiences and observations. The hope is that the descriptions offered will help make sense of our experiences of our environmental situation, whatever our religious beliefs. If what Christian realism makes possible is a clear and coherent view of our environmental situation (rather than merely a Christian view), then that contribution ought to be valuable to people of all faiths and none.

What follows then, is an articulation of a Christian realist environmental ethics, one that aims to use Christian theological insight to render the structure and character of our environmental situation clear and coherent, such that the final product does not depend on Christian faith. In other words, it uses theological symbols from Christian scripture to allow us to hold together insights into environmental problems, insights which are available to everyone, but cannot be reconciled to each other without mythic symbols. It is thus an attempt to make a uniquely theological contribution to a public debate in our religiously-plural context. So, while this is an environmental project, it also serves as a demonstration of how Christian ethics in general can be relevant to novel ethical problems today, beyond the bounds of Christian communities.

However, we will not recognize the need for such a Christian realist approach in environmental thinking if we remain within environmental ethics' dominant assumptions about its occasion, task, and methods. If we think our environmental situation is apparent, if we think it

is a product of a wrong turn in history, if we think bad theology and ethics played a decisive role in that wrong turn, if it seems that what we must do now is self-evident from the sciences, and if we believe Christian environmental ethics is about getting Christians to do what is self-evident, then Christian realism will seem an answer to questions no one is asking. What we need to see is how narrow and circumscribed views about ethics and theology have shaped, and continue to shape, the field. Thus, instead of beginning with a full-fledged account of Christian realist environmental ethics, let us begin by examining Christian environmental ethics in general and the difference Christian realism might make in its underlying self-conception as a field.

The Question of the Place of Theology in Environmentalism

The question of the value of Christian theology[4] for environmentalism is very much in doubt. It is becoming less clear to Christian environmentalists, both as theologians and ethicists, whether or how theology has any unique contribution to make to the shared project of responding to our environmental situation. This has not always been the case. Christian environmentalist thinkers[5] have often assumed that religious belief is fundamental to any culture's environmental form of life. They have assumed that our environmental impact is a function of the way we value nonhuman nature, that our values come from how we imagine our relation to the world around us, and that those cosmological visions are given to us by religion. Building on that framework, they have concluded that, since Christianity is the dominant religion in the parts of the world driving ecological disaster, Christian doctrine is the primary root of our accelerating environmental disaster. The goal of Christian environmental ethics has thus been

[4] Here I mean theology in a narrow sense, something like: "The study or science which treats of God, His nature and attributes, and His relations with man and the universe" ("theology, n.". OED Online. July 2018. Oxford University Press. (accessed September 06, 2018).) What is in doubt is whether Christian beliefs about God and God's relation to humanity and nature make a unique contribution to environmentalism.

[5] We will see this tradition in more detail later, particularly in chapter three. I have in mind here theologians such as Jurgen Moltmann, Larry Rasmussen, Sallie McFague, Rosemary Radford Ruether, and Catherine Keller.

clear and urgent: adjust Christian beliefs to change our bad environmental behavior. The role of Lynn White Jr. in shaping the field in this direction is well known:[6] how he called on Christianity to end environmental destructiveness through the recovery or creation of non-anthropocentric theological metaphors and symbols. In response to White's call, Christian theologians and ethicists have proposed that we imagine our place in the cosmos—specifically how we imagine the relation between God, humans, and nonhuman nature—in new ways or rehabilitate old ways (suggesting we see ourselves as stewards of God's creation, picture ourselves relating to the earth as God's body, and so on). I will borrow Willis Jenkins's usage of the term "cosmological approach" to refer to this way of thinking, which refers to its priority on the cosmological imagination.

The field of Christian environmental ethics has begun to criticize and move past the cosmological approach. There has been a long transition toward pragmatism, pluralism, urbanism, agrarianism, intersectional justice movements, a focus on local communities, and generally more humility about the impact of professional theology on environmental behavior. Thus, there are voices in the field that are less concerned with comprehensive theological visions and global change and more focused on how ethicists can help Christian communities refine practical responses to overwhelming problems (like Willis Jenkins's *The Future of Ethics*[7]), how the Christian church might be constituted internally as an environmental exemplar (such as Laura Yordy's *Green Witness*[8]), or how Christian political theology might provide models of response

[6] For a good overview, see Willis Jenkins, "After Lynn White: Religious Ethics and Environmental Problems," *Journal of Religious Ethics* 37, no. 2 (June 1, 2009): 283–309.
[7] Willis Jenkins, *The Future of Ethics: Sustainability, Social Justice, and Religious Creativity* (Washington, DC: Georgetown University Press, 2013).
[8] Laura Ruth Yordy, *Green Witness: Ecology, Ethics, and the Kingdom of God* (Eugene, Or.: Wipf & Stock Pub, 2008).

to issues like climate change (such as Kevin O'Brien's *The Violence of Climate Change*[9]). While there are authors who still write on environmental cosmology, who still aim to change behavior by fixing ideas about the universe (and conversations and courses on the topic are still dominated by discussions of topics like non-anthropocentrism and the intrinsic value of nature), to other emerging voices in academic Christian environmentalism, pure theology seems less and less relevant to its methods and aims.

Jenkins in particular has achieved a wide audience, arguing persuasively that Christian environmental ethics needs to be more responsive to and realistic about what actually drives environmental choices. He argues that we live in a complex, diverse, and globalizing community and that any comprehensive environmental response cannot rest on the hope that a grand theological narrative will revolutionize the environmental impact of our species. While Jenkins still sees a place for Christian environmental *ethicists* in helping Christian communities respond to problems like climate change or local environmental problems (through community organizing, rituals, models of nonviolence, etc.), he questions whether comprehensive theological visions will alter radically our global situation.[10]

The argument of this dissertation is that a broad theological vision can, in fact, be helpful, even outside of Christian communities, just not in the way Lynn White and the proponents of the cosmological approach had hoped. Christian symbols do not work as simple levers of history, to be pulled this way and that. They are not voluntary postulates that can be reformed instrumentally to redirect our environmental trajectory. What they can do is help us to make

[9] Kevin J. O'Brien, *The Violence of Climate Change: Lessons of Resistance from Nonviolent Activists* (Georgetown University Press, 2017).

[10] For a quick introduction to his thought, see Willis Jenkins, "After Lynn White: Religious Ethics and Environmental Problems," *Journal of Religious Ethics* 37, no. 2 (June 1, 2009): 283–309; for a book-length treatment, see Willis Jenkins, *The Future of Ethics: Sustainability, Social Justice, and Religious Creativity* (Washington, DC: Georgetown University Press, 2013).

sense of who we are, what is going on, what moral demands we are under, what is likely to work, and what responsible action looks like, given the depth and recalcitrance of human nature and history. In short, the contribution of theological thinking to environmentalism is not primarily to make us act better (which we have reason to doubt will work on a global scale), but to help us grasp what is true about our nature and destiny as environmental creatures, which can help us see what responsible action requires. If what we want is pragmatic attention to what actually moves people, we have to abandon the assumption that theology drives environmental history, but it does not follow that we should not abandon theology. It has a vital role in helping us understand the human environmental situation.

To see how Christian realism makes a difference in Christian environmentalist reflection, it is important that we see the existing mode of thought. Thus, let us turn to the basic form of environmental ethics.

Environmental ethics and the preoccupation with values

The field of environmental ethics (in both its religious and philosophical forms) has long focused almost exclusively on proving that values inhere in nonhuman nature and describing the duties that they place on us, all as part of an urgent reform project. That is, the field has been concerned with establishing the value of nonhuman nature in order to protect it and save it from catastrophe.[11] This concern with values is closely tied to the belief that our cosmological visions determine what we value: it has largely been gospel that "anthropocentric" metaphysics and cosmologies (theological or not) elevate human goods relative to nonhuman ones and drive a denial of the "intrinsic value" of nonhuman nature, and that this leads to the commodification

[11] Consider, for example, Mary Evelyn Tucker's statement that the goal of her work is "to adapt religious teaching to [the] task of revaluing nature…so as to prevent its destruction." Mary Evelyn Tucker, *Worldly Wonder: Religions Enter Their Ecological Phase* (Chicago: Open Court Publishing, 2003), 21.

and misuse of it. Other cosmologies and value structures, such as ecocentrism, biocentrism, or theocentrism, on the other hand, are thought to lead us to value nonhuman goods and to treat the nonhuman world with greater care and respect.

Philosophers Andrew Brennan and Yeuk-Sze Lo distinguish two theses at play in environmental ethics' concern with intrinsic values and non-anthropocentrism. The first is what they call the "*evaluative thesis* of non-anthropocentrism," by which they mean the claim that "natural non-human things have intrinsic value, i.e., value in their own right independent of any use they have for others." The second is the "*psycho-behavioural thesis* of non-anthropocentrism," which holds that "people who believe in the evaluative thesis of non-anthropocentrism are more likely to behave environmentally (i.e., behave in beneficial ways, or at least not in harmful ways, towards the environment) than those who do not."[12] According to Brennan and Lo,

> Much of the last three decades[13] of environmental ethics has been spent analysing, clarifying and examining the evaluative thesis of non-anthropocentrism, which has now achieved a nearly canonical status within the discipline. By contrast, the psycho-behavioural thesis is seldom discussed, but is part of the tacit background of environmental ethics.[14]

In short, environmental ethics has for a long time been concerned with establishing the validity of non-anthropocentric values, on the assumption that adopting them leads to environmentally-friendly behavior, but this assumption has gone largely unexamined and unsupported (it has remained in the "tacit background"). Brennan and Lo go on to call for empirical research into the

---

[12] Brennan, Andrew and Lo, Yeuk-Sze, "Environmental Ethics", The Stanford Encyclopedia of Philosophy (Winter 2016 Edition), Edward N. Zalta (ed.), URL = https://plato.stanford.edu/archives/win2016/entries/ethics-environmental/

[13] This content was originally added to the entry in 2008.

[14] "Environmental Ethics > Pathologies of Environmental Crisis – Theories and Empirical Research (Stanford Encyclopedia of Philosophy)," accessed July 11, 2018, https://plato.stanford.edu/entries/ethics-environmental/theories-research.html.

validity of the psycho-behavioral[15] thesis, calling for social scientists to test whether environmental behavior in fact follows from values in the way the field expects.

The psycho-behavioral thesis's connection of beliefs about values to behavior is unsurprising, given the state of contemporary moral philosophy. According to philosopher Connie Rosati, "Many philosophers have regarded the motivating force of normative judgments as the key feature that marks them as normative, thereby distinguishing them from the many other judgments we make."[16] In other words, the fact that a belief will motivate our action is what makes it "normative;" motivating force is the defining characteristic of normativity. Thus, within the framing of contemporary moral philosophical ethics, establishing the value of nonhuman nature, as a normative judgment, just means providing environmental motivation.

Of course, environmental problems have persisted, despite decades of environmentalism.[17] While this is perhaps explained by saying that environmentalism has not yet been adopted sufficiently, there is nevertheless reason to doubt that the strategy of establishing a sound basis for non-anthropocentric values is not working as hoped. The environmental issues in the news have changed in tone. Climate change, for example, has proven resistant to reform efforts, even to widespread acknowledgement, in ways that, say, the issues of the 1980s and 1990s, like acid rain or ozone depletion, did not. Environmentalism has sobered and become self-reflective. Brennan and Lo's call for empirical research into the drivers of environmental behavior has become closer to conventional wisdom.

---

[15] I will use the American spelling outside of quotes.

[16] Connie Rosati, "Moral Motivation," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, n.d., https://plato.stanford.edu/archives/win2016/entries/moral-motivation/.
I was directed to this text by the ongoing research of my colleague, Andrew Packman.

[17] This is not to say that environmentalism has done nothing, only that the spread of environmentalist values has not had the revolutionary effect some may have predicted on the basis of the psycho-behavioral thesis.

Christian environmental ethics finds itself in the position of navigating this shift along with the broader field of environmental ethics. The psycho-behavioral thesis was initially very attractive to Christian thinkers, combined as it was with the belief that values were fundamentally a product of religious cosmology. More specifically, it was long accepted that Christian axioms were the source of our current crisis. Once we accepted that our behavior threatens the earth, that this behavior is dictated by values, and that these values are set by theology, then the academic project of fixing the theological imagination was of vital importance to saving the earth. Jenkins puts this attraction in stark terms:

> Until recently, there has been little incentive for religious ethicists to question that research project because its cosmological orientation seems very good for us. If religious worldviews matter for cultural history, then religious ethics matters for determining the future. The cosmological connection locates religion at the crux of a social crisis, and therefore it makes religious scholars indispensable for guiding sustainable social reform. Meanwhile, the controversy…keeps religious analysis at the center of cultural reflection. For if Christian axioms lie at the root of catastrophic cultural practices, then they must be vindicated, reformed, or replaced with better ones.[18]

According to Jenkins, the cosmological approach (essentially White's version of the psycho-behavioral thesis) elevates religious ethicists and theologians to an unprecedented level of urgent cultural prominence. Why would they question that? However conscious this incentive has been, the theory that environmental behavior is a function of religious cosmology has dominated religious theorization for a long time, beginning with White and continuing through Sallie McFague, Thomas Berry, Jurgen Moltmann, and Calvin B. DeWitt, among many others. To stick with Brennan and Lo's language, because religious ethicists accepted the *psycho-behavioral thesis* that environmentally-salutary behavior follows when people affirm the *evaluative thesis* of non-anthropocentrism (that nonhuman nature has intrinsic value), they focused almost entirely on using theological arguments to establish non-anthropocentric values for religious audiences.

[18] Jenkins, "After Lynn White," 287.

They proposed innovations and reformations like new metaphors for God (McFague) and stories of the universe (Berry), sought to renew doctrines of creation (Moltmann), and aimed to restore emphasis on stewardship (DeWitt).[19]

Thus, as Jenkins argues, the field of Christian environmentalism was shaped in response to White's claim that "Christianity is the most anthropocentric religion the world has seen" and that "more science and more technology are not going to get us out of the present ecologic crisis until we find a new religion, or rethink our old one."[20] Jurgen Moltmann put this motivation in particularly clear language when he asked in his Gifford Lectures, "How must the Christian belief in creation be interpreted and reformulated, if it is no longer to be itself one factor in the ecological crisis and destruction of nature, but is instead to become a ferment working towards the peace with nature which we seek?"[21] It has been accepted that Christian theology must reform itself in order to stop being part of the problem and start being part of the solution.

Today, Christian environmental ethicists increasingly have reason to question the cosmological approach, to accept Brennan and Lo's argument that social-science research is needed to test, amend, or replace this idea. It is increasingly clear that some of the more reductive versions of the cosmological approach are insufficient explanatory frameworks. Empirical research into why people make the environmental decisions they do is a logical next step. However, it is not clear which sorts of research are able to provide what types of insights. It

[19] Sallie McFague, *Models of God*, Highlighting edition (Philadelphia: Fortress Press, 1987); Thomas Berry, *The Great Work: Our Way into the Future*, Reprint edition (New York: Broadway Books, 2000); Jürgen Moltmann, *God in Creation: A New Theology of Creation and the Spirit of God*, 1st U.S. ed edition (San Francisco: Harper & Row, 1985); Calvin B. Dewitt et al., *Caring for Creation: Responsible Stewardship of God's Handiwork* (Grand Rapids, Mich: Baker Pub Group, 1998).
[20] Lynn White Jr., "The Historical Roots of Our Ecologic Crisis," *Science*, New Series, 155, no. 3767 (March 10, 1967): 1206.
[21] Jurgen Moltmann, *God in Creation* (SCM Press, 1985), 20–21.

is in this critical evaluation of the epistemological boundaries of different forms of reflection that Christian realism's value begins to show.

The hermeneutical challenge of replacing the cosmological approach

Testing White's thesis is, in some sense, a straightforward research task: survey people's religious ideas and values and look for correlation with some set of proxies for environmental impact, such as whether they are more likely to eat locally or adjust their thermostats to save energy.[22] This type of research is vital, and there is good reason to think it can at least disprove simplistic versions of the idea that our values dictate our behavior. In fact, for many social scientists it *has* disproven that idea, at least in some arenas of action. Douglas B. Holt, a marketing expert at Oxford, gives us a succinct summary of such thinking: "After nearly 40 years of research that industriously sought out linkages between 'environmental concern' and environmental behaviors, the answer is clear—the relationship barely exists." He goes on:

> An overview of this literature, surveying several meta-analyses, reports that "environmental concern seems to explain not more than 10 percent variance of specific environmental behaviors" (Bamberg 2003, 22). In a decade-long investigation of the ethical values hypothesis, the authors of *The Myth of the Ethical Consumer* (DeVinney, Auger, and Eckhardt 2010) demonstrate that when people are forced to make real trade-offs between ethical considerations and the perceived value of the purchase, they are rarely willing to trade benefits for ethics. In consumer research, this type of value-attitude-behavior model, which was in vogue in the 1960s and 1970s, has all but disappeared from contemporary theory because it provides little insight or explanatory power (Holt 1997; Thompson and Troester 2002).[23]

[22] For an example of this type of research, see: Annick Hedlund-de Witt, Joop de Boer, and Jan J. Boersema, "Exploring Inner and Outer Worlds: A Quantitative Study of Worldviews, Environmental Attitudes, and Sustainable Lifestyles," *Journal of Environmental Psychology* 37 (March 1, 2014): 40–54, https://doi.org/10.1016/j.jenvp.2013.11.005.

[23] Douglas B. Holt, "Constructing Sustainable Consumption: From Ethical Values to the Cultural Transformation of Unsustainable Markets," *The Annals of the American Academy of Political and Social Science* 644 (2012): 240.

For Holt and the research he cites, the motivational power of environmental attitudes is no longer a question: it has not proven to be useful for explaining or predicting market behavior. Holt's findings lead him to argue that "we should reallocate the vast government, NGO, and foundation sustainability investments from promoting consumer value transformation"[24] toward making structural changes in markets.

We should note that Holt and others are here going far beyond disproving the idea that non-anthropocentric values drive environmentally-friendly behaviors; they believe they have proved that environmental concern in general (even of the anthropocentric variety) has little effect on consumer behavior. In fact, they are making the much stronger claim that *ethics* in general has little effect on such behavior. These sorts of studies are sobering, and any environmental ethics must account for the reality they uncover, whatever we make of their conclusions.

However, treating the question of why human beings do what they do in relation to the earth as *wholly* resolvable by the social sciences is nearly as misguided as assuming that it is simply dictated by the religious imagination. The social sciences have their own limitations. In fact, some of the misconceptions that have plagued Christian environmentalist thought have actually come *from* the social sciences. When White made his field-shaping claim that our current crisis is the result of Christian axioms, he spoke as a historian, in the journal *Science*. The fundamental mistake of Christian environmentalism afterward was not that it was blinded by its own idealism and thus ignored the deliverances of the empirical disciplines, but that it accepted a bad empirical claim uncritically. The Christian ethicists and theologians who debated White's thesis that Christianity was to blame for environmental woes were not ignoring empirical

[24] Holt, 236.

research; on the contrary, in addressing White's position they were engaging its cutting edge. We should be clear that simply turning to the empirical disciplines does not necessarily mean turning to the truth.

I do not mean to suggest that, because White's contribution was problematic, the various natural and social sciences cannot be trusted. What I do mean to say is that the project of reflecting ethically on the environment is complex and that it is a mistake to assume that ethnography, sociology, or history can simply resolve the attendant questions of causes and solutions. Environmental issues are inherently interdisciplinary, so we need to be quite clear and explicit about how we go about integrating the findings of different perspectives into a coherent whole. We should incorporate into our thinking the very best social-science research about what drives our environmental choices, but we also have reasons to pause before saying that the character and causes of human environmental behavior are self-evident to empirical observation, and those reasons go far beyond the fact that the social sciences are sometimes wrong. The danger is not just that the expert consensus is fallible; the danger is in continuing to operate within a restricted vision of ethics that can only respond to the latest social-scientific theories of environmental behavior. We should engage with and learn from this research, no doubt, but that does not require granting that such research discloses the human environmental condition, without remainder.

Disciplinary questions and the division of labor

I recognize that no religious environmental ethicists are suggesting we simply cede our work to other departments in the university and turn our attention to other interests. That said, the problem is that many seem happy to cede the *descriptive* work of environmental ethics to other

disciplines and restrict the work of ethics to *normative* work. We can see a clear example of this perspective from religious environmental ethicist Lisa Sideris. Sideris's critical questioning of assumptions in the field has been invaluable and she has been a major driver of the critical self-evaluation it has undertaken in recent decades. Hers is an incisive and important voice. That said, in her review of G. Scott Davis's book on pragmatism, *Believing and Acting,*[25] Sideris provides us with a particularly explicit statement of the circumscribed view of ethics that is evident in the turn to empirical research. The salient feature of the review comes when Sideris objects to a claimof Davis's. He had argued that, properly understood, "All [academic] disciplines are 'cognitive' and evidence based, and all make statements 'capable of being true or false.'"[26] She objects that Davis's position would restrict all academic disciplines to making descriptive claims and foreclose the possibility that an academic discipline could make normative ones.

What matters for our purposes is that in defending the propriety of normative academic work Sideris appears to endorse a very strong division between the tasks of describing reality and of ethics. In support of that division, she quotes Richard Rorty: "[W]hen we know what we want but don't know how to get it, we look to the natural sciences for help. We look to the humanities and arts when we are not sure what we should want. This traditional division of labor has worked pretty well."[27] According to Rorty and Sideris, the role of science (and here we can include all descriptive disciplines, from physics to sociology to history) is to tell us how the world works, including how we can achieve our desires. The humanities are valid in the academy because we need them to tell us what those desires should be, or so most have assumed.[28]

---

[25] Lisa Sideris, "Pragmatism, Ethics, and the Disciplines," *Soundings: An Interdisciplinary Journal* 95, no. 2 (2012): 179–86.
[26] Sideris, 182.
[27] Quoted in Sideris, 184.
[28] I should be clear that I do not mean to claim that this is Sideris' position in her work in general. She has published many articles and books and I do not attempt any comprehensive account of her work it here.

In arguing for space in the academy for ethicists to make normative claims, Sideris (by endorsing Rorty's division of labor) seems to deny the possibility that the humanities can play a role in telling us how the world works. Sideris is explicit: why people do what they do is a descriptive matter of social-science research. Ethics is a separate exercise from the work of identifying the structures of the problems to which it responds. She writes,

> I suppose that, rather than try to engage the natural world itself, the ethicist might instead try (ethnographically and historically) to get at why *people* say and do the particular things they say and do with regard to their particular environment; they might question why, for example, so many Americans reject the science of climate change. This is an interesting puzzle, and I wish someone could solve it. But, because I'm not a social scientist, it is not *my* question, nor is it the question of many ethicists I can think of.[29]

Sideris is a profound thinker whose subtle writing in fact includes many insightful descriptive claims. She is remarkable for being a champion of critical attention to scientific insight. However, it would be a mistake for us to think, as Sideris appears to here, that "puzzles" like why people do what they do—a deep and fundamental question of human agency—are the exclusive territory of the "descriptive" sciences. Sideris might be right that *particular* descriptive questions, like why Americans are more likely than others to reject climate science, might be answered by empirical research, but her broad endorsement of this division of labor seems to imply that questions of human motivation and environmental behavior are answered by the sciences (again, broadly construed), not the humanities.

Yes, Sideris thinks ethics has to take scientific descriptions seriously; this is the core of her valuable contributions to the field. Ethicists have to engage the sciences as best we can. But, "ethics" as she uses it here appears to mean only a way of responding to a world disclosed by the sciences. It is not clear, in her statement, that humane disciplines like theology and ethics can help us see how human beings work. This seems like a troublingly narrow position for a

[29] Sideris, "Pragmatism, Ethics, and the Disciplines," 186.

religious ethicist to take. Whether or not Sideris's statement in the passage above is a good representation of her thinking in general, it is emblematic of much of Christian environmental ethics.

The Need for Multi-Dimensional Ethics

We can contrast this circumscribed sense of ethics-as-normative-response with a more comprehensive understanding of ethics. William Schweiker, for example, identifies five dimensions of ethics, of which normativity is only one. He names the interpretive, normative, practical, fundamental, and meta-ethical dimensions. Schweiker argues that these five dimensions of ethical reflection correspond to five questions that ethics tries to answer: "What is going on? what is the norm for how to live? what are we to be and do? what does it mean to be an agent? and how do we justify moral claims?"[30] Ethics is not restricted to thinking about norms, values, and their practical significance: for Schweiker, "ethics seeks to provide the means to think coherently and comprehensively about how we should live." He goes on, "Method in ethics is how one undertakes the task of systematically coordinating and guiding reflection on the moral life."[31] In other words, ethics is not just about norms. It is not about articulating a list of dos and don'ts that would fix problems if everyone followed them. It is the systematic coordination of all areas of thought relevant to the moral life. Sideris says that the question "why *people* say and do the particular things they say and do with regard to their particular environment" is not "her question" as an ethicist; Schweiker would say it should be. Ethics is not just one side of a division of labor, with descriptive science on the other side. Rather, "ethics" names the effort to coordinate and systematize all sources of knowledge into a coherent whole that can guide the moral life.

[30] William Schweiker, *Responsibility and Christian Ethics* (Cambridge University Press, 1999), 35.
[31] Schweiker, 34.

I want to be careful not to overstate the difference between Sideris's and Schweiker's positions here. While Schweiker claims ethics includes these five dimensions, he does not mean that ethics as a discipline discloses the full content of each dimension. He claims neither that ethics can tell us what is going on in a given situation without drawing on the descriptive sciences, nor that it is the job of the ethicist to do things like scientific research herself. Sideris, for her part, is not saying that ethicists do not need to think hard about empirical research (again, quite the opposite). What distinguishes the two positions is that Sideris seems to see the move from normative questions about the "natural world itself" to questions about "why *people* say and do the particular things they say and do" as turning from ethics to social science. For Schweiker, it is turning from normative ethics to other dimensions of ethics, such as the interpretive and fundamental dimensions.

Why does this distinction matter for our present purposes? Might this just be a case of disciplinary wrangling about which parts of our reflection to call "ethics"? It matters because these differences in conceiving the work of ethics rest on different assumptions about epistemology, human behavior, and the roots of our environmental problems. When Sideris writes that to turn to questions of why people make the choices they make is to turn to ethnography and history, she takes for granted that the drivers of human choice are self-evident to such disciplines. In Schweiker's schema, why Americans deny science *may*, in fact, turn out to be answered sufficiently by empirical research, with no theological or ethical contribution needed. Its explanation may, in this case, be exhausted by fields like ethnography and history. These disciplines in fact likely can answer questions like why Americans deny climate science at a higher rate than the Dutch. When, however, the question is something like, "why does John Smith of Bethlehem, Pennsylvania deny climate science?" or "why do human beings as a species

seem ill-suited to live sustainably on Earth?" ethnography and history likely do not suffice. It might be that individual and universal (rather than general) questions require reflection in the fundamental dimension, questions about what it means to be an agent, about the freedom of individuals, the limits of the species, and so on. It seems evident that there exist questions of practical environmental significance that are not obviously answerable by comparing groups and eras, ethnographically and historically.

To assume that questions of the drivers of human environmental behavior are ethnographic and historical[32] ones is to take for granted that the roots of our environmental problems are to be found wholly in the differences between peoples and eras; it is at least not obvious that this is the case. Because environmental problems are human problems (nonhuman nature bears much of the brunt of the problems, but causes none of it), environmental reflection must be as deep and nuanced as thinking about other profound questions of the human condition. To assume questions of why we do what we do are exhausted by empirical research is to deny that analyzing human beings as environmental creatures involves questions of metaphysics, epistemology, and hermeneutics which exceed the bounds of empirical research. While addressing such deep questions may not be necessary in each specific case, a more comprehensive conception of ethics (such as Schweiker's) is necessary to evaluate when and where it is necessary.

[32] Ethnography and history are the two disciplines Sideris mentions and represent natural places to turn for people who diagnose environmental problems in terms of culture. You look to find differences between populations with different environmental footprints, either across groups (ethnography) or time (history) and blame the differences in environmental outcomes on differences between them. These two do not exhaust the relevant sciences, however. One could look to psychology, behavioral economics, evolutionary science, anthropology, and so on for insight. My point here is not that certain of these disciplines are better than others, only that each individually lacks the perspective to integrate the whole picture. Describing our situation comprehensively and coherently requires insight from each of these, but those insights must be brought into a whole via relation to a mode of thinking fit for reflection on the human condition as such, including the role and limits of different modes of knowing.

What we need is a method of ethics that can raise that possibility that the vision of reality that comes to us from a given mode of reflection is not deep or wide enough. As long as theologians and ethicists accept that "theology" just means behavior-modifying cosmology and "ethics" just means normativity, then we cannot question our role in principle. A more comprehensive Christian ethics can coordinate all reflection on the topic, and incorporate theology into second-order reflection on the proper role of theology in a given case. Only such an ethics makes it possible to know whether the descriptive task is of the sort that can be exhausted by empirical research or if the problem needs to be considered in a wider and deeper frame of meaning.

The reason the cosmological approach has been so naively optimistic about the effectiveness of theology *and* the reason that more critical Christian environmental ethics tends to be dismissive of the value of Christian theology for environmentalism (within and beyond Christian communities) is thus the same reason: neither has a method that can ask whether a theological perspective is needed to define and interpret the problem to which Christian environmental ethics responds. Both assume our environmental situation is self-explanatory and is disclosed fully by empirical research. Both hold that Christian thinkers need only respond to a largely given problem. Regarding the self-evident character of that problem, they can only be either wrong or accidentally right. Neither has a comprehensive method for asking whether theology is needed. In short, neither is comprehensive enough to recognize how it suffers from a lack of a theological perspective. Thus, we need something to act in a coordinating, regulative role, helping us see which modes of analysis are appropriate and where. In short, we need the sciences to interpret some aspects of our environmental behavior, we need theology for others, and we need a multi-dimensional ethics to help us tell the difference.

Christian realism, ethics, and the sciences

Christian realist environmental ethics, then, should treat empirical research into our environmental situation neither as a self-evident whole to be affirmed nor as an illusion to be dismissed. Each of those mistakes is dangerous. On the one hand, we must avoid thinking that the sciences deliver to us a complete picture of the structure and roots of environmental problems. This is the mistake endemic to much of Christian environmentalist thought. Scientific observation is, in this view, self-sufficient and epistemically *independent* of religious questions. On the other hand, we must also avoid saying that observations about the environment are entirely *dependent* on religious matters. This is another common error. People who make this mistake argue that our religious ideas are foundational to all other knowledge and therefore the deliverances of all modes of knowing follow entirely from religious presuppositions. This is the position of many environmental skeptics.

For one particularly clear example of this latter error, we can turn to comments made by Al Mohler, President of Southern Baptist Theological Seminary, after President Trump's 2017 announcement of the U.S. withdrawal from the Paris climate accord:

> The secular worldview that has been largely behind the environmental movement since the 1960s and 1970s is predicated on a very un-biblical notion of the cosmos and of human beings. That worldview largely sees human beings ourselves as the problem and the exercise of dominion as the great evil... Oftentimes in this heated controversy you will hear the two positions sometimes reduced to simply the scientists and the science deniers. But…the science itself is predicated upon a worldview, and that worldview…is very clear in seeing human beings as the problem and denying any kind of divine purpose to the creation, not to mention to the role of human beings within it.[33]

[33] Mohler, Albert, "The Briefing 06-02-17 - AlbertMohler.Com," June 4, 2017, https://web.archive.org/web/20170604135618/http://www.albertmohler.com:80/2017/06/02/briefing-06-02-17/.

For Mohler, the descriptive sciences do not deliver to religion the reality to which it must respond; for him, religious and cosmological ideas shape determinatively the findings of the descriptive sciences (at least in cases like climate change). He thinks that what we see in the world depends on our religious cosmologies. Even scientific observation and theorization are determined by foundational religious presuppositions: climate science is predicated upon a worldview.[34]

A Christian realist environmental ethics should, as I have said, hold to a middle way. Christian realism affirms that the world is knowable (though its full meaning is not self-evident) and that ideas are testable. Niebuhr rejects any suggestion that our ideas cannot be held accountable to what we see unfolding in the world. He thinks we can appeal to reality, to effects in time and space. For example, he regularly makes claims about what the "facts" of history reveal to us about our frames of interpretation. He concludes a polemical section of the *Nature and Destiny* like this: "Thus, neither the classical nor the modern interpretations of historic reality conform to the observable facts."[35] Thus, for Niebuhr, although we subscribe to a variety of interpretations of reality, there remain "observable facts" against which we can test those interpretations. He believes, for instance, that the optimism of the nineteenth century failed the test of the twentieth. He writes, "Since 1914 one tragic experience has followed another, as if history had been designed to refute the vain delusions of modern man."[36] Niebuhr would grant Mohler's point that different ideas about human beings create different expectations for the consequences of human activity in the world. These might make us more or less prone to accept

[34] Interestingly, Mohler's position is not far from and White's. Both think religious ideas shape what we see in our environmental situation. Both think Christianity endorses dominion and a prominent role for human beings. They disagree only over whether this is a good thing.
[35] Reinhold Niebuhr, *Faith and History, a Comparison of Christian and Modern Views of History* (New York: Charles Scribner's sons, 1949), 216.
[36] Niebuhr, 6–7.

science like climatology. However, he would nevertheless affirm "observable facts" in the world (things like glaciers receding, sea-level rise, desertification, and so on) that serve to either confirm or refute those expectations.

I do not want to create the impression that Niebuhr is simply naïve about human objectivity, however. He is, in fact, quite the opposite. Niebuhr scholar Robin Lovin argues that it is Niebuhr who "introduces into the discourse of American religious social ethics what a later generation would call the 'hermeneutics of suspicion.'"[37] Niebuhr accepts the criticisms from masters of suspicion, like Marx, Nietzsche, and Freud, but, in Lovin's words, he goes beyond them by finding the roots of our delusions in the general human condition, not mere material arrangements or psychological disfunction. Lovin writes, "The root cause of our illusions lies deeper than economic interest or psychic vulnerability to particular fears and losses. The root cause is anxiety over the finitude which is necessarily part of every human situation."[38] Niebuhr worries consistently about epistemological distortions arising from this anxiety, from finitude itself, self-interest, and (especially) power. This is what Lovin means by "hermeneutics of suspicion." However, according to Lovin, suspicion is not the final word. There are limits on our ability to know: but it remains a real ability, nonetheless. We are not thinking machines in need of perfect objectivity. We are agents acting and being acted upon who must try our theories against observable effects in the world. We cannot prove the literal existence of sin, for example, but (according to Christian realism), the concept "sin" does a better job explaining the facts of history and guiding our expectations than other candidate concepts. It is that pragmatic affirmation of our ability to test belief against states of affairs in the world that makes Christian realism a form of *realism.*

[37] Lovin, *Reinhold Niebuhr and Christian Realism*, 7.
[38] Lovin, 8.

So, against positions like Mohler's, Christian realism affirms our ability to experience the world with relative objectivity. Against positions like White's and Sideris's, Christian realism denies that social science can give us a sense of the whole. What matters is that we cannot make rational[39] sense of the whole: while Niebuhr holds that we can observe facts like the series of tragedies of the twentieth century, seeing that they refute the "vain delusions" of the nineteenth, we cannot, through reason alone, then replace those delusions with any other principles that would render the movement of human history plain to us. We can, within limits, see the world around us clearly enough to make provisional sense of it, but we run into serious trouble when we try to develop the principles we use for such provisional purposes into interpretations of ultimate meaning. For that, according to Niebuhr, we need theology. If it is the possibility of testing our beliefs against reality that makes Christian realism *realism*, it is our need for theology to make sense of the meaning of the whole that makes Christian realism *Christian* realism.

For Christian realism, it is not the case that religious beliefs about final truths determine our answers to all specific questions, but neither is it the case that final truths are completely separable from specific ones. Niebuhr writes, "Ideally, there should be a constant commerce between the *specific* truths, revealed by the various historical disciplines, and the *final* truth about man and history as known from the standpoint of Christian faith"[40] [emphasis mine]. His use of the term "final truth" should not obscure his conviction that there must be a genuine commerce between the two sorts of truths. We do not just check our specific truths against the final standard of theology. Rather, ideas about final truth act as a critical lens and coordinating

[39] By this Niebuhr means that we cannot reason from observations to a coherent whole. He believes, as we saw in the quote at the beginning of this chapter, "Every affirmation which [man] makes about his stature, virtue, or place in the cosmos becomes involved in contradictions when fully analysed." We cannot make "rational sense" of human nature and history because reasoning from what seems clearly true about us (e.g., we are natural and free) leads to confusion and contradiction. We need mythic symbols, revealed religiously, to capture the full reality of our condition. More on this in the next chapter.

[40] Niebuhr, *Faith and History*, 167.

system for specific truths, but we must hold our ideas about final truths (which are always provisional because we are not God) against the standard of their ability to account for, and bring coherence to, specific truths.

We can see Christian realism's way of relating final truths to specific truths illustrated in Niebuhr's stance on apologetics. Niebuhr does not think we can provide a sufficient rational argument for the truth of Christianity, but he does think a "limited rational validation of the truth of the Gospel is possible." First, negatively, we can show the "limits of historic forms of wisdom and virtue."[41] This is the approach he uses in the first volume of *The Nature and Destiny of Man*, when he elaborates on the many ways that "man has always been his own most vexing problem."[42] He goes on to show how "every affirmation which [man] may make about his stature, virtue, or place in the cosmos becomes involved in contradictions when fully analysed."[43] We sense, accurately, that we are children of nature, evolved beings with natural drives and limits. We sense, again accurately, that we are free, able to transcend the natural process and create new possibilities. But, we are unable to forge a synthesis of the two that does justice to both. In this dissertation, we will see the ways in which different aspects of the cosmological approach fail to do justice to environmental history and resolve into contradictions when fully analyzed.

The constructive aspect of this dissertation builds on Niebuhr's positive approach to apologetics. He writes, "Positively [the Gospel] is validated when the truth of faith is correlated with all truths which may be known by scientific and philosophical disciplines and proves itself a

[41] Niebuhr, 152.
[42] Reinhold Niebuhr, *The Nature and Destiny of Man: A Christian Interpretation*, vol. 1 (Louisville, Ky: Westminster John Knox Press, 1996), 1.
[43] Niebuhr, 1:1.

resource for coordinating all of them into a deeper and wider system of coherence."[44] Again, Niebuhr does not think that this approach constitutes a fully persuasive argument for the Christian faith, but only a "limited rational validation." The positive approach to such a validation is to show how the teachings of the Christian faith bring coherence, which the negative approach shows us we need. The Gospel does not negate the truths known through other disciplines. To the extent they are true, these truths find coherence in Christian theology. To the extent Christianity "proves itself a resource for coordinating all of them into a deeper and wider system of coherence," it shows its value for interpreting the world around us. To the extent our theology proves itself unequal to this task, then we must reform our theology. It is because specific and final truths must limit and clarify each other in this way that we need "constant commerce" between the truths we discover around us and the theological truths we affirm by faith.

Christian realism has a multi-dimensional approach to ethics, in Schweiker's sense.[45] For example, Niebuhr does not just lay out normative frameworks detailing right and wrong in given situations (in fact, he often neglects to specify norms at all). He is much more interested in interpreting what is going on in a given situation or giving an account of human agency, the limits of history, the possibilities and likelihood of justice, the vagaries of politics, and the relation of each of these to the transcendent character of God. Recall Schweiker's claim that "ethics seeks to provide the means to think coherently and comprehensively about how we should live. Method in ethics is how one undertakes the task of systematically coordinating and guiding reflection on the moral life."[46] This is what Christian realism attempts. We have various

[44] Niebuhr, *Faith and History*, 152.
[45] In Schweiker's broad sense, not in the specifics of the same five dimensions.
[46] Schweiker, *Responsibility and Christian Ethics*, 34.

experiences of ourselves and the world, but, negatively, no principles of interpretation that can be derived from experience are adequate to bring them into a coherent whole. Clear thinking requires that we coordinate what we learn from experience with theological truth. Christian realism aims to pay attention to history, political science, and any other source of insight into our situation, and then coordinates these various sources of knowledge into a coherent vision of the moral life. Theology provides the mythic symbols necessary to express the paradoxical reality of the human condition.

Because Christian realism is realistic, it is important to catch that it does not see theology as a storehouse of useful myths to be used therapeutically, but as a mythic way of expressing true facts (which is, of course, useful). Theology helps us make sense of the world, not just by using myth and story to symbolize something rational principles cannot, but by relating the truths in our experiences to truths beyond our experiences, which help coordinate them into a whole. For one example, we have experiences of freedom, but have trouble accounting for the possibility of human freedom scientifically. Theology is an expression of realities that expand our vision of the cosmos to a point where our freedom makes sense. In Niebuhr's words, "The freedom of God, over and beyond the structures of life, makes room for the freedom of man."[47] For another example, we experience life as structured toward an ideal order of peace and harmony; it is what our nature seems fit to inhabit. But, we have no historical reason to think such an ideal is possible, and a great deal of evidence that it is not. The final example, theological truth that God will bring about such an ideal possibility beyond the end of human history allows us to hold together the moral insight that we are to be peaceful and just and the political insight that the world will never be peaceful and just during this age. The method of ethics in Christian realism

[47] Niebuhr, *Faith and History*, 27.

is that we systematically coordinate reflection on the moral life by relating specific truths discovered in experience with final truths discerned by faith.

Conclusion: Christian realist environmental ethics

The promise of Christian realism for environmental ethics, then, is the possibility that a "constant commerce" between beliefs about ultimate truth and about specific ecological and environmental truths can clarify both. Such a commerce can allow us to get past both the assumption that our environmental situation is self-evidently given to us and the assumption that our sense of it is entirely dependent on our views of final truth. It allows Christians to refine their beliefs about the cosmos in light of environmental discoveries and theological truth to help environmentalism sustain realistic thinking about the roots and remedies of our problems. Christian realism can help coordinate our environmental thinking into a "deeper and wider system of coherence," while forcing that system to expand to include the full depth of human life on Earth.

Throughout this dissertation, where Christian realism proves unequal to making sense of our environmental situation, we will reconstruct it by thinking in a Christian realist mode about realities Niebuhr did not consider. The extent to which this reconstructed Christian realism is persuasive depends on how well it can coordinate the truths of our environmental situation into a deeper and wider system of coherence. This dissertation will not attempt a deductive argument for which Christian realism is the only sound or plausible conclusion; instead it will articulate a Christian realist perspective on the environment. If such an articulation succeeds in bringing coherence and meaning, then this serves as a limited rational validation of Christian realism and the theology on which it builds. Thus, throughout it will present examples of what the cosmological approach or other problematic positions claim, followed by a Christian realist

interpretation of the same topic. Showing the other position to be incomplete or wrong does not prove Christian realism right, nor does the truth of any claim hang on the authority of Reinhold Niebuhr or Christian realism. Instead, the negative and positive apologetic approaches, taken together, aim to show Christian realism as a relatively more adequate interpretation.

Chapter Two lays out Christian realism in detail, showing why it is a promising candidate for guiding an environmental ethics and suggesting ways in which it needs to be reconstructed and extended. The aim is the isolation of a Christian realist method from Niebuhr's various works so that what follows can be a Christian realist version of an environmental ethics and not just an application of Niebuhr's thoughts to the environment.

Chapter Three is about the proper use of history in environmental thinking. Negatively, it shows how proponents of the cosmological approach ground their arguments on simplistic historical narratives. Positively, it presents a Christian realist perspective on the value and limits of historical analysis.

Chapter Four recounts in brief summary the broad pattern of our environmental history as a species. Beginning with the evolution of early hominids and continuing to more recent collisions between cultures, it shows our relentless trajectory toward more extensive and intensive modifications of the natural world.

Chapter Five deals with political realism and human agency, specifically the connection between facets of human nature and environmental outcomes. Negatively, it shows that the cosmological approach and similar modes of thought assume a close connection between our values and effects in the world. It argues that there are clear ways in which, especially when we include the natural context of human life, outcomes do not follow neatly from subjective inputs. It argues that our environmental history is an ironic production of sin, tragedy, and fallibility.

Chapter Six is on moral and theological realism. Negatively, it argues that the cosmological approach deploys its source material in an anti-realist way that leads to internal contradictions and ineffectiveness. Positively, it argues for a theological vision of an ecological ethical ideal, one that includes tragedy and other disvalues, but not sin.

Chapter Two: Christian Realism in Environmental Context

What follows in this chapter is a brief account of Christian realism, from which its virtues as a starting point of a Christian environmental ethics will become apparent, as will ways in which it must be revised in light of environmental awareness. The term "Christian realism" is so nearly synonymous with the thought of Reinhold Niebuhr that I will primarily quote Niebuhr when providing examples of its positions. However, Niebuhr did not write about environmental issues directly, so formulating a Christian realist environmental ethics requires that we not simply conflate Christian realism with Niebuhr's positions; we need to be able to isolate a transportable methodological and theoretical framework, which we can reproduce in (and not merely apply to) our environmental context. Given the need for a multi-dimensional approach, which we saw in the previous chapter, it is especially important that we do not just gather Niebuhr's thoughts on one subject, say power politics, and apply them to environmental issues. We need, not just Niebuhr's conclusions on different subjects, but the full depth of Christian realism's approach to making sense of the political and moral life in theological context. Thus, even in citing Niebuhr as the central authority on Christian realism, I will attempt to distinguish between his thoughts and Christian realism as a critical perspective and ethical and theological method.

Christian realism, unlike many familiar realisms, is not concerned with merely one specific type of knowledge or statement. Christian realism is concerned with a range of topics across politics, ethics, and theology and consists of separable—but mutually reinforcing—methods, dispositions, and convictions. Each of these is realist in slightly different senses. It may not be readily apparent at first how Christian realism holds together as a cohesive system, so I will attempt to show that it does.

As Robin Lovin has observed, it is hard to specify the theoretical framework of Niebuhr's Christian realism because he is not the sort of systematic thinker who lays out his methods or defines his concepts explicitly. He tends to employ dialectical polemics, in which his ideas emerge in contrast to what he criticizes and excludes on either side.[1] His system, such as it is, spans a variety of genres and covers a number of subjects for several different audiences, religious and secular. Because of this, Lovin's work interpreting and schematizing Niebuhr's thought is an invaluable resource, and the next few sections draw on his distinctions and definitions. However, because of the specific needs of Christian realist environmental ethics, my rendering of Christian realism will differ somewhat in emphasis and substance from Lovin's. I will be as careful as possible to be clear about which aspects are from Niebuhr, which are from Lovin, and which comes from my own analysis.

Christian realism: its origin and definition

The development of Christian realism by Niebuhr and others was not a mere academic exercise; it was primarily an attempt to think and respond well in a specific historical and political context. The best way to understand the subtleties of his thought is not through abstract schematizing but rather in tracing the fears and hopes that drove him to write. He was motivated, not by formal worries about the consistency of a system, but by pressing issues of Christian conscience in tumultuous historical moments. To name a few, *Moral Man, Immoral Society* and *Interpretation of Christian Ethics* are concerned with (among other issues) international governance and social reform in the era of the League of Nations and the Great Depression. *The Children of Light and the Children of Darkness* was written during the throes of World War II, and argues for the value of a measured, limited democracy over the utopianism of Marxism and

[1] Lovin, *Reinhold Niebuhr and Christian Realism*, 2,3.

strains of liberalism, on the one hand, or the cynicism that leads to authoritarianism and fascism, on the other. *The Irony of American History*, written in 1952, attacks the self-righteousness lurking in postwar American triumphalism. He aimed in each of these cases (and in his other work) to make sense of the confusions and ambiguities of a changing world by relating them to a theological perspective that helped render them coherent and tolerable. In pointing out the contextual and activist aspects of his writing, I do not mean to imply that his work is only intelligible or relevant in a specific context or if you agree with his activist purpose. I only mean to suggest that it will help ground our interpretation if we begin with specifics, and then pull out salient features of the system. Let us begin then, by looking to the broad context in which Christian realism began and to which it responded.

Lovin provides a concise statement of the origins of Christian realism:

> During the first half of the twentieth century, Protestant theologians in the United States gave new attention to the social forces that shape and limit human possibilities. Like the leaders of the Social Gospel movement before them, these writers were concerned with the gap between the biblical vision of God's rule and the realities of modern industrial society. For the new generation, however, a Christian conscience informed by scientific study would not suffice to close the gap. The biblical ideal stands in judgment not only on the social reality, but also on every attempt to formulate the ideal itself.
>
> Therefore, social achievements provide no final goal. The dynamics of history are driven by the human capacity always to imagine life beyond existing limitations. Biblical faith gives vision and direction to that capacity for self-transcendence, but we are best able to challenge and channel our powers when we also understand what is really going on.
>
> "Christian realism" is the name that has been given to that way of thinking. It is a term closely associated with Reinhold Niebuhr, when it is not exclusively identified with his thought.[2]

From this description we can begin to see the different areas in which Christian realism makes its realist assertions. It is concerned with "what is really going on", with social forces that constrain us and cause a gap between the world as it is and a biblical vision of the Kingdom of God.

[2] Lovin, 1.

Concern with forces of resistance to the achievement of our ideals is a form of "political realism." Recognizing the reality and pull of that ideal possibility (the world as it is under God's rule) is a form of "moral realism." The belief that the ideal is real in God alone and that human social achievements are never the final goal is a form of "theological realism." Christian realism is as a position which holds together those three types of realism.[3]

"Realism" means something slightly different in each of these cases. However, there is enough in common between these meanings of "realism" that sketching a general definition of it here will help illuminate how Christian realism hangs together and what this Christian realist environmental ethics aims to accomplish. Keeping this definition in mind will make it easier to see the family resemblances across Christian realism's different areas of concern and thus to see Christian realism as a coherent synthesis of all of them.

Toward that end, it will help to see that "realism" generally refers to positions that affirm at least some aspect of the following: *we can know and speak about objects and their properties which in fact exist, independent of the ideas, beliefs, language, or conceptual schemes of any person or community, and that the truth of our statements depends on accurately representing these independent realities*.[4] Thinkers and theories may be realist in certain aspects captured in this general definition (say, that objects exist independently of our thoughts about them), while

[3] Lovin, *Reinhold Niebuhr and Christian Realism*.

[4] This definition is my own, but it draws directly from the Stanford Encyclopedia of Philosophy definition of realism and Lovin's definition of theological realism. The Encyclopedia defines "generic realism" as the position that: "a, b, and c and so on exist, and the fact that they exist and have properties such as F-ness, G-ness, and H-ness is (apart from mundane empirical dependencies of the sort sometimes encountered in everyday life) independent of anyone's beliefs, linguistic practices, conceptual schemes, and so on." (Alexander Miller, "Realism," in The Stanford Encyclopedia of Philosophy, ed. Edward N. Zalta, Winter 2014, 2014, http://plato.stanford.edu/archives/win2014/entries/realism/);
Lovin (as we will see in a later portion of this chapter) defines theological realism as the belief that "statements about God are not simply expressions of emotion or acts of personal commitment. Theological claims have cognitive content. They may be true or false. True statements about God are true because they accurately represent a reality independent of the concepts, theories, and evidence we have pertaining to that reality" (Robin Lovin, Reinhold Niebuhr and Christian Realism (Cambridge: Cambridge University Press, 1995), 20.)

anti-realist in others (say, that statements cannot represent the independent reality of objects). For our present purpose we can leave aside the epistemological, linguistic, and metaphysical controversies involved; it suffices at this point if we see "realism" as an affirmation of the existence of independent realities that our thoughts and words can nevertheless represent.

We can see, then, that the various aspects of Christian realism (as a species of realism) are each concerned with real objects and structures that exist, independent of our modes of thinking and talking about them. In the following sections we will see the manifestations of, and the connections between, its different types of realism.

Political Realism

The focus on factors that influence actual human choices in history is what Lovin calls **political realism.**[5] The term "political realism" works well for our present purposes, but it is important not to associate it too closely with the approach to political science and international relations by the same name. In that context, political realism refers to a school of thought (going back at least to Machiavelli or even the Athenians in the Melian Dialogue) that emphasizes the utility of using factors of self-interest and power to explain, predict, and manipulate political outcomes, instead of ideals of justice or altruism. While Niebuhr's thought was influential in the development of some modern incarnations of political realism in that sense, his version of political realism is more subtle and nuanced. It is probably best to think of political realism in those other fields as one possible (simplistic) version of political realism.

It will help us see a fuller picture of Niebuhrian political realism if—in light of our general definition of realism—we see it as a concern for politically relevant factors that are independent of our ideals and norms for morality and politics, factors such as our capacities of

[5] Lovin, *Reinhold Niebuhr and Christian Realism*, 4.

reason and empathy and our propensities toward short-sightedness and self-interest. In order to see its relation to other forms of realism, we can define political realism (in Niebuhr's sense) as the position which holds that *the viability of a political effort, system, or ideology depends on and is limited by realities—especially the structures of human nature—that exist independent of it, and which may resist its realization*. One of Niebuhr's most oft-quoted lines is an example of political realism: "Man's capacity for justice makes democracy possible; man's inclination to injustice makes democracy necessary."[6] Here our "capacity for justice" and the "inclination to injustice" are the realities that exist independent of our politics for which political realism must account. Political efforts that discount the former will fail to capitalize on our abilities and will fall short of the full possibilities of justice. Those that discount the latter will tend toward naïve mistakes, such as trusting in the goodness of an individual or class instead of instituting checks and balances. Democracy is viable to the extent it accounts for both. Political realism thus shares with other forms of realism an affirmation of the existence and independence of realities outside ideology, which are nevertheless available for analysis and appraisal.

There are two important features of political realism so defined: first is the priority given to analyzing what influences human choices in history (the "forces that shape and limit human possibilities," as we saw in the Lovin passage). Second is the belief that analytical clarity and political effectiveness require commitment to include the most discouraging and defeating factors, which we otherwise tend to minimize or neglect. To emphasize the latter feature, Niebuhr states that "political realism" means "a disposition to take all factors in a social and political situation, which offer resistance to established norms, into account, particularly the

[6] Reinhold Niebuhr, *The Children of Light and the Children of Darkness: A Vindication of Democracy and a Critique of Its Traditional Defense* (Chicago ; London: University Of Chicago Press, 2011).

factors of self-interest and power."[7] Yet his inclusion of only factors of resistance in that definition is, on my reading, not the full picture of his political realism. It fails to account for the fact that his political thought also consistently attends to the structures which *make possible*, as well as those that resist, the achievement of norms. The focus on resistance in his definition, rather, comes from his recognition of the need to compensate for our tendency to ignore disheartening realities. Because the targets of his polemics tend to be his fellow liberals whom he thinks are too naïve and optimistic, he tends to emphasize the need to account for self-interest and to meet power with power.[8]

While Niebuhr's political realism is concerned with all of the factors that affect and direct human choices in history, it is—as I mentioned in my definition—especially concerned with the structures of human nature. This is because the way in which any other factor—for instance, a social arrangement or technology—affects human choices depends on how humans respond to it. Our basic capacities and propensities of response limit and shape how stimuli can and do move us. Any political effort—whether to lower crime, boost the economy, or anything else—requires some sense of how human beings will respond to whatever incentive or method of coercion it proposes. Any effort to combat crime, for instance, requires (at least implicitly) some theory of what it is that causes humans to commit crimes.[9] Being clear about such causes requires clarity about the interaction of human capacities and propensities, on the one hand, and social and political factors on the other.

---

[7] Reinhold Niebuhr, "Augustine's Political Realism," in *Christian realism and Political Problems* (New York: Charles Scribner's Sons, 1953), pp. 119-120. quoted in Lovin, *Reinhold Niebuhr and Christian Realism*, 3.

[8] He thinks that modernity in general, even its in more pessimistic forms, is united most of all by faith in history. His general pessimism is a reaction against that unwarranted faith. He writes that, "The dominant note in modern culture is not so much confidence in reason as faith in history." Niebuhr, *Faith and History*, 3. His attacks on the "children of darkness" are a notable exception.

[9] Increasing the severity of punishments only lowers crime if potential criminals weigh the consequences before they act and are currently counting them too lightly, for example.

I recognize that human nature is a fraught topic, so it is important that I am clear about its usage in Christian realism. An important first step is to see that Niebuhr draws a distinction between two meanings of the term. On the one hand, he talks about the "essential nature of man," and, on the other, about "the virtue of conformity to that nature."[10] About the first he says that, "nothing can change the essential nature and structure, just as blindness of the eye does not remove the eye from human anatomy." It is the stuff of human life and action. Included in our essential structure[11] is freedom, which "creates the possibility of actions which are contrary to and in defiance of the requirements of this essential [structure]."[12] Our essential structure is not our tendencies to be good or bad; it is the equipment with which we are good and bad. It is also what sets the requirements for the flourishing of our lives. Thus, our essential structure is in one sense determinate: it sets the requirements of the flourishing to which our virtue is directed. However, it is indeterminate in the sense that it includes the freedom to act either according or contrary to virtue. In other words, our essential structure sets the requirements and limits of virtue, but does not direct us toward it in any determinate way.

Niebuhr further identifies two aspects within our essential structure: nature[13] and freedom. For Niebuhr, the first aspect, what we inherit as natural beings, is more than just a set of equipment and capacities (such as big brains, opposable thumbs, or the capacity for language). For him, it includes everything that humans have as a result of being natural creatures: "all his natural endowments, and his determinations, his physical and social impulses, [and] his sexual

[10] Niebuhr, *The Nature and Destiny*, 1996, 1:269.
[11] Niebuhr is not consistent in his terminology here, alternating between essential "nature" and "structure" to refer to this aspect of human nature. I will use the term "structure" to refer to this structural component of human nature, reserving our "nature" for the broader category of which structure is one side.
[12] Niebuhr, *The Nature and Destiny*, 1996, 1:269.
[13] "Nature" here meaning the world outside and prior to human freedom, not "human nature." Human nature is divided into structure and virtue, and part of structure is what we get from nature (the "natural" part of human nature).

and racial differentiations."[14] Earlier in *The Nature and Destiny of Man*, he includes in our natural inheritance both the "vitality of nature (its impulses and drives)," and "the forms and unities of nature, that is, the determinations of instinct and the forms of natural cohesion and natural differentiation."[15] Thus, this first aspect of our essential structure—our existence as part of the natural order—means we have needs, impulses, and drives which can push us either into or away from the forms, unities, and harmonies in which we find ourselves. Again, this natural existence is neither good nor bad, but provides one portion of the stuff with which we act morally and a segment of what we require to flourish.

The second aspect of our essential structure, as we saw, is freedom. Again referring to "man," Niebuhr writes "his essential [structure] also includes the freedom of his spirit, his transcendence over natural process and finally his self-transcendence."[16] It is important that we see here that freedom is not merely an aspiration or goal of humanity; it is part of our essential structure which we cannot forfeit. Freedom is in some sense a function of reason, the ability—through the formulation of concepts—to stand outside the realm of the natural order, to break and remake the natural forms we find around us. This rational capacity, like our natural inheritance, is ambiguous: on the one hand, it is disruptive, allowing us to reorder the forms we find. On the other hand, it also allows us to create new forms and unities at a broader scale, for instance, transmuting natural forms like family and tribe into race and nation (that is, to take natural forms and expand them into novel categories, that nevertheless build on and remain related to what is inherited from nature). What we will see is critical for a Christian realist

[14] Niebuhr, *The Nature and Destiny*, 1996, 1:270.
[15] Niebuhr, 1:27.
[16] Niebuhr, 1:270.

interpretation of our environmental situation is that freedom is an essential part of the human person and is inseparable from the breaking of natural harmonies.

According to Niebuhr, our conceptual dexterity in reimagining the world around us does not exhaust the full extent of our freedom, however. In addition to allowing us to stand outside the flow of nature, Niebuhr also insists that,

> Man's rational capacity involves a further ability to stand outside himself, a capacity for self-transcendence, the ability to make himself his own object, a quality of spirit which is usually not fully comprehended or connoted in "*ratio"* or "*nous*" or "reason" or any of the concepts which philosophers usually use to describe the uniqueness of man.[17]

Thus, our rational capacity includes not only the capacity to transcend natural forms, it allows us to transcend the categories of reason and stand outside ourselves, evaluating our existence as both natural and rational creatures.

So far, we have focused on the essential structure of human nature. We will explore the other side of human nature—virtue of conformity to the essential structure—in the section that follows this one, on moral realism.

Before we move to that section, however, I should acknowledge reservations people may have about the validity and appropriateness of using the concept of "human nature." The term can be abused such that certain segments of humanity are taken to represent the norm for human life. Universal human nature can end up sounding a lot like, say, German, Protestant, upper-class men. There are thus good reasons to be leery of using the term. However, all moral and political recommendations must include some conception of what human beings are like, fundamentally, at least implicitly and broadly conceived. If we say there is no fixed, universal human nature, this is just a way of saying human nature is flexible and plastic, perennially and universally, or that human nature is such that it is shaped profoundly by social location. This is really to dispute

[17] Niebuhr, 1:4.

what human nature is like, not to dispute that there is such a thing, if the term just means the characteristics of the species.

Any attempt to influence or predict the results of human choices includes assumptions about the factors that drive, shape, and limit human agency. Errors result when those assumptions are muddled or mistaken. Niebuhr pursues political clarity by addressing what he sees as rampant confusions and contradictions in these oft-hidden theories of the human person in political and social thinking, both interpretive and activist. For him, interpreting history and recommending interventions must include wrestling with questions of general human capacities and propensities, which drive us to questions of human nature, whether we call it that or not.

The unfolding history of humanity, in particular, is Niebuhr's observatory of human nature. Through memory of past human choices, we see human nature play out on a scale which makes visible its perennial character. While aspects of our essential structure, say our anatomy, are observable in the present, estimates of something like the possibilities and limits of human goodness require a large sample size over long periods of time. However, history does not provide a complete and coherent picture of the possibilities of human virtue.

In Niebuhr's terms, estimates of human virtue depend on judgments of human "stature," given the facts of history ("stature" here meaning our capacity to transcend our circumstances and make choices for good or evil).[18] For example, if we have a low opinion of our stature, perhaps doubting we can be good in bad historical circumstances, then maybe humans are as good as history allows (a high view of human virtue) and we can maintain optimism for the eradication of evil in history. If we have a high opinion of human stature (our capacity to be good), thinking we are always free to be peaceful, just, and so on, then we must hold a low

[18] Niebuhr, 1:16.

opinion of our virtue (our actual goodness), given the prevalence of evil in history; if we always could have chosen better, then it must be that we have a tendency to make bad choices. Thus, if we are realistic about human history,[19] then estimates of our virtue relate inversely to the estimate of our stature.[20] If, for example, we have a low opinion of human stature and do not think we can transcend our eras and cultures, then we can excuse a lot of human vice on the grounds that the individual was in the wrong point in history or in a bad society. We can say people were violent because they lived in a barbaric age or that someone was racist because of her culture. We do not have to confront the possibility that evil is a perennial condition of human beings. If we grant human beings the stature and freedom to be good, despite our circumstances, then we are accountable, whatever our context. Such a high estimate of our capacities means that we cannot explain away injustice or racism as the result of being at the wrong stage of culture progress or decay. If people can always be good, but are regularly bad, then we must have a perennial propensity toward evil. If we always have the capacity to transcend our situation, for good or ill, then we cannot put hope in historical progress for the eradication of evil (since we will retain the freedom to be bad). This means, perhaps counterintuitively, that Niebuhr believes ideologies with high hopes for moral progress in history require a low estimate of human freedom.

Thus, a high view of the freedom of *individuals* means a low view of our freedom as a *species* in history. If we are always at least somewhat free to transcend our social circumstances, then two things follow: first, flawed social and political arrangements cannot explain the

[19] Of course, if we are not realistic in our assessment of history, then we can think of humans as both always free to be good and possessing a consistent tendency to choose the good. Niebuhr has little patience for this possibility, as he wrote most of his major works in the long 1940s. History's lessons were, for him, unambiguous: "Since 1914, one tragic experience has followed another, as if history had been designed to refute the vain delusions of modern man" (*Faith and History,* 6-7).
[20] Niebuhr, *The Nature and Destiny*, 1996, 1:16.

violence and injustice in human history, because we always could have been better, and, second, we cannot expect improvements in such arrangements to end the problems of violence and injustice. If we were always free over our circumstances, we must regularly choose badly, and we will continue to have the freedom to do so, no matter how we change our circumstances. Thus, while it is true that Niebuhr is pessimistic about the limits of politics, we need to keep in mind that his low opinion of human virtue is built on a high estimate of our freedom to transcend our historical moment and make moral choices in that freedom.[21]

One might worry that Niebuhr's high view of the freedom to transcend our historical context implies that differences in crime, poverty, or educational attainment across different ethnicities, races, or genders are due only to differences in virtue between those groups (if we interpret Niebuhr as saying our freedom absolutely defies social structures and historical formation). His position may seem to imply racist or sexist conclusions, if everyone is capable of overcoming the disadvantages of her situation and people are somehow culpable for not doing so. Imputing to everyone, even oppressed groups, a full range of free agency is one of the ways theories of human nature have been used to denigrate those groups (for example, blaming a people group for a lack of educational achievement, despite their lack of access to education).[22] However, Niebuhr insists that we are only *relatively* and not *absolutely* free from social and political influence. So, while Niebuhr is clear that humans are always relatively free in our essential structure (and thus we cannot blame the existence of evil only on historical conditions), neither is any specific evil in history simply due to unrestricted free choice.

---

[21] This is an aspect of the argument in *Moral Man and Immoral Society*. Individuals have the stature necessary for heroic acts of self-sacrifice, but a wider scope reveals the generally low virtue of human beings (though this is just one part of the thesis). Reinhold Niebuhr, *Moral Man and Immoral Society: Study in Ethics and Politics* (Louisville: Westminster John Knox Press, 2002).

[22] For a particularly compelling articulation of this case, see Katie G. Cannon, "Moral Wisdom In The Black Women's Literary Tradition," *The Annual of the Society of Christian Ethics* 4 (1984): 171–92.

Yes, Christian realism stands out from many modern modes of thought, including some forms of liberal Protestantism, because it holds that "[man] finds the root of sin to be within himself. The essence of man is his freedom. Sin is committed in that freedom."[23] And yes, it teaches that the root of evil is not in lagging historical progress, but in the corruption of our freedom that is part of our essential structure. However, we must keep in mind that, as we saw in the Lovin passage at the beginning of this chapter, one of the primary distinctives of Christian realism is its concern with the "social forces that shape and limit human possibilities."[24] It is fundamentally about the factors—including both human nature and those in society and political arrangements—which affect our choices. Niebuhr is not saying, for example, that if one nation or race has a lower rate of crime or higher rates of educational attainment, it is because of its moral superiority. In fact, because he believes we are all equally free and sinful, the implication is that differences in the degree and character of the manifestations of evil in different cultures are not natural, but are rather the result of divergences in history, culture, and politics. Our natural tendencies do not vary. By affirming the relative but not absolute freedom in our essential structure, Niebuhr argues that we always have had and always will have the possibility and likelihood of evil, but that society and politics really matter in restraining and directing it. Our nature is such that the way it is nurtured is very important, just not absolutely so.

Because of the complexity of human nature, political realism cannot mean merely deriving a political program from empirical observation of history, even though such history is our best observatory of human nature. Though political realism does include attention to the observable factors that drive actual human choices in history, this does not mean that the history of those choices is our only source of insight into the structures which shape and limit choice.

---

[23] Niebuhr, *The Nature and Destiny*, 1996, 1:17.
[24] Lovin, *Reinhold Niebuhr and Christian Realism*, 1.

For Niebuhr, clear-eyed political analysis entails profound questions that mere political observation and wisdom cannot answer in full. Since "freedom" is part of our essential structure, we cannot induct from history any sort of binding laws of cause and effect. We are free to respond differently to the same stimulus. Niebuhr writes, "The freedom of the human agent introduces complex and incalculable factors into the flow of cause and effect. There are events in history which could be fully understood only if the secret motives of the human agents could be fully known."[25] Yes, the job of the realist political analyst or visionary includes looking to history for insight into the structures and tendencies of human choice at a large scale. However, because freedom is part of that structure, the patterns of history are never "simply intelligible,"[26] never coherently apprehended, merely through observation and rational analysis.

Thus, Christian realism differs from ahistorical theories of human nature, but also from those that find historical location to be sufficient and self-explanatory.[27] For Niebuhr, our "mixture of freedom and necessity" gives history "its particular character of meaning and obscurity, of partial, but not complete intelligibility."[28] That history is only "partially" intelligible does not mean only (as Christians might worry) that it does not lead the observer to the full Christian picture; rather, history is, on its own to any honest inquirer, incomplete and under threat of meaninglessness.

---

[25] Niebuhr, *Faith and History*, 18.
[26] Niebuhr, 38.
[27] We can think here of a rejection of both something like a Kantian liberalism's notion of freedom and something like a Marxian view of history (if we can look past the ways each of these thinkers may be more nuanced than their reputations). Niebuhr largely accepts Marx's critique of the liberal notion of a free, disinterested bourgeois individual, but denies Marx's assertion that a reorganization of material conditions will remove the problems of ambiguity and injustice. We are not as free over our conditions as liberalism hopes, but we are free enough to reject and corrupt any hoped-for moral formation by a new economic order. See, e.g., Reinhold Niebuhr, *The Irony of American History* (University of Chicago Press, 2010), 14.
[28] Niebuhr, *Faith and History*, 18.

Because human nature is a paradoxical compound of natural causation and freedom, history is an amalgamation of effects flowing from causes and free choices transcending any specific cause. History provides valuable lessons, but it is not a coherent realm of meaning without some higher mode of interpretation. This is why we saw, in the previous chapter, that there must be a constant commerce between specific truths, experienced within the flow of history, and final ones, discerned through faith. The political realism of Christian realism means paying attention to all the factors that make possible and resist the realization of our ideals, but those factors cannot be read off of human history. Observing the ambiguous progress of human development acts as a check on our more naïve interpretations of theology, but history is not understood coherently without recourse to theological and mythic symbols. Thus, political realism is analytically separable from moral and theological realism (it represents a specific aspect of Christian realist thought), but it is not practically separate, according to Niebuhr. Christian realism does not just absorb (for example) Machiavellian political realism as one leg of a three-legged stool; its estimates of those factors that structure and limit political possibilities draw on the lessons of history, but only as they are made coherent by incorporation within the larger structure of thought.

Moral Realism

We will explore moral realism in some detail in Chapter Six. For now, we just need to see that, within the context of Christian realism, moral realism holds that our moral claims are statements of fact whose truth depends on their relation to an ideal possibility willed by God. Our actions are good to the extent they conform to the essential, ideal created order. As we saw in the Lovin passage above, the Christian realists "were concerned with the gap between the

biblical vision of God's rule and the realities of modern industrial society."[29] We should always interpret the way Niebuhr's political realism calls into question this ideal's achievability in history as a strategy for best approximating the biblical ideal, not a repudiation of it. Christian realism is not *Christian* realism without the conviction that the biblical ideal is real. The pessimistic bent to Niebuhr's political realism is about the current unattainability, not unreality, of the biblical ideal. He in no way believes that moral norms and ideals are simply illusory, reducible to the expression of human values like self-interest and power.

Thus, as I mentioned above, in addition to political realism, Lovin identifies Christian realism as a version of moral realism. He defines moral realism as the conviction that "*whether a moral statement is true or false depends on a state of affairs that exists independently of the ideas that the speaker or the speaker's community holds about the appropriate use of moral terms.*"[30] While Niebuhr worries that in reality *expressions* of moral ideals very often do cloak individual or collective self-interest, he affirms that these claims are in fact true or false based on their conformity with a reality independent of how and why they are expressed. Thus, while Christian realism's political realism attends to factors which resist the realization of ideals, including the biblical ideal, its moral realism insists that this ideal is no less real than the factors that resist it.[31]

Contrary to any simplistic interpretation of Christian realism as contemptuous of ideals or dismissive of idealism, Niebuhrian Christian realism has a nuanced account of the significant role of ideals in human life. Lovin writes, "there is an element of idealism in the moral life of each individual and an element of utopianism in every attempt to think normatively about the life

[29] Lovin, *Reinhold Niebuhr and Christian Realism*, 1.
[30] Lovin, *Reinhold Niebuhr and Christian Realism*, 13.
[31] Lovin, 9.

of society."[32] It is what Niebuhr calls the "tension between the ideal and the real"[33] that provides the pull of obligation of the moral life. Moral acts, for Niebuhr, are not about following a set of rules or maximizing a consequentialist calculus, but about establishing, at least in the moment of the act, the ideal, understood as the fundamental order of life, toward which we feel drawn.

What does he mean by "ideal?" In the previous section, we saw that he talks about human nature in terms of the essential structure of human nature and the virtue of conformity to it. Conformity to the essential, fundamental structure of human beings: this is the ideal. For Niebuhr, the ideal is about the reality for which we are meant in God's creative purposes, about acting in conformity to the structure we were given.

How do we know that a given way of acting is more closely conformed to our essential structure? To answer that question, we have to see that the individual idealism and societal utopianism that Lovin mentions are closely related. The idealism that governs our individual ethics is tied very closely to what we imagine a utopia to be like (whether we take it to be purely imaginative, real at some point in the past or future, or in the consummating will of God, as Niebuhr does, it is at least imagined at the moment of choice). Niebuhr usually talks about morality in reference to a community; the ideal for individual conduct is inseparable from the ideal possibility for society. For him, our moral obligations are to act in the way that would mark an ideal human community, and it is that ideal community that provides the pull. Niebuhr rarely, if ever, talks about the individual moral life as attractive to us; in fact, the moral demands of

[32] Lovin, 18.
[33] Reinhold Niebuhr, *An Interpretation of Christian Ethics*, Reprint edition (Louisville, Kentucky: Westminster John Knox Press, 2013), 20.

Jesus' love ethic "wrests" from us a "cry of distress and contrition."[34] We are so daunted by its demands that we are "always tempted to indifference."[35]

It is the attractiveness of the ideal *community*, not the self-sacrificing individual ethic, that generates the pull of obligation to the moral life. He writes,

> The obligation to build and to perfect communal life is not merely forced upon us by the necessity of coming to terms with the rather numerous hosts, whom it has pleased an Almighty Creator to place on this little earth beside us. Community is an individual as well as social necessity; for the individual can realize himself only in intimate and organic relations with his fellowmen. Love is therefore the primary law of his nature; and brotherhood the fundamental requirement of his social existence.[36]

Here we see that the bridge between human nature and our moral obligation is our need for community for self-realization. "Self-realization" is another way of saying "conforming to our essential structure;" what is required for self-realization Niebuhr calls the law of our nature. For Niebuhr, the moral life is not about begrudging acquiescence to a self-denying command from God, so much as being pulled forward by the promise of full self-realization in "intimate and organic relations with his fellowmen."

The observation that an ideal community exerts a pull on us is a recognition of pre-moral goods, that is, goods integral to the essential structure of human nature. By "pre-moral" I mean that they are good because they are integral to our flourishing as human beings per se. To see the difference, consider the statements "it is good to be have enough food to eat" and the statement "it is good to feed your hungry neighbors." The first is a statement of a pre-moral good; it is good for humans to have their caloric needs met because we cannot flourish otherwise. The second statement is of a moral good: it is good to feed your hungry neighbors because it fulfills

---

[34] Niebuhr, 103.
[35] Niebuhr, 103.
[36] Reinhold Niebuhr, *The Nature and Destiny of Man: A Christian Interpretation*, vol. 2 (Louisville, Ky: Westminster John Knox Press, 1996), 244.

your moral obligation to them. Now, we may say, with Aristotle, that moral actions are themselves integral to our flourishing, but this does not deny that there are pre-moral goods as well (see *Nicomachean Ethics*, I.8, 1099a30-1099b7). The point is that we do not need a moral judgment to tell us that it is good to live in a stable, peaceful, just, and well-fed community of brotherhood and love. We are drawn to it, not because it is imperative, but because it is attractive (to borrow terms from Henry Sidgwick).[37] The imperative of moral action is to a community that meets the pre-moral needs of human nature. In the above quote, it is because community is the "necessity" that love is the "primary law" of our nature.

His political realism means that he recognizes the impossibility of meeting the demand of the love ethic, but this is in tension with a real pull we feel toward the community that universal conformity to such an ethic would bring. There is a real war between our members. There are elements in the self that express a will-to-power, seeking to win security against perceived threats from others' pursuit of their own self-realization.[38] That is where sin enters the picture, according to Niebuhr, not in the basic drive to realize the self. The battle in the moral life is not between self-denial and self-assertion but between self-realization in community and self-preference at the expense of community.

The challenge for environmental ethics, as we will see in Chapter Five, is being clear about where environmental destruction originates: is it only from the self-preferential and sinful will-to-power, or is at least some of it an unavoidable result of the drive for self-realization? Because, as I will argue, some significant portion of our negative environmental impact comes from the drive for self-realization of seven billion people and the goods (like food and family) that requires, we find ourselves in a difficult situation: the pursuit of goods that are constitutive

[37] Henry Sidgwick, *The Methods of Ethics* (Hackett Publishing Company, Inc., 1981), 105ff.
[38] Niebuhr, *The Children of Light and the Children of Darkness*, 20.

of our nature seems at odds with the flourishing of the ecosystems that support us, and on which we depend for many of those goods. A major topic of the latter half of this dissertation is the extent to which this difficult situation, this tragic bind, is like and unlike Niebuhr's interpretation of the social condition of humanity.

Setting aside the unique challenges of our environmental situation for those later chapters, we need to see here that, even without environmental considerations, Niebuhr sees the human condition as a serious interpretive problem. We are clearly meant for a sort of community that is regulated by a "law of our nature" that we find daunting and "distressing." Our nature is set against itself; we experience ourselves as meant for organic relations and "brotherhood," but it is insurmountably beyond our collective capacity to bring about (we cannot even find desirable the necessary love ethic). The prevalence of evil is apparent to the earnest observer of humanity in the world. Thus, as we attend to the realities of history, we see that this essential order of life, which we feel as an obligation, seems unlikely to have existed in the past or to ever exist in the future. Thus, in making moral claims, we feel an obligation toward and express an ideal law of love that is the requirement of the sort of creatures we are, but we have no empirical justification to sustain hope for its real existence in history.

Niebuhr calls this disheartening gap between moral ideals and realistic political expectations a "threat of meaninglessness which comes into history by the corruption of human freedom."[39] The corruption of freedom (sin) is a threat to the meaning of our lives because our moral ideals are not disembodied theoretical constructs but instead are related to visions of a perfected version of our world. That is, since our ideals are about the lives we actually live, our relationships, what we love—in short, the things we care about enough to make moral claims

[39] Niebuhr, *Faith and History*, 22.

about them—threats to the real possibility of our ideals are threats to the meaning of our most basic and significant experiences. Niebuhr writes: "Individuals and nations seek a deeper or higher dimension of meaning than the mere record of their continuance in time. They require some structure of meaning which will give various events a place in a comprehensive story."[40] Niebuhr means, I think, that moral claims are really an articulation of *our* world (not just *some* world) brought into "harmony of life with life," an articulation of the very "law of [our] nature."[41] Thus, implicit in our moral claims (which, at their best, are expressions of the requirements of our essential nature) is a hope for what our world can be, a comprehensive vision that gives meaning to history. These visions might be individual, local, collective, or ultimate, but they are all assertions of meaning for the world we experience in our own lives. It is the felt impossibility of the realization of these ideals that threatens our own lives and our sense of history with meaninglessness and despair.

Niebuhr's Christian realism meets the threat of meaninglessness and despair because it combines political and moral realism with a third type, theological realism. Recall that in Lovin's description, the relevant ideal possibility for society, which stands in judgment of social reality, is not a generic one, but the "biblical vision of God's rule." This eschatological vision of "divine and eternal *agape,* the ultimate harmony of life with life,"[42] though implicit in our moral claims, is apprehended in detail, not through rational extrapolation of the progress of history or a reasoned judgment of political success, but through revelation. The key, in Niebuhr's mind, to sustaining a meaningful yet realistic account of human history is faith. In *Faith and History* Niebuhr writes,

[40] Niebuhr, 23.
[41] Niebuhr, *The Nature and Destiny*, 1996, 1:16.
[42] Niebuhr, *The Nature and Destiny*, 1996, 2:81.

> The conception of divine sovereignty over history which is not immediately apparent in the structures and recurrences of history establishes a dimension in which there can be meaning, though the facts of history are not related to each other in terms of natural or logical necessity. The freedom of God over and beyond the structures of life makes room for the freedom of man. All forms of naturalistic or spiritualistic determinism are broken. History is conceived meaningfully as a drama and not as a pattern of necessary relationships which could be charted scientifically.[43]

Thus, our interpretation of history, our investigation into what is really going on, can never reach a satisfactory conclusion if it employs only rational categories of necessary relations. The unfolding of history does not disclose its own meaning, because (as we saw in our discussion of human nature and history) it does not follow rules toward which we can reason inductively. The reality is that we feel the pull of the ideal community—an ideal which is real, but which the facts of history give us no empirical justification to expect to be fulfilled. We experience moral obligation to pursue aims in line with the flourishing of our essential nature, but for which we have no reasonable expectation of success. In the context of this conflict between the aspirations of morality and what a cold political realism would expect, moral action is only sustainable, according to Niebuhr, if we see that the norms are real in the sovereignty of God. For the Christian realist, political realism (which is pessimistic about the achievability of the ideal) and moral realism (which affirms that ideal as the standard that gives history its meaning) coexist stably only in the context of theological realism. Put another way, if 1) moral realism says that moral claims are true statements of fact about an independent reality, 2) that reality takes the form of an ideal community, and 3) political realism tells us no such community has ever or will ever exist, then the realisms are in contradiction. We will either fall into despair about morality or ignore political realities. If, however, the ideal community is real in God's consummating will, then we can hold to the idea that it is real, without making the mistake of thinking it is a political

[43] Niebuhr, *Faith and History*, 27.

possibility. Thus, for Christian realism, stable political and moral realism require theological realism.

Theological Realism

"Theological realism" has many different uses and we should be clear about what I mean by it here. I will follow Lovin's definition: for the theological realist,

> Statements about God are not simply expressions of emotion or acts of personal commitment. Theological claims have cognitive content. They may be true or false. True statements about God are true because they accurately represent a reality independent of the concepts, theories, and evidence we have pertaining to that reality.[44]

Theological realism is thus distinguished from alternatives to either side. It rejects the erroneous (according to Niebuhr) position on one side that there is no reality of God beyond our expressions and the error on the other side that God is real but so far removed from our theological statements that these statements cannot, in principle, accurately represent God. Theological realism, thus defined, holds in tension the confidence to claim that true statements about God can be made and the humility to maintain that God remains independent from and transcendent over these statements. Theological statements can represent, but not capture and contain, the reality of God.

Niebuhr's theological realism is not a general affirmation of the reality of God; its form and content are specifically Christian. He believes we can make true statements about God, not through general natural theological reasoning, but because of revelation, paradigmatically in the life and teaching of Jesus. So, for example, whereas the love ethic is a law of nature, we cannot derive it from nature but need the revealed teachings of Jesus. Our nature is too diverse and the love ethic too unappealing for it to be clear to us without revelation. That we are meant for a

[44] Lovin, *Reinhold Niebuhr and Christian realism*, 20.

community regulated by a law we find undesirable is an example of the contradictions and confusions that arise when we reflect on the human condition. It is part of why we are a vexing problem to ourselves. We have seen that theological realism was essential to the coherence and meaning of our experiences of the antinomies and ambiguities of history. Reasoning from contradiction, ambiguity, and confusion cannot result in clarity about the particular character of God. The gospel of Jesus, especially as crucified Christ, is foolishness to, not the fruit of, worldly wisdom. Niebuhr writes, "The revelation of a divine mercy in a suffering savior was not a conclusion about the nature of God at which men might arrive if they analyzed the causes, sequences, and coherences of the world and deduced the structure of existence from these observable phenomena."[45] Whereas (in Niebuhr's telling) the classical world placed the center of meaning in changeless forms beyond the world and found no meaning in history, and modernity finds meaning only within history, Niebuhr interprets Christianity as locating meaning in a reality that transcends, but acts within, history and time. Ultimate meaning is not revealed in a set of propositions that are rationally necessary or in the culmination of historical progress, but in the story of a person whom faith apprehends as the God who died on a cross.

A critical point here is that, for Niebuhr, human life is suspended between and participates in time and eternity, the finite and the infinite, nature and freedom. We sense within and above the mundane experiences of life that we are fit for an existence beyond what we can achieve or expect. Niebuhr believes that this basic homelessness of the human spirit presents us with ambiguity, antimony, even absurdity. Thus, his basic project of political analysis leads to the need to make sense of our moral life, which drives us to a need for a way to deal with paradox and contradiction.

[45] Niebuhr, *Faith and History*, 140.

For this reason, we can see the crucifixion as the theoretical center of Niebuhr's Christian realism (even if he rarely discusses it). The crucifixion is the paradigmatic fact that cannot be arrived at rationally, but which makes sense of the ambiguity and confusion of human life. It is what makes possible coherent, meaningful interpretation of the world, just because it does not make sense. However, the *way* it does not make sense incarnates the way life does not make sense. The absurdity of that moment on the cross is not nonsense; is the source of Christianity's capacity to bring coherence to the contradictions of human life that seem similarly absurd.

Casual readers of Niebuhr might find the claim that the cross is the center of his thought surprising. Much of his more popular writing is not obviously Christocentric. However, Niebuhr believes that the story of God revealed in the form of a crucified savior brings meaning and coherence to the contradictions and incoherence of life. Thus, Christian realism's seemingly non-theological recommendations about power politics and democracy derive, fundamentally, from Christology. The Christian view of history, in fact, Christian realism itself, *works* (according to Niebuhr) because it can deal with the mystery and paradox at the center of human nature and history in a way that alternative views cannot. Its capacity to deal constructively with the contradictions and compromises of politics comes from finding satisfactory resolution of paradoxical history in the paradox of a suffering Christ. The Christian gospel is not rational, in any simple sense, but it saves clear thinking. It allows us to see what is really there, without the anxiety that leads to false completions and the absolutizing of political visions.

Niebuhr, as we have seen, insists that life is always less simply intelligible and coherent than rationalism expects. On the other hand, he insists that human life in the flow of nature and time is more individual, meaningful, and intelligible than anti-rationalist mysticism can account for. Superseding both, the message of Christ crucified is both rationally impenetrable yet

meaningful in the same way life is. Niebuhr writes, "To make suffering love rather than power the final expression of sovereignty was to embody the perplexity of history into the solution."[46] In other words, the resolution of history in the form of the paradox of the cross *fits* the paradox of life in a way a simple rational explanation could never do. Simpler answers to life's questions are either cynical (despair) or idolatrous (false completions). As he puts it, the Christian perspective allows us "to 'make sense' out of life; whereas alternative approaches either destroy the sense of life entirely or make false sense of it."[47] Christian realism is thus a mode for interpreting life and history, which affirms the value of the full range of human modes of knowing, without despairing at their apparent inconsistencies or exalting any one of them to the status of ultimate meaning.

Niebuhr thus sees faith in Christ crucified as providing the possibility of sustaining together various seemingly contradictory forms of knowledge (like moral aspirations and plausible [thus often relatively pessimistic] political expectations). This is not a neat resolution that simply solves the problems of the moral and political life, but it is a starting place for a framework of coherent meaning in the midst of these perennial problems. It is this capacity for coherence that marks the most distinctive contribution Christian realism can make to environmental ethics.

Coherence: Theology and other sources of knowledge

Niebuhr believes that human achievements, including expressions of knowledge and wisdom, stand in one of two possible relations to the love of Christ: "insofar as they represent developments of the goodness of creation, it is their fulfillment. Insofar as they represent false completions which embody the pride and the power of individuals and nations…it is their

[46] Niebuhr, 143.
[47] Niebuhr, 141.

contradiction."[48] Niebuhr seems to be saying that, because of the goodness of creation, the world rewards our investigations into it with partial but real knowledge and wisdom that Christ fulfills; the Gospel does not contradict all merely human knowledge. Remember, the law of love is the basic, not supererogatory, requirement of the flourishing of human nature. We are, in a sense, built for it, though we are not built to arrive at it as the conclusion of our thinking or to aspire to it as a simple fulfillment of our individual desires. The Gospel is not the rational result of human reason, but it is its coherent, supra-rational completion.[49] It is the fulfillment of our nature, our flourishing. However, because of pride, power, self-interest, sin, etc., we desire and construct "false completions", that is, principles of explanation and centers of meaning and desire, that sweep away the ambiguities of history and offer reassurance of ultimate meaning and fulfillment where only proximate meaning and false completions are possible. The Gospel of Jesus stands in contradiction to these false completions.

Because the Gospel fulfills authentic deliverances of human reason and our desires for brotherhood, Niebuhr believes a "limited rational validation of the truth of the Gospel is possible."[50] It is limited in the sense that, as was said earlier, one cannot build a rational proof that the Gospel contains the ultimate resolution and meaning of individual lives and human history. That said, Niebuhr believes two forms of demonstration lend credence to the Christian message: via a negative approach, Niebuhr believes, "the Gospel must and can be validated by exploring the limits of historic forms of wisdom and virtue."[51] This is the approach Niebuhr

[48] Niebuhr, 151.
[49] This paragraph may trigger thoughts of Aquinas in readers of a certain persuasion. I believe the relevant difference is that, while Aquinas believes the perfection of the natural virtues is sufficient for earthly flourishing and the theological virtues are a supernatural completion, Niebuhr believes that our earthly flourishing requires faith, hope, and love and that our experiences are finally incoherent without them. Thus, human modes of knowing, while incomplete, are not merely incomplete. They tend toward antimony and meaningless. Their completion in Christ is supra-rational, not a simple filling-in of what is missing.
[50] Niebuhr, *The Nature and Destiny*, 1996, 1:101.
[51] Niebuhr, *Faith and History*, 152.

takes in *The Nature and Destiny of Man*, which, as we saw, he begins by saying that, "Man has always been his most vexing problem…Every affirmation which he may make about his stature, virtue, or place in the cosmos becomes involved in contradictions when fully analyzed."[52] Our affirmations about ourselves may all be true, but analyzing them together leads to contradiction. Critically, for Niebuhr, this is not due to a limitation of our ability to experience the world accurately, but is the result of our *accurate* experience of a world that is *in fact* rationally inscrutable; the world in fact requires a paradoxical, perplexing resolution. Our apprehension of the world is only coherent if we interpret it in relation to the supra-rational reality of God. While revelation is required to see the positive coherence of the world, Niebuhr believes that we can see the limits of all other forms of wisdom when we submit them to consistent analysis. Much of Niebuhr's polemical writing (which is to say, most of his writing) should be seen as pursuing this negative apologetic task.

The other aspect of the "limited rational validation" of the Gospel is the positive approach. According to Niebuhr,

> It consists in correlating the truth, apprehended by faith and repentance [that is, the Gospel], to truths about life and history, gained generally in experience. Such a correlation validates the truth of faith insofar as it proves it to be a source and center of an interpretation of life, more adequate than alternative interpretations, because it comprehends all of life's antinomies and contradictions into a system of meaning and is conducive to a renewal of life.[53]

In other words, though we cannot arrive at the truth of the Gospel through rational proof, once apprehended (through revelation, in faith and repentance) it *works* as a way of making sense out of our experience. Revelation, on Niebuhr's account, does not inject truth into a world of shadowy confusion and unreliable knowledge; rather, the theologian is able to correlate the truth

[52] Niebuhr, *The Nature and Destiny*, 1996, 1:1.
[53] Niebuhr, *Faith and History*, 165.

of revelation to other truths "gained generally in experience." The truths of revelation and experience are in a mutually reinforcing relationship. If apparent truths gleaned from revelation and experience prove incommensurable, one or the other is wrong or confused.

A critical implication of this, central to Christian realism, is that the capacity to coordinate and explain the ambiguities of history is a criterion for the adequacy of any theological system. Yes, theological insight might require that we amend non-theological beliefs, but theological positions are inadequate if they fail to make sense of experience and the facts of history. Put more positively, Niebuhr believes that adequate Christian theology works to bring coherence to experience. Theology's success working in this way "validates the truth" of what is apprehended in faith because it is "more adequate than alternative interpretations." It is not that the Gospel is true because it works; rather, it works as a center of interpretation of life because it is true. Formulations of it that do not work in this way are inadequate expressions of the Gospel and are in need of revision.[54]

Niebuhr's depiction of the apologetic tasks of the theologian helps us to see how and why he melds political, moral, and theological thought the way he does. On the one hand, politics has the scope to reveal the contradictory and ambiguous character of human wisdom and virtue, opening the door for a theological answer. On the other hand, theology brings insight and coherence to the perplexing realm of human ethics, politics, and history, which, in turn, works to (at least partially) validate the truth of Christianity. Revelation is necessary because we cannot arrive at the truth of the Gospel without it, but because Christian revelation is true, what it says about human nature works as a "center of interpretation" for human life, including political life,

[54] This inability to fit and explain the facts of history often forms the heart of Niebuhr's criticism of other theologies. Also, this section should strike readers as bearing the imprint of American pragmatism. Lovin argues that pragmatism was the resource that made Niebuhr different from Continental neo-orthodoxy. See Lovin, *Reinhold Niebuhr and Christian Realism*, 39ff.

which can be evident to any audience of good faith (not just Christians). In Christian realism, the Christian message is not just helpful for Christians in the personal task of giving their lives meaning; it has real predictive and explanatory power in political analysis. For Niebuhr, theology brings coherence and intelligibility to politics, allowing us to grasp what actually makes it work and (perhaps more importantly) what prevents it from working. A key supposition is that human nature has significant political implications. Theology, by clarifying human nature, produces insight into the factors, like self-interest and power, which affect actual human choices in history. Political outcomes are made possible and limited by the sort of creatures we are, a reality illuminated by theology. Politics, in turn, provides an observatory of human nature, to which any theological anthropology can be held accountable. In short, theology properly articulated illuminates politics and realistic political analysis refines and clarifies theology.

I would be remiss if I did not note that, while Niebuhr does not believe that sin distorts all human knowledge, he does worry about our *pretensions* to knowledge that result from pride and complacency. Our explanations and justifications of historical arrangements thus must be viewed through a hermeneutics of suspicion.[55] That is, our realist assessment of what is really going on cannot take the explanations of the motivations of the actors involved at face value, as they may be dishonest or (more significantly) self-deceived.[56] The position is subtle: the goodness of creation makes possible real and reliable—though limited—knowledge of the world around us, but our fallen state means we tend to reject those limits and therefore we must approach our own and others' *expressions* of worldly wisdom and values with suspicion.

[55] Lovin asserts that Niebuhr introduced hermeneutics of suspicion to American social ethics as a result of his early Marxist influences. Even as Niebuhr later became a vocal critic of communism, he is best understood as a "post-Marxist," rather than an "anti-Marxist." Lovin, *Reinhold Niebuhr and Christian realism*, 8.
[56] Lovin, 8.

By way of summation and conclusion of this rough and quick account of Niebuhr's Christian realism, let us turn to a discussion of the benefits of Christian realism for environmentalist theory and the revisions of Niebuhr's thought necessary for our environmental age.

The Promise Of Christian Realism for Environmentalist Theory

The first advantage of Christian realism for environmentalist thinking is that it is well suited to bring coherence to seemingly contradictory modes of knowledge. A basic assertion of Christian realism, as we have seen, is that we experience our lives within overlapping, apparently incoherent spheres of meaning. We are creatures of nature, which we transcend, prone to evil and violence, yet fundamentally aware of a law of love, and so on. This is very important for environmentalist thought, especially environmental ethics. The term "environmental ethics" itself contains the recognition that we exist in a realm of natural necessity (we are "environmental" creatures), as well as a realm of freedom in which we experience the possibility of moral choice (we are ethical creatures). Thus, a cogent *ethics* that is thoroughly *environmental* requires precisely what Christian realism offers: a frame of interpretation capable of forging a coherent synthesis of these seemingly incommensurable principles of interpretation.[57]

The second advantage of Christian realism for environmentalist theory is that it asks a set of questions the field has at times neglected. Environmentalist theorists—as we will see in the chapters that follow—have recently been forced to confront public recalcitrance in the face of dire environmental warnings and have begun to analyze the factors that we see resisting the realization of the environmental norms the field has put forward. Nevertheless, this political realism is relatively (but certainly not entirely) new to environmentalism; Christian

[57] Which is not to say, of course, that there are no other adequate frameworks. This dissertation argues that Christian realism is a helpful way to approach environmental ethics. It never claims it is the only way.

environmentalist thought is only beginning to probe in earnest Christian frameworks for analyzing and addressing those factors that resist the realization of environmental norms. Christian realism already brings with it a disposition to focus on these factors, and has ready means for identifying and interpreting them.

The third advantage is that it allows for the coexistence of hope with a clear-eyed assessment of the discouraging and disheartening aspects of our environmental situation. Part of the challenge in responding to any daunting moral and political challenge, like our current situation, is to sustain hope and energy without minimizing the realities that stand in the way of success. We can become convinced that the meaning of what we do depends on the possibility of its ultimate success, causing us to either treat ultimate resolution as a simple possibility or recognize that it is impossible and reject cynically the truth that our actions are meaningful. Christian realism's relation of the moral meaning of history to a God who transcends, yet participates in the world, means that we can find meaning in our efforts without seeing a direct path to their ultimate success. Responsible effectiveness remains a moral criterion (rather than only pure faithfulness to an infeasible ideal), but we are responsible only for proximate, not ultimate, ends. This allows us to work for the best available outcome without needing the assurance that final resolution of the problem is a human possibility.

The fourth advantage is that it makes possible a publicly intelligible, yet distinctively Christian, contribution to environmentalist thought. As we will see in the chapters that follow, much of Christian environmentalist theory has been concerned with how Christians should respond to our environmental situation, understood as a readily intelligible phenomenon. In these accounts, science, social science, and history deliver to Christianity a problem, to which Christians must marshal resources from the tradition to move Christians to respond in the ways

empirical scholarship has shown us is required. The entire role of Christianity in much of Christian environmentalist theory is to serve as a storehouse of evocative images to be deployed to motivate members of that tradition to care about something any responsible person should care about in any case. We are told to imagine, for example, that our role is as God's "stewards of the Earth," that the Earth is "God's body," etc., in response to a list of empirically discerned environmental emergencies. Christianity, in this approach, plays only a motivational, hortatory, or moralistic role in Christian environmental ethics; the aim is to use Christian resources instrumentally to spark and sustain Christian moral energy. Alternatively, in examples such as Laura Yordy's *Green Witness*, Christian environmental ethics uses the tradition, not as a simple stockpile of resources, but as a means to provide a model of the Church's faithful response to witness to the ecological eschaton. Unfortunately, that model is intelligible only within and to the church. Thus, Christianity's role in these different alternatives is either hortatory, but not descriptive, or descriptive in a way that is unintelligible to all but Christians.

An aim of Christian realist environmental ethics, on the other hand, is to be a Christian environmental ethics that is descriptive of the problem and the possibilities for solutions in a publicly intelligible way. While its coherence is ultimately made possible only in reference to the exclusive revelatory event of the incarnation, discerned through faith, it should nevertheless have explanatory power that works to make sense of the experience of anyone analyzing the situation in good faith. Remember, Niebuhr believes that Christian revelation is open to partial rational validation because it works as a "source and center of an interpretation of life, more adequate than alternative interpretations, because it comprehends all of life's antinomies and contradictions into a system of meaning and is conducive to a renewal of life."[58] Even though

[58] Niebuhr, *Faith and History*, 165.

the apology for Christian realist environmental ethics I put forward relies on revelation for this principle of interpretation that allows it to give a coherent account of the environment, this account's coherence should be apparent even to those for whom revelation is not authoritative. In short, Christian realism can make a distinctively Christian contribution to the basic description of our environmental condition (that is, one that is unavailable without revelation), whose persuasiveness nevertheless does not depend on the authority of revelation and reaches beyond a community constituted by the Christian narrative. The task of Christian realist environmental ethics is not to make a publicly intelligible problem relevant for Christians (who as members of the public should need no extra help), but rather to bring publicly intelligible coherence to a problem whose complexity defeats simple rational explanation without theological insight.

Not A Mere Application Of Christian realism

Hopefully, the attention paid thus far to the methodological, dispositional, and conceptual basis of Christian realism—and not just its political prescriptions—has made it clear that this dissertation is a version of Christian realism, and not a mere application of Christian realist political thought. One could conceivably write a Christian realist environmental ethics by simply granting Niebuhr's interpretations of history, morality, and theological anthropology, and then apply his resulting political conclusions to the environment as just another area of politics and international relations. However, I believe that approach would be deficient in two respects: First, an application of his political expectations to the environment would only work if "the environment" were already intelligible to us in Christian realist terms. Unfortunately, there is no stock interpretation of the environment to which we could easily apply a Christian realist political calculus. We must first bring coherence to our interpretation of our environmental situation before we can make political recommendations for how best to respond. We need a

careful accounting of the drivers of environmental choices, with special attention to those factors that resist the realization of norms (environmental norms which also need to be expressed in morally realist terms). In short, before Christian realist political theory can be applied to environmental issues, we first need to interpret and express those issues in the vocabulary and with reference to the concerns of Christian realism. Political application can take place only after a thorough, realist analysis of what is really going on.

The second problem with a simple application approach to constructing a Christian realist environmental ethics is that it would imply Niebuhr's analysis of human nature, ethics, and politics needs no revision in light of environmental awareness. This is not the case. The history he cites in support of his moral anthropology is mostly concerned with the ambiguities of politics and relations in society, not with the wider story needed to illuminate the character and limits of the human place in ecosystems. If history reveals aspects of the essential structure of human nature, then environmentally relevant aspects of that structure may need to be seen in light of the history of human beings as actors in ecosystems.

I should say that Niebuhr does worry that human hubris overestimates our power over the natural world, a concern shared by environmentalism. However, he is more worried that our *success* in mastering nature has led to overconfidence in our ability to master human nature than he is about the limits or tragic consequences of our power over nature. We can see a clear example of a revision that Niebuhr's thought requires in *Faith and History*, where he lists four categories of human capacities "in which various limits of historic growth may be observed."[59] The first is "man's capacity to manipulate the processes of nature, to exploit its treasures and bend its forces to human ends."[60] Three others follow this first category: power to manipulate

[59] Niebuhr, 71.
[60] Niebuhr, 71.

culture, power over rational forms, and finally power over our own creatureliness and finitude. The list moves in descending levels of freedom and power; Niebuhr worries that our relative success at the start (our power over nature) is used to justify expectations for success at the end (power over human creatureliness). Niebuhr includes our capacity to manipulate and exploit nature because he sees it as an example of our greatest progress in history, even though he sees the resistance of nature as a limit to that progress. The insight of environmentalism is precisely the recognition of more serious limits to our power to manipulate nature and exploit its treasures. Clearly, then, any Christian realist environmental ethics needs to revise Niebuhr's schema of the various possibilities and limits of human power. Changing Christian realism's depiction of the limits of human power over nature changes, in small but significant ways, its estimation of the character of politics.

When I say that Christian realist environmental ethics revises Niebuhr's thought in light of environmental awareness, we should keep in mind that, as we saw in the previous section, the content of "environmental awareness" must be revised in terms of the methods and dispositions of Christian realism. The Christian realist environmental ethicist looks to environmental history (as I will in Chapter Three) with the aim of illuminating our essential structure and universal tendencies, and thus the result looks very different than histories that diagnose the roots of our environmental situation only in terms of historical developments.

Another example of where Christian realism and environmental thought inform and reform each other is the scope of history each one considers. Niebuhr is mostly concerned with recorded political history and in particular with the narratives of progress in the modern West. To wit, Niebuhr repeats in many places that our natural inheritance on which human history is built

includes the "natural cohesion of tribe and race."[61] The implication, I believe, is that tribal existence is "prehistoric," in the sense that it forms part of the stuff of which history is later made. We innovate and produce historical novelty on top of the substrate of these "natural" cohesions. Thus, while he sees human nature as the way we have always been, the history to which he attends in order to see that structure only begins with the recorded history of civilizations. The history he most often tells has three phases, the Classical, Christian, and Modern.[62] Much environmentalist literature, on the other hand, has a two-phase history: a time of balance with nature and a period of relatively recent imbalance. As examples, for Lynn White, Jr. it was the medieval triumph of Christian presuppositions,[63] for Larry Rasmussen the habit of mind of the industrial age,[64] and so on. Thus, neither Christian realists nor many environmentalists have felt the need for a very long account of human history. However, if we take Christian realism's focus on history as a way to see the outworking of the essential structure of human nature *and* environmentalism's concern for human-nature relations, we realize we have to look at the whole history of human beings in nature. This requires a much longer timeframe than either field has felt the need to explore. To see the essential structure of our nature as environmental beings, we need to look at historical continuities, not just across the rise and fall of nations and empires, but across the arc of the growth of the human presence on earth. Thus, we must look to history at the very limits of what we know and the greatest extent of its scope. This is the subject of the next chapter.

Another significant environmentalist revision of Christian realism has to do with tragedy. As we will see in great detail in Chapter Four, Niebuhr does not think the Christian view of

[61] Niebuhr, *The Nature and Destiny*, 1996, 1:27.
[62] For example, ibid., 1:4–25.
[63] White, "The Historical Roots of Our Ecologic Crisis."
[64] Larry L. Rasmussen, *Earth Community, Earth Ethics* (Maryknoll, N.Y.: Orbis Books, 1996), 8.

history is significantly tragic (though elements of human life involve tragic situations). He writes, "There is always the ideal possibility that man will break and transcend the simple harmonies of nature, and yet not be destructive. For the destructiveness in human life is primarily the consequence of exceeding, not the bounds of nature, but much more ultimate limits."[65] Niebuhr thinks there is an ideal possibility in which free human beings can creatively break and remake natural harmonies, without causing the sort of destruction that matters. For him, we are destructive when we sin, not when we pursue human goods creatively by breaking natural forms. The idea that we can (ideally, but not in practice) pursue all nontrivial human goods without conflict and destruction means that human life is not tragic. The Christian view is not like the Greek view, in which the assertion of human freedom involves us necessarily in guilt.

An environmentalist revision of this view of tragedy would object to the position that breaking natural harmonies is not destructive. Natural harmonies matter to environmentalism; breaking them is necessarily destructive. If freedom and creativity our integral to the human good (and they are) and necessarily involve the breaking of natural harmonies (they do), then pursuing the human good necessarily involves harm to nature. A major revision of Christian realism in environmental context, then, is that a tragic interpretation of human life and history is given new plausibility. If we cannot pursue the human good without involving ourselves in guilt, then our situation is tragic. This is a major theme of Chapter Five.

The final revision environmental awareness requires of Christian realism is related to the tragic interpretation of human life. If the created, essential structure of human beings involves unavoidable guilt (prior to any sin), then God is to some extent implicated in that guilt. More basic to an environmentalist revision, if ecosystems are taken to be part of the fundamental

[65] Niebuhr, *The Irony of American History*, 158.

reality of the created order, then God created a world marked by death, decline, predation, suffering, disease, and parasitism. Christians have usually taken these phenomena to be evil. Thus, the incorporation of evolution and ecology into a theological system requires dealing with a theodicy problem and an eschatology problem. The theodicy problem is how to make sense of God's creation of what we have taken to be evil. The eschatology problem is how to incorporate ecosystems into our imagination of the fundamental order of reality, the reality for which we take ourselves to be designed, which provides the pull of obligation of the moral life. These challenges are a major concern of Chapter Six.

Conclusion

This chapter has presented an interpretation of Christian realism, the necessary theoretical framing for a Christian realist environmental ethics. The challenge now is to think in this mode about our environmental situation. The remaining four chapters, as we have just seen, are about employing a Christian realist approach to thinking about the environment. Chapter Three is about interpreting our environmental history. Chapter Four relates a brief overview of that history. Chapter Five is about political realism, interpreting the drivers of human environmental choices in history (including a tragic reinterpretation of the human condition). Chapter Six is about moral and theological realism, exploring what it means to take the truth of Christian claims seriously in the midst of environmentalist revisions (including revisions about theodicy and eschatology).

Chapter Three: The Role of History in Environmental Analysis

The opening chapter of this dissertation distinguished a Christian realist environmental ethics from the cosmological approach, exemplified by the work of Lynn White, Jr,. which seeks to fix our environmental problems by fixing theological symbols. I claimed that the fact the field has understood itself as an urgent activist movement in response to a clear and novel problem has led to errors in method and content. I claimed that what we need is a multi-dimensional approach aimed at bringing coherence to our environmental situation, rather than at motivating Christians to respond to an already-disclosed moral task. The unique contribution theology offers, I claimed, was insight into the human condition, not only evocative symbols capable of changing that condition.

However, I have not yet made clear why this is the case. I have not yet shown why our environmental situation is best interpreted as arising from perennial features of human nature, rather than as a particular problem theology can solve. Christian realism, because of its politically realist attention to features of human nature that make possible and resist our aspirations, will of course approach all social problems in this way. Central to its method is looking at how human nature structures, drives, and limits our possibilities in a given situation. However, just saying we need Christian realism in this case because other approaches are not Christian realist enough does not get us anywhere. We have to see why Christian realism is an appropriate response on grounds other than its insistence that it usually is.

This is especially true because the cosmological approach is a plausible strategy in certain environmental situations. For example, evidence suggests that the religion of Easter Island led to its ecological collapse. If this is the case, religious changes might have saved it. The process of building its famous giant stone heads required wooden tracks on which to slide the

heavy stones. It seems that so many trees were cut down in the (perhaps) religious frenzy to build the heads that the fragile island ecosystem collapsed, bringing the civilization that it supported with it. If it is the case that building the heads was driven by religious cosmology, then a theological reformer potentially could have prevented ecological disaster by changing religious symbol systems prior to disaster.[1] Closer to home, we likely can think of individuals and congregations whose views of environmental issues and environmental behaviors have changed because of theological interventions.[2]

The argument here is not that theological beliefs cannot cause bad environmental outcomes and therefore that theological changes can never make a positive difference. The claim is that this approach is insufficient to the task of understanding and responding to our total environmental situation. While theological symbols matter to environmental outcomes, they are a poor explanation of the total shape of human environmental impact throughout history. Our environmental crisis is not like the one on Easter Island. It is more like the problems of violence and oppression which pervade human history than an isolated religious craze on a remote island. It does not have a single historical cause that can be reversed by religious leaders. We cannot assume that theology is both the root of and the remedy to the problem, but have to analyze it in terms of our basic condition as agents in environmental context.

How do we see that our environmental situation is more like perennial social problems, like violence and oppression, than the crisis on Easter Island? The key is history. In at least one sense, then, this chapter and the one that follow form the crux of the dissertation. Whether we

[1] Clive Ponting, *A New Green History of the World: The Environment and the Collapse of Great Civilizations* (New York: Penguin Books, 2007), 1ff.
[2] For a particularly powerful and well-documented example, see Susan Drake Emmerich, *Faith-Based Stewardship and Resolution of Environmental Conflict: An Ethnography of an Action Research Case of Tangier Island Watermen in the Chesapeake Bay* (University of Wisconsin--Madison, 2003).

need a Christian realist environmental ethics or the cosmological approach is sufficient depends on how we view environmental history. If our environmental problems are the result of a specific set of doctrines driving a novel set of destructive behaviors, which we can see operating in the historical record, then perhaps changing those doctrines will work. If, on the other hand, history reveals that humans have always stood out from and harmed nature and our present condition is simply an intense instance of a perennial human reality, then we need to make sense of that reality. Chapters Five and Six develop and apply a Christian realist environmental ethics, building on the vision of environmental history laid out in Chapter Four, for which the current chapter provides theoretical framing. The arguments in the final two chapters will not make sense or convince anyone who does not share that view of history.

The work of this chapter, then, is to show how the cosmological approach relies on a specific view of how to deploy history and show a Christian realist alternative. To the extent that the history related in Chapter Four fits what one would expect, given human beings are as Christian realist anthropology claims, it will serves as a limited apologetic for the arguments that follow. Thus, this chapter begins by looking at the historical account White offers and the cosmological approach accepts, then turns to Christian realist accounts of how human nature shapes history. The next chapter then relates a (very brief) account of the history of human beings as environmental creatures.

White's use of history

How does White reach the conclusion that Christian symbols are the source and solution of our environmental problems? In White's telling of history, pre-Christian religions imbued the natural world with sacred status; natural landscapes were full of spirits, alive and inviolable

(what Jurgen Moltmann labels our "earlier religious inhibitions").[3] Christian visions of a transcendent God, who created the world for the use of human beings, led to a desacralizing of nature, recasting it as inert material for human exploitation. This religious-imaginative wrong turn, White claims, led to the development of our modern scientific sensibility and, critically, to a chain of events that threaten the planet: the wedding of this scientific mode of thought to technological innovation, its application to industrial use, a vast increase in human power over nature, and the unchecked use of that power for exploitation.[4] Because of its influence on the literature, it is worth devoting some time to see how he marshals his historical narrative to analyze the environmental crisis.

According to White, natural science and technology have merged only recently, though each is ancient. White acknowledges that some limited human impact on our ecosystems is ancient as well, but it is (according to White) the modern combination of science and technology that brought about an epoch-making, *categorical* change in that impact. He writes,

> [It was] not until about four generations ago that Western Europe and North America arranged a marriage between science and technology, a union of the theoretical and the empirical approaches to our natural environment. The emergence in widespread practice of the Baconian creed that scientific knowledge means technological power over nature can scarcely be dated before about 1850…Its acceptance as a normal pattern of action may mark the greatest event in human history since the invention of agriculture, and perhaps in nonhuman terrestrial history as well… Today, less than a century later, the impact of our race upon the environment has so increased in force that it has changed in essence.[5]

This last line is critical. White believes he has identified, not merely a period of rapid acceleration or intensification of a preexisting mode of relation to the earth, but a moment of essential change. The quantitative expansion of human impact has been so vast and rapid that he believes it constitutes a qualitative transformation.

---

[3] Moltmann, *God in Creation*, 1985, 20–21.)
[4] White, "The Historical Roots of Our Ecologic Crisis," 1203.
[5] White, 1203.

Because White believes the interrelated complex of creed, technology, and industry, which drove the change in our relation to Earth, now permeates every aspect of our lives, he argues that it must be addressed as a whole. This methodological choice has had significant consequences. He writes, "What shall we do? No one yet knows. *Unless we think about fundamentals*, our specific measures may produce new backlashes more serious than those they are designed to remedy."[6] His choice to turn to "fundamentals" presented White (and continues to present us) with a very consequential question: what is fundamental? Given his diagnosis of the problem in the Baconian creed and the technological power that flowed from it, he had options available. He could have seen scientific technology as the "fundamental" that needed to be changed, or specific technologies, or even the industrialized capitalism that followed. However, in White's view, the creed preceded and caused the technologies and new pattern of action, so it appeared the more "fundamental" of the two.

Thus, his search for the root of the problem moves from scientific technology, via the creed, to the culture in which it developed. He writes, "Our ecologic crisis is the product of an emerging, entirely novel, democratic culture."[7] He concludes, from the observation that the crisis is the product of culture that, "Presumably we cannot [survive] unless we rethink our axioms."[8] With this move to culture and so to axioms, his diagnosis becomes both wider and narrower than the prior one: wider in that it encompasses the whole culture, not just science and technology, but narrower, because he identifies axioms as the source and driver of culture. In just a few paragraphs, he has gone from a description of an overwhelmingly complex global crisis to a very specific diagnosis and prescription: the problem is our axioms, which we can and must rethink.

[6] White, 1204. Emphasis mine
[7] White, 1204.
[8] White, 1204.

White is not finished; his historical lens gets even narrower: the axioms of the culture in which science and technology became wedded are native to Western Europe, specifically the form of Christianity found there. Thus, it is not the whole culture or its axioms, but the religion that delivers the axioms to the culture that is the real root of our crisis. White justifies his turn to religion by asserting that, "What people do about their ecology depends on what they think about themselves in relation to things around them. Human ecology is deeply conditioned by beliefs about our nature and destiny—that is, by religion."[2] He does not assert merely that religion is one influence on people's ecological behavior among many; rather, our behavior *depends* on religion. Note also White's position on how religions influence behavior: it is not through the forms of community they create, the rites and disciplines they practice, or the way in which they form individuals. The effect is achieved, rather, by influencing what people "think about themselves in relation to things around them" and "beliefs about our nature and destiny." The massive complex of industry, infrastructure, markets, individual and collective behaviors, and so on, which causes our present ecological devastation, can be traced to changes in our symbolic religious imagination.

The reductionism of this explanation should trouble scholars of religion. White considers no reason *why* people believe in Christianity, but rather treats the phenomenon of its spread as if it is merely accidental—and therefore reversible—historical development. In his account, religion seems to deliver beliefs to people and their culture, seemingly from without. It is not an expression of something true or an authentic product of people's experience. White analyzes religion only in terms of its consequences and uses; he never considers the appeal or truth value of Christian axioms, only their effects on our activity. To change our behavior, then, White can

simply assert "we must rethink and refeel our nature and destiny."[9] He does not consider the possibility that religion might do anything like reveal true insight into our actual nature and destiny; it merely shapes how we think and feel about them.[10] These thoughts and feelings determine our ecological behavior.

White concludes from this diagnosis that "Christianity bears a huge burden of guilt"[11] for the current situation. At this point in his argument, White faces another important choice, this time about the *current* shape of Christianity's guilt. Perhaps Christian axioms only started a chain of causes that have led to the current situation and therefore Christianity bears responsibility only for being the spark: it was a primary cause, after which many secondary and tertiary causes drove (and continue to drive) the crisis into the present. He could say that technology and science, once wedded, no longer needed Christianity to sustain their marriage.

White takes a different path: he claims Christianity bears ongoing and accumulating guilt for being a *persistent* efficient cause, a continuing driver of environmental damage. Christianity's ongoing guilt is assumed when he says, "we shall continue to have a worsening ecologic crisis until we reject the Christian axiom that nature has no reason for existence save to serve man."[12] While White's historical method seems able to at most point to Christianity as only the originator of the problem, he draws from that history the conclusion that our religious beliefs continue to determine our ecological behavior. How he could so much as warrant the claim that our behavior continues to be driven by religion today from the historical evidence he supplies (bad environmental outcomes seem to have arisen in Christian parts of the world) is not at all

[9] White, 1205.
[10] Here we see a strain of non-cognitivism that runs through much of Christian environmentalist thinking. Non-cognitivism here means the position that theology and ethics are just not in the business of reporting true facts about the world. We will engage this issue in more depth in Chapter Six.
[11] White, "The Historical Roots of Our Ecologic Crisis," 1206.
[12] White, 1207.

clear. In other words, if it is the case that Christian axioms were to blame because they played a role in influencing the Baconian creed that drove industrialization and exploitation of nature, it is not clear, on that basis, why we should think Christianity is a problem today (unless Christianity is integral and necessary for sustaining Baconian thinking).

White seems to equivocate on this last point. He does not say that the crisis will worsen until we reject Christianity, in total, but rather until we reject Christian "axioms." About the difference he writes,

> It has become fashionable today to say that, for better or worse, we live in "the post-Christian age." Certainly the forms of our thinking and language have largely ceased to be Christian, but to my eye the substance often remains amazingly akin to that of the past. Our daily habits of action, for example, are dominated by an implicit faith in perpetual progress which was unknown either to Greco-Roman antiquity or to the Orient. It is rooted in, and is indefensible apart from, Judeo-Christian teleology…We continue today to live, as we have lived for about 1700 years, very largely in a context of Christian axioms.[13]

So, White's position at this point seems to be that the problem today is not Christianity, but the ongoing persistence of Christian axioms, divorced from explicit reference to Christian thought. This assertion is hard to harmonize with his prior statement that what we do "depends" (present tense) on religion. White does not give us clues to finding that harmony.

It is worth pausing here to note the role of what White is calling "Christian axioms." Remember, in this chapter we are not just interested in White's telling of history, but in his account of action which underlies it. How he diagnoses history entails a theory of how things like religion direct the course of human life on earth. That is the legacy that must be engaged, more than his position on Christianity. In his telling, the "daily habits of action" of the modern world are built on an implicit affirmation of Christian ideas. However, because of this point, White's ostensible criticism of Christianity actually credits it with playing a role in human

[13] White, 1205.

progress that betrays serious Christian and European chauvinism. Recall that a crucial intermediate step between Christian axioms and environmental destruction is, in White's telling, the wedding of science and technology, which drives the whole complex of modern industrialized society. For White, this is a reason to criticize Christian axioms. What it implies, however, is that all of the incredible advances that scientific modernization represents are also due to Christianity. Everything from space travel to gene therapies to increased food supply are thanks to the spread of Christian symbols and their victory over the ideas of "Greco-Roman antiquity" and "the Orient."

There are at least two reasons this aspect of White's argument is problematic. Most obviously, it denies much if any contribution to modern life from cultures outside the west. Further elaboration is not needed to see why that is a problem. What might require more elaboration is the problem that White offers no way to untangle the good from the bad effects of Christian axioms. Christianity's view of the natural world as "inert matter," rather than sacred and alive, seems to have two effects in the argument: first, it licenses the commodification and use of nature by humans—this is the one that troubles environmentalism. Second, it seems to unlock tremendous power over the material world. White does not deal with the latter point in much detail, focusing on how we choose to use our power rather than the mere development of it. However, it seems to follow from his argument that the scientific approach to technology, which Christian axioms apparently made possible, gets something fundamentally right: the material world usually *does* respond in the ways it predicts. Medicines usually work as anticipated. Fertilizer regularly increases crop yields. Rockets follow predictable flight plans. As a result, humans are healthier, better fed, and have walked on the moon. Yes, ecology discovered the problem of unintended consequences in nature, which humbles our confidence that we can

control natural outcomes, but this is only a check on crude, non-ecological versions of a scientific outlook. In the overwhelming majority of cases, science has proven itself adept at increasing our power over the natural world, in ways ecological awareness has not contradicted. Yes, damming rivers leads to unanticipated consequences, but dams work to produce electricity. While ecological caveats are important, they are only corrections to the general reality that scientific technology has successfully unlocked tremendous power to control the material world.

If Christian axioms cause both problematic anthropocentrism and scientific and technological success, it is not clear where that leaves us. For one thing, White never breaks down what portion of the increase in our environmental impact is due to which effect of Christian axioms. That is, he never says how much of our crisis is due to new values and how much to new power. Suppose, for a moment, that the increase in technological power was the only change; attitudes toward nature had remained the same. Even though we would value nature, there is no reason to think we would stop pursuing the goods we always have: food, shelter, health, family, knowledge, and so on. Valuing nature would not, for example, prevent the advances in public health and food supply that spurred the exponential growth phase of the human population. That is, of course, unless we anticipated the effects that this population increase would have on nature and consciously chose to remain sick and hungry. Even if our values had not become more anthropocentric, it seems at least plausible that an exponential increase in our environmental destructiveness as a species would have happened anyway.[14]

[14] Even if our non-anthropocentric values had led us to pour our inventive energy into reducing our environmental impact and we managed to halve it compared to what were already pre-industrial levels, a huge increase in environmental damage would have been unavoidable. The human population has increased sevenfold since 1800. Our environmental impact would be three-and-a-half times what it was beforehand in this ideal scenario, with no change in value structure. US Census Bureau, "Historical Estimates of World Population," accessed July 10, 2019, https://www.census.gov/data/tables/time-series/demo/international-programs/historical-est-worldpop.html.

The point here is not to argue about counterfactual hypotheticals; the point is that White's claims about the effects of Christian axioms on the values we hold, scientific knowledge and technical power we have gained, and the habits of actions we have developed, are so blunt and vague that there is no way of quantifying or evaluating its influence. If he is right about the whole complex of economic, technical, scientific, and cultural changes Christian axioms have wrought, by what measure can we judge that it has been good or bad, either overall or in the details? Life expectancy is a good example: what are we to make of the increase in human longevity brought about by the wedding of science and technology? It has certainly played a large role in increasing our ecological footprint (we spend much more time on earth, and more of it consuming resources as adults). However, to say that, because it contributes to the ecological crisis, it is simply bad, does one of two things: it either simply ignores the ambiguity of history, in which benefits and harms follow from the same developments, or it simply denies any value to the huge leap forward in human wellbeing over the last few centuries. In either case, suggesting that we "rethink and refeel" the elements of Christianity that he thinks shaped the modern world in this way shows remarkable confidence that most people will share his negative evaluation of the outcomes of the development of scientific technology. At the very least, White's depiction of the operation of axioms is such a blunt instrument that it provides no guidance for how we might winnow out the negative environmental values and outcomes from the developments we find undeniably positive.

Further confusing the picture is that, in a tangent in the middle of the article, White leaves the topic of religion momentarily to talk about medieval technological advances (his area of expertise). He notes that features of northern European soil drove medieval Europeans to develop cutting plows, drawn by teams of oxen. White writes of this development that,

> Man's relation to the soil was profoundly changed. Formerly man had been part of nature; now he was the exploiter of nature. Nowhere else in the world did farmers develop any analogous agricultural implement. Is it coincidence that modern technology, with its ruthlessness toward nature, has so largely been produced by descendants of these peasants of northern Europe?[15]

It is hard to overstate the significance of this tangent. White here offers what seems to be a *complete and sufficient* alternative explanation for the unique environmental impact of Western cultures, one that requires no reference to religion whatsoever. There is no reason to think that Christianity played any role in the process of plow invention at all. If that tangent is sound, then the entire argument about religion is superfluous. However, White makes his claim that ecological behavior depends on religion in the paragraph that follows *immediately after* this excursus into plow technology. White says explicitly that the plow changed the imagined relation to nature, not that a religious innovation in the imagined relation to the land made the invention of the plow possible. He offers no help in reconciling his techno-materialist and the religio-idealist frames of explanation. [16]

Thus, even if we ignore the problems in each element of his argument, the overall picture White paints is full of unresolved tensions and contradiction. Both his materialism and his idealism are simplistic, but the mere existence of both should have given him pause. It should have inspired careful and tentative recommendations about what to do now. In the end, we get none of this from White. After all the discussion of religious symbols, their lingering influence where religious faith is absent, and plows, he transitions to his constructive proposal with the following line, "More science and more technology are not going to get us out of the present ecologic crisis until we find a new religion, or rethink our old one."[17] Here we see the

[15] White, "The Historical Roots of Our Ecologic Crisis," 1205.
[16] It is inconvenient that we cannot go back and run through human history again to test which variable is the determinative one.
[17] White, "The Historical Roots of Our Ecologic Crisis," 1206.

culmination of his earlier statement that partial solutions will not work until we address "fundamentals." For White, religion alone is what is fundamental, even in a post-religious population ripped from nature by plow technology, and we cannot move forward without a new religion. He concludes by proposing new attention to St. Francis, recommending that he be adopted "as a patron saint for ecologists."[18] Thus his one answer to our post-Christian world's global ecological crisis is to adopt the perspective of St. Francis.

In short, White's argument is simplistic, dismissive of any real basis of religion, dismissive of contributions to modern development from outside the Christian West, unable to account for mixed character of historical development, overconfident that the general public will share a negative evaluation of it, and incoherent in its juxtaposition of idealist and materialist argumentation. He hopes the conversion to Franciscan thinking that he advocates will make people value nature and want to save it, but saving nature is the only benefit he identifies to this reformation: it appeals only to people who already value and want to save nature, people who do not need it. Outside its legacy within thinking about religion and the environment, there is little to commend attention to the article.

Historical method in White's article and its inheritors

White's assumptions about how to deploy history in environmental ethics persist in Christian environmentalist thought. A Christian realist environmental ethics, as I have mentioned, will not make sense under those assumptions. Bringing his ideas to the surface allows us to note them where we find in the works of other authors and our own thinking. Toward that end, let us look at those assumptions in more detail.

[18] White, 1207.

A note about method: I will begin to weave in examples from other authors to further illustrate the cosmological approach. Willis Jenkins is right that most works in the field adopt White's framing and introduce themselves in response to it.[19] Anyone familiar with Christian reflection on the environment knows the extent of the references it makes to White. Because of this, it is not necessary to offer a history of its influence or an argument that it is influential. Recounting a history of such references, in addition to being unnecessary, might credit him too much with shaping the field. His mode of thinking was not new[20] and it is not that different from what we find in other topics in contemporary ethics.[21] White is prominent here because he is prominent in the literature and his article is a particularly clear example of a problematic way of approaching these issues. So, what follows then is an analysis of assumptions underlying the turn to history in the cosmological approach, with examples taken from White, but also other authors. Each is chosen because it is exemplary of the way of thinking under discussion.

First, we can see that White assumes that our environmental situation is a crisis with merely historical roots and discovering those roots reveals its causes and solutions. That is, he assumes that, if we know when and where it began, looking at what occurred in that time and place will reveal the roots and remedies of the problem. If we want to understand the "fundamentals" lying behind all specific environmental problems, we look to the big changes that happened when the crisis started. The crisis started in the mid 1800s? Look to the big cultural shifts that happened at that point that seem relevant. Ecofeminist Carolyn Merchant puts it this way: "To understand why one road rather than the other was taken requires a broad synthesis of both the natural and cultural environments of Western society at the historical

[19] Jenkins, "After Lynn White."
[20] For an excellent overview of the literature that antedates White's article, see Panu Pihkala, *Early Ecotheology and Joseph Sittler* (LIT Verlag Münster, 2017).
[21] See the section on contemporary moral theory in Chapter One

turning point."[22] The way you interpret and address problems, then, is to find the decisive turning point and discover what was going on at the time.

Implicit in this first assumption is the belief that the sorts of things that matter for analyzing the crisis are things that can change radically. If we can grasp the nature of a problem by knowing where it comes from, then it must be the case that what is fundamental to it is what changes, not what persists from before. If we can grasp the fundamental reality of our environmental crisis by studying nineteenth-century Europe, then the core of the problem is what was new then. What matters in studying the problem is not something fixed or perennial (like the number of toes typical of human beings or our propensity toward self-interest), because such things did not change. If we had the same anatomy before and after, then anatomy is not worth our attention in analyzing the problem. In the same way, features like sin or moral weakness cannot be what is fundamental and salient for our thinking about the problem, because those are relatively constant features of human beings. If we believe that studying the turning point is sufficient to understand the problem, then the problem is not in human beings, but in things that change across eras and populations.

The second assumption is that the specific, changeable things that are fundamental to environmental outcomes are ideas, specifically religious ones. These are White's "Christian axioms," his belief that "human ecology is deeply conditioned by beliefs about our nature and destiny—that is, by religion."[2] As another proponent of this way of thinking, Thomas Berry, a pioneering writer on religion and environmental issues, asserts that the "The deepest cause of the present devastation is found in a *mode of consciousness* that has established a radical

[22] Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (New York, N.Y.: HarperOne, 1989), xxi.

discontinuity between humans and other modes of being" [emphasis mine].[23] Larry Rasmussen claims the cause of the crisis is a "habit of mind" dating from the industrial revolution which "lifted us wholesale from the rest of nature as a species apart."[24] The problem worth investigating for these authors is not any *real* "discontinuity between humans and other modes of being," but the "mode of consciousness" that asserts one. The problem is not that we *are* a "species apart" from nature, but that we developed the "habit" of thinking we are. As Rasmussen puts it, while some environmental problems are open to technical solutions, "many other matters, wrapped tightly around peoples' ways of life, are cosmological and ethical to the core. 'Outer' human ecologies mirror 'inner' ones."[25] What we are (in any permanent way) is not as pertinent as what we think we are, because what we are comes to "mirror" what we think we are. Our analysis should thus focus on what we think.

I should note that, while White presents the claim that Christian axioms are the problem as a conclusion, I am here classifying it as an assumption. This is because White and others who employ his historical method often do not present much of an argument that ideas were the cause, beyond the fact that new ideas seemed to emerge at the time the crisis seemed to begin. At most, White and others point to a correlation between cultures influenced by Christianity and places where environmental impact seems worse. Ecotheologian Ernst M. Conradie writes,

> The thesis that Christianity is deeply implied in the roots of ecological destruction is based on the intuitive recognition that there is a close correlation between countries where Christianity was well established during the industrial revolution and historical carbon emissions.[26]

[23] Berry, *The Great Work*, 4.
[24] Rasmussen, *Earth Community, Earth Ethics*, 8.
[25] Rasmussen, 187.
[26] Ernst M. Conradie, *The Earth in God's Economy: Creation, Salvation and Consummation in Ecological Perspective*, vol. Volume 10, Studies in Religion and the Environment ; (Zürich: Lit, 2015), 1.

This correlation is such a loose basis for an argument that it is fair to conclude the real reason theorists blame Christianity is the existing assumption that values are basic to behavior and that values come from ideas, especially religious ones (as we discussed in Chapter One). If what we mean by "countries where Christianity was well established" is really "countries populated by people of European descent," then lots of other mechanisms are suggested by the correlation. White's point about cutting plows seems as good as any. He also notes that, "The leadership of the West, both in technology and in science, is far older than the so-called Scientific Revolution of the 17th century or the so-called Industrial Revolution of the 18th century."[27] A several-centuries head start in science and technology seems like it could explain greater historic carbon emissions as well. To pick another theory, the fact that Eurasia is the landmass with the greatest number of plants suitable for farming and the longest east-west axis is at least as plausible a mechanism as religion.[28] That there are other plausible explanations does not mean that White's thesis is wrong, only that it is not obviously dictated by one correlation. Whether it represents, in Niebuhr's words, an "arbitrary judgment" or one that throws "real light upon the variegated events of history"[29] is an issue to which we will return later in this chapter. The point here is that we are justified in categorizing the turn to religious ideas as an assumption, rather than a conclusion.

Third, White and others assume that, because what drives the problem is found in what was new at the "turning point," then the clue to fixing it can be found in what preceded it. If Berry believes a new mode of consciousness "established a radical discontinuity," then that

[27] White, "The Historical Roots of Our Ecologic Crisis," 1204.
[28] More on this in the next chapter. Briefly, domestication of animals leads to infectious diseases, which leads to disease resistance, which contributes to victory in collisions with other cultures. The shape of the landmass allowed for the evolution of crop species and the spread of agricultural innovations in the same climate zone, leading to early developments of technologically advanced agricultural civilizations. For more see Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies*, 1 edition (W. W. Norton & Company, 2017), 339.
[29] Niebuhr, *The Irony of American History*, 152.

radical discontinuity was not there beforehand. Whatever mode of consciousness *was* there before the turning point was able to keep humanity from crisis. We can learn from it, even if we cannot adopt it directly. Likewise, if Rasmussen's "habit of mind" was able to "lift us" from nature, then the habit of mind that preceded it kept us within nature. White talks about how, before Christianity, "pagan animism" meant that natural landscapes and objects had "guardian spirits" that limited their availability for human use.[30] Moltmann, as we have seen, talks about "earlier religious inhibitions"[31] that preceded the dangerous theologies causing our crisis. Thus, if historical memory of the turning point reveals a novel phenomenon at the heart of the crisis (in this case, new religious ideas), then it also reveals the key to avoiding the problem (earlier or different religious ideas).

Fourth, because history reveals the roots and remedies of the problem, the problem is (at least to some extent) reversible. I do not mean to say that many writers suppose ecological damage is simply reversible, but rather that they think the *cause* of the problem is reversible. We may not be able to restore extinct animals and refreeze the ice caps, but we can reverse the drivers of the crisis. If religious changes caused the problem, then religion can fix it. More precisely, even if they doubt that religion *will* fix it, changes in religion *would* fix it if adopted widely enough.

Fifth, because religious ideas lie at the root of a reversible problem, it is the task of theologians and ethicists to articulate theologies and ethics that would reverse the problem, or reclaim those that preceded the problem. In the present case, this means that, because the environmental crisis is a cultural production and culture is based on religious ideas, we must change ideas to change culture and reverse the drivers of the problem. Moltmann writes,

---

[30] White, "The Historical Roots of Our Ecologic Crisis," 1205.
[31] Moltmann, *God in Creation*, 1985, 20.

> Because, now, all processes which change our natural environment have their roots in economic and social processes in human societies, and because these in their turn are based on man's interpretation of himself, it would seem a task for Christian theology to work for the revaluation of previously accepted values.[32]

Rasmussen puts it this way:

> The note must be registered again that earth and its present distress call for nothing less than religious and social re-formation, a conversion far from fully effected…Viable earth faiths, it seems, require rerooting virtually all religious and moral traditions, even when some meet our trauma better than others. Ours is not a time for the religiously and socially timid or the intellectually fainthearted.[33]

James B. Martin-Schramm and Robert L. Stivers, in their textbook on environmental ethics, sum up the task thus:

> For humans to be in a caring relation to nature, these attitudes must change. For some, this means a radical change and the adoption of polar opposite attitudes. For others a synthesis of old and new attitudes is needed to care for both humans and nature.[34]

It is by these reformations and reconstructions of theology and ethics that Christian reflection is thought to make a real difference in the world. Conradie writes that ecotheology is a reformation of Christian theology which, "participates in an ecological transformation of economic modes of production and cultural patterns of consumption"[35] Doing so will remove the deepest cause of our present problems.

In sum, White and other proponents of the cosmological approach hold to the following:

1. What matters in analyzing the problem is what is new.
2. What is new are ideas, the "inner ecologies" which determine our "outer ecologies."
3. Because the problem is caused by what is new, what preceded the change is the key to addressing it
4. Because ideas are the cause, we can reverse the cause by changing ideas (even if this is unlikely to happen, adopting new ideas *would* work if enough people did it).

---

[32] Jurgen Moltmann, *The Future of Creation*, annotated edition edition (Philadelphia: Augsburg Fortress Publishers, 2000), 129.
[33] Rasmussen, *Earth Community, Earth Ethics*, 8.
[34] James B. Martin-Schramm and Robert L. Stivers, *Christian Environmental Ethics: A Case Method Approach* (Maryknoll, N.Y: Orbis Books, 2003), 17.
[35] Conradie, *The Earth in God's Economy*, Volume 10:1.

5. It is the task of Christian environmental theology and ethics to furnish new ideas, or to rehabilitate old ones.

Christian realist use of history

The cosmological approach sees our environmental situation as a historical development, one for which knowing its history is what matters for understanding and response. Christian realism does not disagree that studying history is valuable, but it thinks there are real limits to this value, both for analysis and activism. To see how Christian realism uses history, it is first necessary to see what history is from a Christian realist perspective.

Toward that end, we need to see that theories of history are inseparable from theories of human nature. If we think history moves with the flow of ideology, this entails a theory of human nature in which behavior flows from ideology. If we affirm the Marxist materialist dialect of history, this entails a theory of human nature in which behavior is a product of economic structures. The cosmological approach sees history as a story of real effects following from cosmological causes because it sees human beings as simple machines: behavioral outputs flow from cosmological/symbolic inputs. It is because it holds, anthropologically, that "outer ecologies mirror inner ones" that it sees history as a series of ideas causing outcomes.

For Christian realism, as we saw in the previous chapter, human beings are anything but simple machines. Because of this, history is not a story of cause and effect, but a realm of "meaning and obscurity, of partial but not complete intelligibility."[36] What a person does is not a function of something like the ideas they hold, but an expression of a complex mix of freedom and determination. We are influenced by a variety of different factors, but our choices are always to some extent free, and thus not fully explained by what precedes and influences them. The

[36] Niebuhr, *Faith and History*, 18.

complex, even paradoxical character of human nature does not tell us the shape of history; it is what constitutes history and makes it possible.

In Niebuhr's telling, time precedes the arrival of human beings, moving forward, marking out the flux and flow of nature. With the genesis of human beings, eternity became mixed into the flow of time. This paradoxical admixture of eternity into the working out of necessary, natural causation is what Niebuhr calls "history." Our freedom consists of a limited but real capacity to stand outside time, to access eternity in the realm of ideas. But it also manifests itself in the capacity to produce novel concrete, material realities via a series of relatively free choices, choices that cannot be explained by laws of cause and effect. In Niebuhr's words, "The freedom of the human agent introduces complex and incalculable forces into the flow of cause and effect. There are events in history which could be fully understood only if the secret motives of the human agents could be fully known."[37] Our relative freedom allows us to innovate, to solve problems, and restructure those forms in indeterminate (but limited) ways. Because freedom is part of our essential structure, the production of history is integral to being human. But, because freedom does not exhaust our essential structure, being shaped by history is integral to being human as well.

Humans thus exist in history as both its creators and creatures (though neither role is absolute). Each free act, each innovation, each breaking and remaking of natural forms and harmonies, adds a novel layer to the sedimentation of free choices, which helps constitute the forms inherited by the next generation. The realm of history, as opposed to time, is constituted by the difference between what would have happened had there been no freedom and what did, in fact happen. We are, in our essential structure, inheritors and disruptors of natural forms, and

[37] Niebuhr, 18.

this disruption designates the realm of history. This matters for Christian realist environmental ethics: the disruption of nature and natural forms is not merely a regrettable development within human history; it is constitutive of history itself.

An implication of Christian realist anthropology we can develop is that studying history is useful to different extents and in different ways depending on scale, based on the mix of freedom and determinations in human nature. Freedom is the most salient feature at the scale of individuals and individual choices, with nature playing a larger role as we approach general human history. Historical determinations make the most difference at an intermediate scale of differences across eras and groups.

For Niebuhr, this scale is set by the mix of freedom and determinations in human agency. Because freedom is real, it is impossible to explain a given human choice only in reference to the history that preceded it. Freedom means the person could have chosen differently, given the same historical precedents. As the scope of analysis narrows toward the individual person and especially individual choices, history becomes less and less useful in predicting and explaining what happens. While Niebuhr thinks all human behavior is a mysterious admixture of nature and freedom (as we saw in the last chapter), freedom is most obvious at the scale individual.

However, we are also subject to determinations and thus there are certain fixed human realities that precede and pervade history, and which history therefore cannot explain. Here we can include the natural propensities of human beings we discussed in the last chapter, the features of human beings that are intrinsic and universal, such as the tendencies to form family and tribe, the sex impulse, or the tendency toward self-assertion. We are mortal, fallible, vulnerable, finite, and so on. There are other characteristics that are not part of our essential structure, but are perennial features of human nature, like sin. Since these are universal to human

beings, they will be true in the future as they were in the past. Since these are not open to historical development (though their expressions are), they set the structure and limits of history.

Thus, if we look at more general, widespread, and perennial human phenomena, the more the determinations of human nature are decisive. We reach the limits of our capacity to interpret them as the result of historical development. It is, in Niebuhr's telling, impossible to give a historical explanation for the shape of history itself, to explain its permanent features and the overall shape of its development in terms of remembered (or remember-able) events. As the phenomena we wish to analyze approach the general and perennial, we lose the possibility of explaining them through memory. If we move outward toward thinking about the shape of human history as a whole, history becomes less and less useful in predicting and explaining it. Niebuhr puts it simply: "history…does not solve the enigma of history."[38] Finally, we reach a point at which human behaviors and tendencies that appear to be universal (or nearly so) cannot be explained historically at all.[39] The influence of determinations (as opposed to freedom) is most obvious at the widest scale of humanity.

To be clear, when I say that at the scale of the general and universal, historical explanation is no longer sufficient, I am not denying that the study of history is helpful for learning about human nature. As we have seen, history is Niebuhr's observatory of human

[38] Niebuhr, 233.

[39] What to do with the idea of *evolutionary* history is an interesting question. In some sense, evolutionary insight *is* historical insight into the formation of human nature. In that case, it is possible to give a historical explanation of general features of human beings. It is commonplace now to try to explain features of human beings in terms of the evolutionary history that produced them. My (tentative) position at this point in the development of my argument is that what matters for political reform efforts about history is whether it can work as a source of freedom over current reality. Knowing that some general present reality has evolutionary roots does not (at least obviously) give us power to change it. It is hard to show how an evolved feature of human agency could have been and still could be other than it is. Knowing that the sex impulse, for instance, is a product of evolution, gives us no more power over that impulse than if it were a permanent feature of human beings with no known historical development. In some sense, then, showing something to have evolutionary roots is functionally equivalent to showing that it is a universal, ahistorical reality.

nature. The difference is between *learning* about human nature's permanent features by looking at a wide scale and *explaining* the origins of universal features by appeal to historical development. For instance, if a broad survey of history finds that there is violence present in every culture, this helps us see that some propensity to violence is nearly universal among humans. History is helpful. However, such universality also means that it is impossible to find the origin and root cause of violence in the historical record, because we have no knowledge of a time before it. History helps us to see violence in human nature, but it does not reveal the causes of violence.

Staying momentarily with the example of violence, we can turn to the middle scale. A broad view of human history reveals that violence is ubiquitous, but not that it is homogenous. In fact, its prevalence varies widely. Some cultures and time periods are more violent than others by orders of magnitude. These differences across time and group represent the scale at which a differential study of events in their histories is potentially very enlightening. For an example, consider the epidemic of fatal shootings on the south side of Chicago, where I live. One cannot understand the geographic and racial distribution of violence in the city without understanding its history, the influence of the Great Migration, redlining, contract buying, unjust policing, the war on drugs, educational inequity, White flight, business divestment, and mass incarceration. That Hyde Park (my neighborhood) has a lower rate of violence than the neighborhoods to the south and west of it is not natural; it is historical. The same is true of the fact that African American young men are most heavily involved in the violence, as both perpetrators and victims. These features of the present, because they are at the scale of differences across populations, are best understood through history. This becomes obvious as soon as the history is understood. Learning

this history readily acts as a source of freedom by removing from these shootings the dangerous illusion of naturalness, and by pointing to possible means of addressing them.

We have to keep in mind, however, that an individual shooting is poorly explained by history, as is the universal existence of conflict and violence in all societies across time. Because people are relatively free, it is impossible to predict exactly where and when a shooting will occur; shooters remain responsible for their choice to shoot. Because conflicts are a natural part of human communities, history also cannot explain their mere existence. History can, however, help explain why one neighborhood has a higher rate of shootings than another. We fail to understand the full reality of the situation if we neglect the reality of freedom and human nature that limit the scope of historical explanation.

There are not clear and obvious lines between the scales at which different explanations work and they are never complete at any scale. The freedom of the individual is a check on the explanatory power of history, but individuals are not absolutely free. We can see elements of human nature by looking at a broad sweep of history, but the history of human kind is not just the outworkings of human nature. There are elements of freedom, determination, and randomness throughout. Niebuhr writes.

> The degree of freedom compounded with the stuff of nature may vary endlessly in specific acts and emotions, in types of conduct and in patterns of behaviour. But these variations move within one constant pattern, namely that both freedom and necessity are involved in every human action and in every historical concretion and configuration. It is this mixture of freedom and necessity which gives the realm of history its particular character of meaning and obscurity, of partial but not complete intelligibility.[40]

Any analysis of a given historical phenomenon, if it is to be realistic, must recognize that there are a full range of human powers, propensities, and limits in play in every choice. Different

[40] Niebuhr, *Faith and History*, 17.

perspectives can help illuminate what happened, but, even taken together, our observations and analysis do not disclose the full meaning.

In every historical development, then, there are elements of freedom and determinations, and the determinations are a mix of natural and historical. A historical study of race practices in Chicago can illuminate the geography and demographics of violence, but understanding and addressing the problem requires more than such a study. It does not explain the long history and recalcitrance of divisions in society along racial and ethnic lines. The peculiar manifestations of prejudice and oppression here have historical roots, but there is a natural basis to anxiety and distrust of others. Particular manifestations of discrimination were due to chance and to free choices, as well. Knowing what happened in race riots of 1919 in Chicago does not unlock the mystery of everything that followed. The ensuing history of Chicago could have proceeded differently. Even at the scale at which history is most instructive, the picture it presents is incomplete.

It was at least reasonable to suppose that environmental problems are like the problem of violence in Chicago, and a specific set of historical events would be very enlightening. We could learn a lot from history if we wanted to discover why, for example, Spain and Germany burn a lot of fossil fuels, while the country in between, France, gets the majority of its electricity from nuclear power. However, to just assume that we can turn to history to discover the fundamental character, roots, and remedies of a global crisis was unwarranted. The global scale of the problem suggests that human nature has a significant role to play. From a Christian realist perspective, we have good reason to suspect that such a wide-ranging problem is not so novel as it appears.

Thus, thinking from a Christian realist perspective means that we have *a priori* reasons to be skeptical of White's telling of history. It seems unlikely that a problem that emerges from nearly every facet of life of nearly every person on the planet is the result of a relatively recent religious change. What we would expect is that human nature and the basic human condition in nature play a large role in shaping and limiting our environmental behavior. The scale of the problem is just wrong to expect a merely historical cause. Thus, a Christian realist looking at environmental history would expect to find that environmental disruption is a much more universal reality than White's history suggests.

Because Christian realism sees history as a product of complex creatures, a realm with a "particular character of meaning and obscurity, of partial but not complete intelligibility,"[41] it has real doubts about our capacity to manipulate its direction. If we are not simple machines whose behavior follows from either ideal or material stimuli, then we lack levers with which to move us determinately in new directions. Because of this fact and others, some historical developments are irrevocable. Niebuhr values memory, but points out that it is not the only way the past is transmitted into the present; the flow of the historical process includes the accumulation of concrete artifacts as well. These concretions come to us as determinations, not freedoms. He writes, "the past is present to us not only in our memory of its events but in the immediacy of the accomplished events which it places upon our doorsteps. We do not merely remember the accident we had in our childhood, but we have a scar upon our forehead as a 'reminder.'"[42] My memory that I was in a bicycle accident as a child reveals that my scar is not natural or necessary, but is contingent. This does not mean, however, that I am free in relation to the scar; the scar itself is concrete, fixed. Memory of the accident does not give me the freedom to choose

[41] Niebuhr, 18.
[42] Niebuhr, 19.

simply not to have the scar anymore. We can recall the set of events that led to depletion of the ozone layer, but we also have the Antarctic ozone hole as a concrete reminder.

To see how the past is present to us in concrete ways, consider the legacy of racism in America. Remembering the forms of discrimination that led to the wealth gap between races *does* give us a measure of freedom over its apparent naturalness, but our freedom to fix it is significantly limited by the artifacts of racism.[43] The wealth gap between races is not natural, but neither is it *simply* reversible once we know its history. If we attempt to identify the cause and put an end to it (passing anti-discrimination legislation, for example), we have not thereby erased the wealth gap. The gap itself, once created, reproduces inequalities in health, education, etc., which continue even if the original cause of the gap (such as de jure discrimination) were to be removed. Questions of affirmative action and reparations are contentious, at least in part, because they require the recognition that a problem is not simply erased by removing its explicit or original cause. They force us to admit a limit on our freedom. However uncomfortable it may be, the truth is that ending the causes of injustice does not necessarily remove their effects and bring justice. Likewise, if we stopped mountaintop-removal mining immediately, Appalachia's deep scars would remain.

Niebuhr puts the general rule clearly: "We can not simply undo what our fathers have done, even though our fathers might have had the freedom to take another course of action. Thus the past is present to us in varying degrees of revocable tentativity and irrevocable finality."[44] Some effects of the past may be reversible, but they also may not be, and they are rarely entirely so. Yes, if a room is warm because someone turned up the heat an hour ago, you can usually

[43] I, of course, do not mean to suggest that racism and discrimination are only past realities.
[44] Niebuhr, *Faith and History*, 20.

return the room to its original temperature by turning the heat back down.[45] However, not all events work this way. If you start a fire with a match, blowing out the match will not put out the fire. If carelessness led you to knock over a glass vase, being careful now will not piece it back together. Knowing the origin of a phenomenon does not necessarily mean that we can undo it.

To the extent history is revocable, we need memory of how things came to be in order to change them. To the extent history is irrevocable, the freedom which memory grants us over present reality is limited. The fact that history mixes in "irrevocable finality" with its "revocable tentativity"—and that the borders between them are not obvious—is a significant limit on history's utility for political activism. It is a reality that should chasten our political expectations. It also poses an interpretive difficulty when we do employ historical analysis in the service of reform projects. It is not easy to see how freedom and determination, reversibility and irreversibility, are related in a given case. To know how to proceed, we must understand, not just the historical roots of the current situation, but the manner and relative permanence with which those roots transmit their effects into the present. Only then can we ascertain whether, how, and to what extent we are free to bring about the change we desire.

If we think about White's thesis in light of this limit, we see a clear need for revision. Even if we grant the notion that Christian cognitive symbols form an important part of the historical roots of our current problems, this is no guarantee that changing them today will fix those problems. Now, the fact that some environmental problems are irreversible is fairly obvious, as I have said. But, beyond this, we have accumulated an infrastructure that relies on intense carbon use. Technical cultures have an inertia to them; we cannot redirect them at will.

[45] Even here this is true only if it is cooler outside the room than in. If the temperature were hotter outside, you would need an active intervention, such as air conditioning, to undo what was done.

The accumulation of physical harms and the establishment of a material culture are not simply revocable.

But, even beyond the concrete sedimentations of ecological damage and the inertia of the physical economy, it is not clear that even ideas are reversible. White says Christianity arranged a marriage between science and technology; this does not mean that it can arrange their divorce. Adopting a new idea and abandoning it are not symmetrical processes. If Christianity is responsible for initiating the idea that the Earth is inert substance for humanity to exploit, this does not mean that Christianity is capable of re-imbuing nature with sacred status. In many cases there is a direction to the flow of history, and we should not assume that the power to bring about a change implies the power to reverse it.

The flow of history is not simply reversible, even if we suppose we have found a mechanism that drove a change in the past, because humans cannot simply master ourselves. Environmentalism is right to point out that modernity was mistaken to think it could master nature. However, as long as we stay within White's framework, we are operating within the modern belief that we can master human nature. We saw in the last chapter that one revision that needs to be made to Niebuhrian Christian realism is that it views our mastery of nature as largely a success story. Niebuhr does not acknowledge ecological worries that this mastery was incomplete, but he is right that we have succeeded in greatly increasing our mastery of the material world. We could not have such an extraordinary environmental impact if we had not succeeded so well in multiplying our power to manipulate matter. Niebuhr's insight, which needs no revision, is that it was always a mistake to think that we could master human nature in the same way we mastered matter. He thinks this is a category mistake and that success in manipulating nonhuman nature cannot carry over into power to manipulate human nature. He

writes, "but ultimately the problems of human conduct and social relations are in a different category from the relations of physical nature."[46] The main difference between the two is that, in relation to nature, human beings are only the subject, not the object, of human choosing: human freedom needs to be included on only one side of the equation. When attempting to manipulate human behavior and social structures, on the other hand, the same capacities that give us the power to act as subjects, also give us the power to resist, reject, or reshape the effects of those actions as objects. Niebuhr goes on: "The modern belief that 'scientific objectivity' may be simply extended from the field of nature to the field of history obscures the unity of the self which acts, and is acted upon, in history."[47] Because of the complex and paradoxical union of nature and freedom in human beings that make us both the creators and creatures of history, we can never act only as creators to manipulate history and expect ourselves and others to respond as mere creatures of it. We have to impute to human beings as the object of actions the same array of powers that we impute to them as subjects. We have to expect the same freedom and flexibility in resisting change that we credit to ourselves as agents of change.

In sum, Christian realism values history as a way to gain freedom over the present, to see how things could have been different, and to see the roots of the problems that concern us. This much it shares with White and those who share his assumptions. However, it also sees human beings as complex admixtures of freedom and determination such that looking to history cannot reveal the fundamental character of social problems, especially at the smallest and widest scales. It expects that problems as general as environmental destruction likely have roots in human nature, not in mere historical developments. Christian realism would be skeptical of White's claim that a global phenomenon like our environmental situation has easily-specifiable roots in

[46] Niebuhr, *Faith and History*, 12.
[47] Niebuhr, 12.

the nineteenth century. Even if such roots were found, it has reason to doubt such a problem is simply reversible. A major reason why is that human beings have the full range of powers and possibilities as objects of manipulation as we do as subjects. Whatever efforts we attempt bring to bear as agents (such as changing our theological ideas) can be resisted, reformed, or rejected by people as patients.

Thus, as we now turn to look at environmental history, we proceed with different purposes and expectations than what we saw in White's method. We look to the broadest sweep of history we can in the hopes of seeing perennial features of the human-nature relationship.

Chapter Four: Environmental History

The previous chapter dealt with historical method, specifically how the cosmological approach and Christian realism differ in the ways they use history. We saw that the cosmological approach assumes that what matters about the ecological crisis (and how to fix it) can be discovered by investigating novel developments at a historical turning point. A Christian realist, on the other hand, would expect a problem as diffuse and general as our environmental situation to have deeper roots in human nature and would suspect that it cannot simply be reversed. Both positions are just assumptions about what the history likely shows. But, what does it show? What do we find when we look to the long history of human life on earth? That deep natural history of human life is the subject of this chapter. It is necessarily brief, but my hope in presenting it is that enough of the picture comes through that we recognize that the character and trajectory of human environmental impact is much closer to the expectations of the Christian realist perspective.

The cosmological approach assumes that for a long time (most of human history) humans lived in a sustainable, long-term, harmonious relation with their environment and that this harmony was the result of their attitudes toward nature. When these attitudes changed at some decisive turning point, the human relation with the nonhuman world changed with it, not only in degree, but in kind. However, when we look at the long history of humans on earth, as we do here, we find no evidence of such a period of sustainable harmony with nature. Furthermore, we find that the needs of survival and the available natural resources can account for the developments in human interactions with the natural world *overwhelmingly more than* and almost *independent from* religious (or any other) attitudes toward nature. We also see that the more contemporary example of cosmologically-induced harmonious balance that plays the

largest role in our perception of this history—the story of Native Americans prior to European contact—is the product more of mythology and colonialist projection than any historical evidence.

The history relayed in this chapter has a role in both the negative and positive apologetic tasks of this dissertation. Negatively, it shows that the assumptions of the cosmological approach do not match the historical evidence and, positively, it provides limited validation of Christian realism's anthropology. That is, because the history is close to what Christian realism would expect, based on its account of human beings, it lends support to that account. It does not *prove* Christian realism correct, of course, but it can bolster the case being made here that Christian realism is a relatively more adequate way of coordinating our moral thinking about the environment than many existing accounts. At the same time, the history here helps point to a revision needed in Christian realism, namely, that it needs to reconsider the possibility that human life is significantly tragic. In short, the history related here helps reveal the shortcomings of the cosmological approach and the advantages of Christian realism and sets the stage for the constructive chapters that follow.

Environmental history

The story of the genus *Homo* begins roughly 2.5 million years ago, at the start of a long period of climatic cooling. In response to the cooling, many other animals, like the big cats, became increasingly more specialized to survive, adding muscle and longer teeth and claws. Humans[1] moved the other direction. We became more adept at being generalists. Our teeth

[1] For the rest of this chapter, "humans" will refer to members of all species of the genus *Homo*. I will use the name "Sapiens" when I mean to refer only to *Homo sapiens*. This is accepted practice in the fields that study early humans. However, in the rest of the dissertation, before and after this section, it is safe to assume I mean just Sapiens when I talk about humanity and human nature.

actually grew smaller. Geneticist Stephen Oppenheimer[2] writes that, "humans represented a new evolutionary concept in a number of ways, not only with their large brains, mixed diet, and smaller teeth, but in their adaptive behaviours, including the making of the first shaped stone tools by the very earliest humans."[3] The human strategy was not to specialize to maximize our fit for one niche or one feeding strategy, but to become more flexible, cooperative, and adaptive. While many other animals evolved to maximize their exploitation of one set of resources or one feeding strategy, humans changed to be able to make use of an ever-wider array of resources. This is not to say that humans are the only generalists, only that we have been uniquely successful at it.[4]

---

[2] A note on sources for this section: This history draws heavily on three books, *The Real Eve: Modern Man's Journey out of Africa* by Stephen Oppenheimer, *Sapiens: A Brief History of Humankind* by Yuval Harari, and *Guns, Germs, and Steel: The Fates of Human Societies* by Jared Diamond. All three are broad accounts for general audiences, but each is well-cited and reports consensus positions on the issues discussed here (though not without taking stands on debated issues). The literature on early human history largely takes two forms: either popular works like these that try to present the broad pattern of human history or fine-grained, peer-reviewed journal articles that deal with narrow research questions (e.g., Mathias M. Pires et al., "Reconstructing Past Ecological Networks: The Reconfiguration of Seed-Dispersal Interactions after Megafaunal Extinction," *Oecologia* 175, no. 4 (2014): 1247–56.). I will offer a mix of both here, but it would add little to the existing literature for me to ignore and replicate the work of drawing together the primary sources to tell the broad story, which authors like Diamond, Harari, and Oppenheimer have already done well. [there is a third category I have omitted: popular works that are not well-suited for a research project because of problems like being under cited or prone to unsupported speculation, like Chip Walter, *Last Ape Standing: The Seven-Million-Year Story of How and Why We Survived*, first edition (Walker & Company, 2013) or Kirkpatrick Sale, *After Eden: The Evolution of Human Domination* (Durham: Duke University Press, 2006).]

[3] Oppenheimer, *The Real Eve: Modern Man's Journey out of Africa,* 14.

[4] I want to address a possible misunderstanding related to the idea of evolutionary origins of our unique place in the natural order. There is a sense in some environmental writing that whatever traits we can attribute to evolution make us fit for harmony with nature; our separation from it is due to human choices, not the equipment with which nature furnished us. This somewhat romantic idea holds that we are formed by evolution to exist in ecological balance with other creatures but have chosen to rip ourselves from it. Evolution creates harmony and stability, on this account, while humans create disruption and disorder. Ecofeminist Rosemary Radford Ruether, for example, believes that what evolved was a system in which "all the diverse animal and plant populations in an ecosystem are kept in healthy and life-giving balance by interdependence," (quoted in Sideris, *Environmental Ethics, Ecological Theology and Natural Selection*, 50) We cause problems when we reject our evolved place in this interdependent web. The idea is that evolution creates ecosystems that work in balance and, since humans evolved, we must be suited by nature for such balance. It must be the case that, in our basic equipment, we are capable of seamless immersion in the natural order.

What this misunderstanding of evolution gets wrong is that evolution does not just dictate the fate of organisms, bringing them inexorably into balance. The behavioral patterns of animals can redirect the flow of their development. Animals can "choose" behaviors like feeding strategies, after which evolutionary pressures favor certain traits that are fit for that new strategy. Darwin's finches developed into different species from one founding group because they had to try out different survival strategies in the Galapagos. Different groups evolved traits that

The story of the genus *Homo* is, like the rest of evolution, not a story of an inevitable progression toward *Homo sapiens*. *Homo* took multiple evolutionary paths, most of which were

---

favored its typical behavior. If a group of finches "chose" to start eating nuts, then its beak shape would gradually grow to be better at crushing nuts, while a group that favored eating insects would develop a beak better suited for that purpose. It seems likely that the reason human brains grew so much relative to other similar apes was due to some new behavioral choice (Oppenheimer, *The Real Eve*, 19)

Depending on the behavioral changes, species do not only develop new characteristics that maximize survival; sometimes evolution goes haywire. What matters for evolution is passing on genes, not surviving, so animals can evolve in bizarre ways that do not make them better at filling a specific ecosystem role. Picture for a moment the plumage of a bird of paradise, a peacock's tail, or an elk's massive antlers: none of these helps the animal survive. In fact, these features are so cumbersome, they seem more likely to hinder survival, to get in the way of basic tasks like flying or walking through dense forest undergrowth. So, how do animals evolve to be *less* fit to survive? The answer is an evolutionary mechanism called "sexual selection." The behavioral choices that matter here are not things like feeding strategies; what matters for sexual selection is mating behavior. In each of these species, not all males mate. Either the female chooses the males with the most impressive and alluring feature, as in birds of paradise, or the males compete for the opportunity to mate, as in the sparring of the elk. In these cases where only a few males mate, especially in cases where it is only the males with the most extreme traits (the one male with the most impressive tail mates with all the females, the others do not reproduce at all), evolution runs wild and we get the extravagant displays we see in these species. All non-extreme individuals' genes are eliminated from the gene pool each generation (see "Sexual Selection - Biology Encyclopedia - Body, Examples, Process, DNA, Life, Used, Make, Species, Form," accessed July 17, 2019, http://www.biologyreference.com/Se-T/Sexual-Selection.html) To see how this would lead to extreme outcomes, imagine what humans would look like in just a few generations if only men over six-and-a-half feet were allowed to reproduce.

Let us consider for a moment the possibility that the human brain is like these birds' tails or the elk's antlers. The brain size of hominids underwent a spectacular increase between 2.5 and 1.5 million years ago. It is likely that the difference in brain growth between hominids and other ape species was due to behavioral differences. That is, our ancestors likely developed some new behavior (improved language skills, meat eating, group hunting) that benefitted individuals with bigger brains. This much is fairly uncontroversial (Oppenheimer, *The Real Eve*, 10).

It is at least plausible that the behavioral change that drove brain growth was related to sexual selection, as much or more than survival. Perhaps, as in some chimpanzee tribes, the leaders of the hunt exchanged meat for sexual favors. If the most intelligent individual led the most successful hunt and was in charge of distributing meat, and this resulted in more reproductive opportunities, then this could be a case of runaway sexual selection. Oppenheimer again: "We all know where runaway sexual selection leads: to peacock tails – or, just maybe, to big brains." (Oppenheimer, 13.)

It might be the case, then, that our brains are evolutionary extravagances, an extreme feature that exceeds what we need to survive. Perhaps our brains relate to the brains of other apes the way peacock tails relate to birds that use their tails just for flight: morphologically homologous but not functionally analogous. In both cases, what initially evolved to serve a mere survival function came to serve an entirely different purpose in one species because of its behavioral choices. If this is the case for us, then perhaps our brain is, like the features of these other animals, a survival liability, not an advantage. There is no evolutionary mechanism that could anticipate the dangers our brains could later unleash, like nuclear war or environmental collapse. There is no reason to think that evolution would give us only characteristics that would fill well alongside other creatures in balanced interdependence.

While it is a real possibility that sexual selection gave us extravagant brains, bigger than we need, this is just speculation. We do not know for sure why hominid brain growth spiked after 2.5 million years ago. Perhaps there were violent conflicts between human groups in which the cleverest or most cooperative ones won or bigger brains allowed for particular success in surviving climatic changes. The point is that there are ways nature could produce a creature that is incapable of remaining within natural restraints and ecological relations of give and take. We should keep in mind that our evolutionary past is not a story of nature gradually shaping an animal for egalitarian membership in an ecosystem; it is the story of the indeterminate development of a creature that would become capable of destroying ecosystems

dead ends that did not lead to us or our direct ancestors. Throughout most of the last 2.5 million years there were multiple *Homo* species alive on Earth simultaneously. It is only in the last few dozen millennia that the number has narrowed to one. All species of *Homo* were remarkable for their sociality and adaptability. Using cooperation and problem solving, they were able to adjust to a variety of different landscapes and survival challenges. Leaving other ape species in their relatively narrow niches, hominids spilled out of Africa into and across nearly the whole of the Eurasian landmass. By 100,000 years ago, this diverse group of humans ranged from the large, cold-adapted *Homo neanderthalensis* living in Europe as far northwest as the British Isles, to the very small (three-and-a-half feet tall, fifty-five pounds), tropical *Homo floresiensis* on the Indonesian island of Flores (*Homo sapiens* remained localized in southeast Africa for the time being). [5] This picture is not yet complete. There are almost certainly more species are still to be discovered.

The succession of human species did not show a linear development in its unique capacities. Most of the increase in brain growth in hominids was in the first 700,000 years of our history (beginning 2.5 million years ago).[6] After that, brain growth slowed considerably (Sapiens, in fact, actually have smaller brains than Neanderthals). Eventually, the advantages of bigger brains were outweighed by the energy cost of growing them and the danger that large heads pose in childbirth. At the same time, human cultural development (at least technical culture that leaves artifacts, like tools) followed a nearly opposite growth curve, beginning

[5] Yuval Noah Harari, *Sapiens: A Brief History of Humankind*, Reprint edition (New York: Harper Perennial, 2018), 7.
[6] Bigger brain size does not mean more intelligent, necessarily, but relatively bigger brains at a given body size is correlated with intelligence.

gradually and then rapidly accelerating.[7] In Oppenheimer's words, "human culture feeds into itself, thus generating its own accelerating tempo"[8] separate from the pace of somatic changes.

The way the increasingly fast tempo of human cultural innovation has exceeded the rate of evolutionary change would prove devastating for other animals. Most species become deadlier by evolving new physical traits (sharper teeth, longer claws), but humans did so by developing new communicative and cognitive abilities, which allowed for the rapid development and spread of new strategies and technologies. After 1.5 million years ago, brain size did not increase as quickly, but fossils of each new species of *Homo* are found with a more advanced set of tools and material culture.[9]

The evolutionary arrival of Sapiens between 200,000 and 150,000 years ago[10] in sub-Saharan Africa did not immediately have a far-reaching impact. We remained in southeast Africa for at least 80,000 years, over half of our time on the planet so far. One explanation for this initially slow expansion is that, like the evolution of *Homo* in general, the arrival of Sapiens' physical attributes preceded the gradual acceleration of innovations and technology, though it might also be the case that we needed to wait for new genetic mutations over this period to gain the abilities we needed for our later spread (this is debated[11]). Sapiens then expanded slowly across the rest of Africa until 70,000 years ago, when we crossed into Arabia and then exploded across the rest of Eurasia. In just 5,000 years, by 65,000 years ago, Sapiens territory reached from what is now the Atlantic coast of Portugal, in the west, to the Pacific coast of China, in the

[7] Oppenheimer, *The Real Eve*, 17.
[8] Oppenheimer, 32.
[9] Oppenheimer, 17.
[10] According to Harari, the exact arrival is debated, but "most scientists agree that by 150,000 years ago, East Africa was populated by Sapiens that looked just like us." Harari, *Sapiens*, 14.
[11] Harari claims that the majority of experts credit genetic mutation.(Harari, 21;) Oppenheimer tends to favor the "culture feeds into itself" theory, doubting genetic change happens quickly enough. Of course, as he points out, new cultural developments can drive evolutionary change by creating situations that favor certain traits, so the theories may not be so distinct. Oppenheimer, *The Real Eve*, 18. No one really knows for sure.

east. We then spread through the Indonesian archipelago and crossed the open ocean to Australia by 45,000 years ago. Mammoth hunters followed their game through Siberia into Alaska 16,000 years ago. The descendants of these hunters found their way into the rest of the North America blocked by glaciers until they melted 12,000 years ago. Humans then spread throughout the whole American landmass, reaching the southern tip of South America 2,000 years later (10,000 years ago, or 8,000 BCE).[12]

There is some debate about what drove this rapid dispersal. Clive Ponting, in his *A New Green History of the World,* blames population pressure. According to Ponting, when we moved into a new area, we met a new set of challenges in the effort to extract a living from the landscape (perhaps radically new challenges; hunting mammoths in Siberia during an ice age is very different from hunting in the warmer climes further south). Sapiens have proven uniquely successful at solving these puzzles and meeting those challenges. The problem with finding a successful survival strategy, however, is that, as more and more people survive, it puts increasing pressure on the ecosystem to replace the resources being extracted. Early Sapiens had various strategies to limit population growth (such as extended breastfeeding and infanticide), but the Sapiens of this period proved consistently better at increasing survival rates than they were at population control. The result was scarcity and conflict. According to Ponting, dispersal into new territory was primarily a means of dealing with the problem of overcrowding, until we reached a point when we had filled the earth and there was nowhere else to go.[13] It is almost certainly a coincidence that the invention of agriculture, back in the Levant (the epicenter of our dispersal out of Africa), occurred around the same time that territorial expansion reached the tip of South

[12] Harari, *Sapiens*, 15.
[13] Ponting, *A New Green History of the World*.

America and could go no further. That said, it is true that we did not develop agriculture anywhere until we had nearly exhausted the dispersal strategy.

Harari is open to other explanations of our dispersion, suggesting that early Sapiens likely chose to move because of a combination of negative factors (crowding, natural disasters, and war) and positive ones, such as new hunting opportunities.[14] Hunting mammoths in ice-age Siberia sounds like an absolute last resort strategy, one you would only choose if there was no other option left, but there were, in fact, benefits to hunting giant, slow-moving game in what amounted to the world's largest walk-in freezer. Food storage is generally impossible for hunter-gatherers, but this was a notable exception. In reality, no one knows exactly why early Sapiens were so motivated to expand their territory, and Harari seems right to suggest that there is no need to choose just one reason. Humans today relocate across the globe for a variety of reasons; we should not assume our ancestors were monolithic in their motivations. We should note, however, that population pressure and scarcity were factors, even if not the only ones.

Whether driven on by those negative factors or drawn on by curiosity and new opportunities, Sapiens have never been in steady-state balance with our environments. The general pattern is one in which humans defeated ecological checks on our population growth and exceeded more intentional ones. For at least the last 70,000 years,[15] we humans have relentlessly expanded our presence on Earth. We have no record of a time after that point during which we have lived in stable equilibria, held in check by set limits to our expansion. That is, there is no evidence of a time in which we failed to increase our dominance over our biotic communities by overcoming previous limits. The first thing to see from the historical record, then, is that *Homo*

[14] Harari, *Sapiens*, 69–70.
[15] I do not mean to suggest that we were in static balance before 70,000 years ago. Growing from a small group to filling southeast Africa was no small task and hardly counts as a static existence.

sapiens have always (well, at least for the last 70,000 years) had a relentless expansive tendency. We burst out of our native habitat and enveloped the globe in a remarkably short period of time, overcoming daunting obstacles and enduring great hardships in a ceaseless quest for new territory and resources.

What did it look like when Sapiens moved into new areas and overcame ecological challenges to survival? Initially, Sapiens spread into territory already occupied other hominid populations. The ecological impact in these areas was relatively minor, given that the animal population had had time to adapt to being hunted by humans and had learned to avoid us. European animals, for example, were already wary of Neanderthals and Sapiens must have appeared largely similar. There is evidence that Neanderthals hunted large game successfully,[16] but not enough to drive them to extinction (though clearly well enough for these animals to evolve a fear of humans).

One group of animals, however, was not prepared for us and went extinct every time they came into contact with Sapiens: other species of humans. While there is new evidence of interbreeding between Sapiens and other humans, like Neanderthals, so little of modern human DNA is from these other species that it seems likely that most of their disappearance is due, not to assimilation, but annihilation. No one knows exactly what happened in the encounters between Sapiens and other species of *Homo*, whether we slaughtered our new neighbors or merely outcompeted them for territory and resources. As with the dispersal theories, however, there is no need to settle on just a single explanation. Competition and conflict could have both played a role (along with, to a lesser extent, interbreeding). While we will likely never know for

[16] See, for example, Geoff M. Smith, "Neanderthal Megafaunal Exploitation in Western Europe and Its Dietary Implications: A Contextual Reassessment of La Cotte de St Brelade (Jersey)," *Journal of Human Evolution* 78 (January 1, 2015): 181–201, https://doi.org/10.1016/j.jhevol.2014.10.007.

sure what these interactions looked like, the result was the same everywhere: the complete extinction of non-Sapiens humans. When the last tiny humans on Flores Island died off 12,000 years ago, we stood alone.[17]

If the extinction of other human species is a grim story, it pales (at least in terms of sheer numbers) with the devastation we wrought when we moved beyond the borders of what had been hominid territory. Australia was the first catastrophe, as it was the first place Sapiens moved into a biotic community with no prior human contact. Australia at the time was full of exotic creatures that seem taken from fantasy: 450-pound kangaroos, two-and-a-half ton wombats, and marsupial lions, to name just three.[18] This diversity did not last long. According to Harari, "Of the twenty-four Australian animal species weighing 100 pounds or more, twenty-three became extinct"[19] soon after human contact.

The Americas were the next continents to go. They were full of equally fantastic animals, like eight-ton ground sloths and saber-toothed cats, which proved equally unprepared for human contact. The results were devastating on a vast scale. According to Harari, within a few thousand years, "North America lost thirty-four out of forty-seven genera of large mammals. South America lost fifty out of sixty."[20] He adds (unnecessarily combatively),

> Don't believe tree-huggers who claim that our ancestors lived in harmony with nature. Long before the Industrial Revolution, *Homo sapiens* held the record among all organisms for driving the most plant and animal species to their extinctions. We have the dubious distinction of being the deadliest species in the annals of biology.[21]

---

[17] Harari, *Sapiens*, 19.
[18] Harari, 65.
[19] Harari, 65.
[20] Harari, 71.
[21] Harari, 74. Our place as the deadliest of all species is secure only if it is the case that there was no Great Oxidation Event. If there was, then cyanobacteria wiped out most of life on Earth at the time when they began to excrete oxygen (toxic to anaerobic microbes) and would likely take the title. For a discussion of this controversy, see Richard A. Kerr, "Great Oxidation Event Dethroned?," *Science* 324, no. 5925 (2009): 321. In either case, we seem the clear record holder for the most recent billion years.

Across the globe, the arrival of Sapiens to new territory coincides with the disastrous collapse of animal populations.[22]

We know essentially nothing about the religion, cosmology, and moral stances of these early Sapiens, so it is hard to say to what extent (if any) religiously-motivated, non-anthropocentric values played a role in these massive environmental disruptions. What we do know is that whenever Sapiens arrived in territory not already occupied by other hominids, mass extinctions followed. There must have been differences in culture and beliefs among the Sapiens groups doing the damage, but damage followed regardless. The arrival of Sapiens is the only datum needed to predict mass megafaunal extinction. No data about the culture of the particular Sapiens is available or necessary for interpreting the pattern. Thus, in addition to our relentless expansiveness, the second thing to note from our early history is that, in Harari's words, "the historical record makes *Homo sapiens* look like an ecological serial killer."[23]

Third, it is important that we see that the historical development of our technical and material culture (like farming), which were to have profound effects on our ecological impact, were not always or even usually the result of human intention and forethought. This fact matters because it reveals a deep pattern in our environmental history: we fall into new situations

---

[22] There has been a long-running debate among scholars over whether to blame humans or climatic changes for these collapses. The issue is clouded somewhat by the fact that one of the effects of swift changes in climate is the opening up of new routes of human expansion (glaciers melting and letting humans pass, land bridges forming during ice ages, and so on). Because of this, the arrival of humans often coincides with climate change. The evidence now seems clear that humans are largely to blame, especially in the Americas. Australia is more contested. If it is climate change, it would be a remarkable coincidence that the large animals there survived millions of years and many ice ages, only to have 96% of them die out at the precise moment humans arrived in the middle of an unremarkable ice age (Harari, 66). For more, see Sander van der Kaars et al., "Humans Rather than Climate the Primary Cause of Pleistocene Megafaunal Extinction in Australia," *Nature Communications* 8 (January 20, 2017), https://doi.org/10.1038/ncomms14142.; David W. Steadman et al., "Vertebrate Community on an Ice-Age Caribbean Island," *Proceedings of the National Academy of Sciences of the United States of America* 112, no. 44 (2015): E5963–71., Christopher Sandom et al., "Global Late Quaternary Megafauna Extinctions Linked to Humans, Not Climate Change," *Proceedings: Biological Sciences* 281, no. 1787 (2014): 1–9.; Hillary S. Young et al., "Patterns, Causes, and Consequences of Anthropocene Defaunation," *Annual Review of Ecology, Evolution, and Systematics* 47, no. 1 (2016): 333–58, https://doi.org/10.1146/annurev-ecolsys-112414-054142.

[23] Harari, *Sapiens*, 67.

unintentionally, with successive generations inheriting ambiguous new realities which they cannot undo. Our history includes a series of irreversible developments brought about by a series of innocuous choices that led to ambiguous or bad results we did not intend. We will miss these traps[24] if we do not see how history moves in ways we cannot anticipate or control. We can misunderstand shifts in human technology if we use only recent experience as a guide. This is because many of the major advances in the last few centuries are credited to great inventors succeeding in making real what they intended to invent. Thomas Edison knew he wanted an electric lightbulb, he just had to find the right metal in the right arrangement. The Wright brothers had a heavier-than-air flying machine in mind and set about inventing one. Extrapolating backward, we can assume other leaps forward were similar. However, this would give us a very wrong impression of the drivers of environmental history.

Let us stay for a little longer, then, with our example, the "invention" of agriculture. The details of the process by which agriculture arose are not, on their own, important for this dissertation. An argument for Christian realism in environmental ethics does not depend on how we understand the domestication of wild plants and animals. What matters is that we see how the development of our material lives moves by mechanisms that exceed simple regulation by our hopes, beliefs, and values. While some inventions—like the lightbulb or a clock—we could infer the goals of the inventor merely by studying the artifact (provided we know how it works). Other inventions, like food production, may at first brush seem similar, but this would be a serious misunderstanding, one that gives too much credit to our intentions, goals, and values in shaping

[24] I call them "traps" but I do not mean to convey that they were intentionally set by someone. Farming, for example, was not a trap laid by some trickster hoping to ensnare human beings. What I mean is that it is a development that locks or "traps" us into a new mode of life, which we cannot escape.

our material lives. The development of agriculture shows there is no simple isomorphism between our inner and outer worlds—at least the former does not simply direct the latter.

To be clear, no individual invented agriculture. No one had a moment of inspiration in which she imagined a new possibility and went about making it real. As Jared Diamond puts it in, *Guns, Germs, and Steel*,

> What actually happened was not a *discovery* of food production, nor an *invention,* as we might first assume. There was often not even a conscious choice between food production and hunting-gathering. Specifically, in each area of the globe the first people who adopted food production could obviously not have been making a conscious choice or consciously striving toward farming as a goal, because they had never seen farming and had no way of knowing what it would look like. Instead… food production *evolved* as a by-product of decisions made without awareness of their consequences.[25]

Even if a forager had a vision of farming come to her in a dream, there would have been no cultivated crops to plant. One cannot simply sit down in a clearing and invent wheat from wild grass.

So, what happened? How did we accidentally become farmers? How could we cultivate crops necessary for farming before we started farming? The answer is that the early stages of agriculture were merely an extension of the coevolution of plants and animals. Plants invest energy in fruit, for example, to manipulate animals into dispersing their seeds. This is obviously not intentional: some feature of the plant surrounding the seed of an individual plant undergoes a random mutation that makes it slightly sweeter or more colorful, so more animals eat them, spread the seeds in their feces, and the plants with the newly attractive fruit are more heavily represented in the next generation. Over thousands of generations the plants change to suit the desires of the animals in a mutually-beneficial coevolution. Birds, bats, and bears have "cultivated" fruit in this way, long before the invention of agriculture.

[25] Diamond, *Guns, Germs, and Steel*, 103.

Early human foragers would certainly have made similar decisions in selecting fruits. Sitting in a blueberry patch, foragers would not have picked randomly, but would choose the biggest, juiciest berries from the most productive bushes. Bringing the berries back to camp, some would spill, spoil and be thrown out, or be eaten and then defecated nearby. As a result, each year when the band of foragers returned to the site, they would find more attractive berries, closer to camp. Over the years, the berries near camp would become less and less like wild varieties as they became more and more suitable for human gathering and consumption. While the spoilage and defecation mechanisms of cultivation do not apply to cereals, like wheat (where we chew and eat the seed, not the fruit), but spillage would still have happened, especially with what were initially very small seeds from wild grasses. Over time, the foragers noticed how unusually tasty, nutritious, and easy to collect these coevolving plants were compared to others and begun to promote them by removing nonfood plants (the first "weeds"), moving aside rocks, and intentionally spreading some of the collected seeds from favored plants. Gradually, they would have spent more time at this work and less time traveling between sites. Sometime after 10,000 years ago in the Fertile Crescent, humans first gave up the nomadic lifestyle entirely and focused on growing plants and raising animals.[26]

Four features of the development of agriculture are relevant here: first, as I have mentioned, it was not the result of human intention. We picked the best blueberries because those are the ones we wanted to eat right then, not in order to domesticate the wild blueberry. Second, and related to the first, where and when it happened did not depend on human cultural differences or preferences. Very few wild plants and animals are suited for domestication. Some

[26] Diamond, 109–25; Harari, *Sapiens*, 77ff.

early humans lived in areas with them, others did not. The ones that lived for a long time in areas with domesticable crops did so.[27]

That last statement requires some clarification. Some human populations *did* live in areas with domesticable plants, but nevertheless did not domesticate them, but only because of the type of plant. Native North Americans never domesticated apples, for instance, despite the presence of wild apples. However, we have to keep in mind that some species are only worth domesticating if you are already committed to the settled lifestyle and, even then, some take millennia of practice to figure out. Apples cannot be the basis of a food-production system: apple trees take too long to grow, cultivating them takes an advanced knowledge of food production, and you cannot live on apples alone (they spoil too quickly). People only domesticated apples when they already lived as farmers for thousands of years in areas with wild apples. Both of those conditions are necessary. What is needed to develop agriculture is readily-domesticable plants and animals *that can be staples of a diet*, plus a long period of human presence. Once you domesticate staple crops, then you can eventually domesticate others. It took 8,000 years of settled agricultural practice in Eurasia (after 60,000 years of Sapiens habitation) before they cracked the code of grafting apple trees. According to Diamond, "If Native Americans had proceeded at the same rate in inventing or acquiring grafting techniques [as Eurasian farmers], they too would eventually have domesticated apples—around the year A.D. 5500"[28] Thus, in some parts of the world, like Australia, agriculture never developed, despite a long history of human occupation, because the right species were not available. In other places, like parts of the United States, domesticable plants were there, but not easily domesticable staples. Where there were easily domesticable staples, humans eventually domesticated them. Whether or not a

[27] Harari, *Sapiens*, 78.
[28] Diamond, *Guns, Germs, and Steel*, 150.

human population developed agriculture depends more on the available plants and the duration of human habitation, more than any differences in the people.

Third, farming made things worse for people. By that statement, I do not mean to paint a rosy picture of the foraging lifestyle. It was difficult. What we have to see, rather, is how bad rudimentary agriculture was in comparison. Farming is obviously great for us today, especially those of us who eat farmed food without having to farm. Farming makes surpluses possible by extracting ten to 100 times more calories from a given tract of land, compared to foraging.[29] But, in the short-term, farming made people sicker, more vulnerable to drought and crop failure, more likely to suffer from chronic pain, and much more likely to die a violent death.[30] Infectious disease arrived with agriculture, as diseases passed from domesticated animals to people and people lived in close contact with one another. People spent a far greater portion of their time working and at tasks for which we are ill-adapted. Harari goes so far as to describe the agricultural revolution as "history's biggest fraud"[31] because of the way it seemed to offer easier living, only to result in the opposite for most people, at least for the first several millennia.

Fourth, the persistence and spread of farming did not depend on our preferences. As perhaps the earliest example of what became a general human pattern, the increased efficiency of the advance did not result in greater leisure; instead, it drove societal changes that resulted in greater demand and which locked us into a new normal of more intense work. Abundant food lessened the need for limiting reproduction and large families made more extensive farming possible, but they also made it mandatory. Population density increased as land use intensified

---

[29] Diamond, 84.
[30] "Many anthropological and archeological studies indicate that in simple agricultural societies with no political frameworks beyond village and tribe, human violence was responsible for about 15 percent of deaths, including 25 percent of male deaths." In some contemporary cultures who practice simple agriculture, as many as half of all adults die from violence. While the numbers are harder to specify, with foragers, it's closer to four percent. (Harari, *Sapiens*, 82.)
[31] Harari, 77.

and vice versa. We reached a point at which there were too many of us to live as hunter-gatherers. A move back to foraging was off the table. Sticking with agriculture was not an attractive choice; it was the only option.

So, if it was so much worse, why did it spread? Why would other cultures adopt grueling, backbreaking work? One reason is that population density and disease are potent weapons. Agriculture only developed independently in a few places on earth (perhaps as few as seven).[32] Its spread to dominate the globe was, as in its initial development, not due only to its attractiveness or to conscious decisions to adopt it. In collisions between hunter-gatherers and farmers, the farmers almost always prevail. Their immune systems, numbers, and capacity for organized violence win out. Human history moves forward into new forms, not necessarily because we value them, but because they outcompete and displace other forms.

Of course, displacement was not the only way agriculture grew to predominate. It is not the case that we are all descendants of the first farmers because all other people were wiped out. Agriculture spread to new groups as well. This is likely due to a mix of negative and positive factors, as was the case with human dispersal. Population pressure and the extinction of game species would have made farming necessary for many. The trap of agriculture probably had a variety of enticements. The results, however, were always increased labor, disease, chronic pain, and violence.

There are certainly times when groups make conscious decisions to adopt or reject changes, with a clear vision of the tradeoffs (think of the Amish or Indigenous groups who choose to maintain a traditional existence). There is no reason to suppose that there were not lots of roads not taken in history, potential developments societies rejected. I am not here arguing for

[32] Harari, 79.

a strict determinism based on geography and natural endowments. If we look to the scale of individuals and groups, there are probably a variety of different reasons and random developments that led to changes in feeding strategies or decisions not to make them.

What is important to the present argument, however, is that at the absolute broadest scale, the general patterns can be pretty clear. For the big-picture developments in human relations to nature, the story can be told without reference to cosmology or convictions (in fact, we have to tell the story this way because we have no access to any data on such internal factors for nearly all of human history). Human populations seem to respond in predictable ways to the same situations and differences in outcomes seem to emerge from differences in context. As we saw briefly in the last chapter, Diamond argues that Eurasia's shape gave it an advantage in developing agriculture: A long east-west axis means a large number of plants and animals evolved for a similar climate zone, increasing the chance that somewhere in the zone are domesticable ones. A large diversity of potential crop species means the same farming techniques, seeds, and animals can spread over a great distance. Lots of agricultural possibilities led to food surpluses and storage, leading to large, densely populated, and complex societies. This led to technology, mobility, military strength, and infectious diseases. Each of these contributed to a power asymmetry in relation to people from areas less suited for the early development of agriculture. It led to the eventual global dominance of a settled, urban, technologically advanced way of life exported from Eurasia (either through violent conflict, competition, or the spread of ideas and technologies to new cultures).[33]

Looking earlier, an even broader pattern emerges. From before the genesis of *Homo sapiens*, we see a trajectory of increasing and accelerating technical sophistication as culture

[33] This is the argument of the whole book, but for a concise overview, see Diamond, *Guns, Germs, and Steel*, 83.

"feeds back into itself." This leads to greater freedom over local environments and more intense use of land. Human territory expands as barriers to living in different climates and landscapes are overcome. Our freedom in relation to the natural world increases along with technology, at least at the local level and in the short term. We develop new possibilities for feeding ourselves and extracting resources from different landscapes. New forms of life develop and possibilities multiply. At the same time, advances shift the context of life in ways that foreclose other possibilities.[34] Seeming steps forward, like agriculture, multiply our possibilities, but also multiply our labors and vulnerabilities, (even if, much later, they vastly reduce our labors. New efficiencies can at times, rather than make life easier, accelerate the pace of work and multiply our stresses (many of us have experienced this at a smaller scale in our lifetimes with developments like email and working remotely). Some advances make us more violent, like the agricultural revolution. Others, like the rise of larger polities and laws, make us less violent locally, but also make possible new forms of war and violence on an unprecedented scale.

Despite its ambiguities and unevenness, this relentless development, taken as a whole, has been devastating for nonhuman nature. The long acceleration in the extent and intensity of our uses of land and resources has increased the pressure we put on ecosystems relentlessly. While relentless, our impact has not followed a smooth exponential growth curve; it intensified in a series of waves. The first was the initial spread of Sapiens beginning 70,000 years ago. The second, as we have seen, was the Agricultural Revolution, beginning 10,000 years ago, which has splintered and destroyed habitat, remaking the face of the earth, driving erosion, and polluting watersheds. The third, which we have not yet discussed, is the Industrial Revolution of

[34] Take, for example, the dispersal of humans across the globe. This is a story of gaining and losing capacities, possibilities, and freedoms. For instance, while the species *gains* the capacity to live in the arctic, this might be because a given tribe *loses* the freedom to live anywhere else because of population pressures. The species *gaining* the power of farming might mean a family *loses* the freedom to forge a living any other way.

the last few hundred years. Yes, Lynn White is correct that this third wave is vastly more intense than what preceded it. However, this just means it follows an established pattern of vast increases in the intensity of our impact. Just as in the agricultural revolution, it brought together and consolidated a slow evolution, in this case, the use of machines and mechanization to multiply human speed and power. Just as the cultivation of staple crops unlocked new possibilities (like cultivating apples), technologies like the internal combustion engine unlocked a whole new set of inventions, like cars, tractors, and airplanes. Just as in the agricultural revolution, new efficiencies led to population growth and crowding, as well as changes in the social order, an accelerated pace of life, and long hours of grinding work for which we are ill-adapted. Small decisions to pursue a better and easier life led to both real advances in the human condition and devastating human and nonhuman costs.

From this perspective, when we look at our current environmental situation, it does not seem so much like an unprecedented historical turning point in need of explanation and solution (by religious cosmology or anything else). It appears more like the most recent step in a pattern going back millions of years. If we turn to history to find the moment at which we started on a path to ecological crisis, almost any point in that time would seem an arbitrary choice. Whatever it is in us that gives us the power and propensity for radical changes in our environmental condition seems to antedate all such inflection points. It is not clear there is anywhere to look, if what we are after are religious inhibitions that restrained us within nature.

Now, perhaps we are leaping from a few isolated moments (early megafauna extinctions, agricultural revolution, etc.) to conclusions about the broad pattern of history. Perhaps, while we have seen that environmental disruption of nature and mass extinctions are ancient and perennial features of the human presence on earth, it might seem that things quieted down after our initial

spread and the development of agriculture. We have seen that the first humans to arrive in the Americas initially caused megafaunal extinctions, but perhaps they then settled into a new equilibrium of stable balance. It is true that, in the roughly 10,000 years from the end of the great extinction in North America until the arrival of Europeans, far less damage was done to the land than in the few hundred years since European contact. So, while I have argued that Native Americans had an initially devastating impact, I have not thereby shown that they or some other groups did not hold the secret to sustainable living (at least once the other large animals are mostly gone). One could accept the historical narrative I have related and still think that the reason we have ecological disasters in the U.S. today is sufficiently explained by the differences in religion, cosmology, and values between European and Indigenous Americans. Indigenous cosmology may not have prevented the extinction of the American lions and camels, but it prevented the massive deforestation and pollution we see today.

There is, of course, some truth to this reading. There was no Love Canal, no DDT or runaway carbon emissions in pre-Columbian America, no smog or strip-mining. The question to think about, however, is not why there were no such problems, but rather, what it *would have taken* for those problems to have been here. What would it have required for Native North Americans to have been strip-mining and emitting smog when Europeans arrived? Instead of assuming that the fact they were not doing these things is exceptional and needs explanation, we need to see it is exactly what we would expect, given what we know about their situation (if we knew nothing about their religion and cosmology).

To see this point, let us consider a counterfactual hypothetical in which early Americans had arrived in the Americas with deeply anthropocentric cosmologies and a strong antipathy for nonhuman nature. Let us say they wanted nothing more than to pollute and destroy. What would

this have taken? To achieve chemical and carbon pollution and mechanized disruption by 1492, they would have had to pull off a remarkable feat, even if a desire for such forms of destruction was the sole motivating force in all they did. They first would have had to solve all the barriers to surviving and thriving in a brand-new landscape when they arrived. In fact, they needed to master, not one landscape, but several, from the arctic tundra to the boreal forests, temperate forests and grasslands, deserts, tropical forests, coastal swamps, high plateaus, and mountains, and that is just for the settlers who took the straightest possible route down the spine of the Americas from Alaska to Argentina. They would have to solve all of those survival puzzles so completely that their population grew to the point of exhausting the possibility of further dispersal and to begin to apply mounting survival pressures. They would have had to live in the same territory long enough to begin to coevolve with plants and animals and begin the long transition to agriculture, provided the right plants were available. This would have to happen independently in arable zones in North, South, and Mesoamerica, because the same set of crops and techniques cannot spread north and south in the way they can move east and west in the same climate zone. For example, knowledge of terrace farming in the Incan empire could not spread north to the Algonquin people in what is now Massachusetts, the way wheat could spread across Eurasia. Despite those structural disadvantages in the Americas, agriculture did develop independently in all three of those major regions. Even though the Americas were settled by Sapiens only 12,000 years ago, 60,000 years after we reached the Fertile Crescent, agriculture arose here only 5,000 to 6,000 years after it did there—by 3,500 BCE in Mesoamerica and South America and by 2,500 BCE in the Eastern United States.[35]

[35] Diamond, *Guns, Germs, and Steel*, 96.

After agriculture was well-established, they would then need to form large, stratified societies (which they did), invent writing (which they did), and then develop the whole succession of technologies that would lead to industrialization. While it took 5,000 years to go from agriculture to writing in the Fertile Crescent (roughly 8,000 to 3,000 BCE), in Mexico, it took less than 3,000 years (3,500 to 600 BCE).[36] If their aim had been to destroy and pollute the natural world, Native Americans' development of the necessary technology and political cooperation was tracking only a few millennia behind the Eurasians', despite a massively later start, and was closing the gap quickly.

Now, I obviously do not mean to suggest Native Americans in fact wanted to destroy nature. I am only saying that, if they had, they were making quick progress toward gaining the necessary tools. The fact they had not yet closed the gap with Europe is hardly evidence they held a secret for avoiding environmental destruction. If anything, rather than needing an explanation for their lack of disruption to the land, it seems more natural to look for a reason for their much more rapid progress toward that end.

We might wonder, then, why the Americas were in such pristine condition when Europeans arrived, given 5,000 years of agriculture. Why did the Europeans not find an altered and crowded landscape? There are two quick answers. First, 5,000 years of agriculture is not as long as it seems. Recall that it took 8,000 years for Eurasian farmers to go from cultivating wheat to figuring out how to domesticate the apple. Second, and most importantly, Europeans *did* find, at least initially, an altered and crowded landscape. The myth of pre-Columbian America as pristine wilderness is just that, a myth. The myth is the product of the fact that disease and disarray, brought by the first explorers and conquistadors, destroyed what had been a populous

[36] Diamond, 209.

and prosperous group of civilizations. By the time European settlers arrived, centuries after first contact, there had been centuries of regrowth in the natural landscape that created the false impression of an undisturbed paradise.[37]

I want to be clear about what I am arguing here and what I am not. I am not saying that there is a moral equivalence between the environmental practices of Indigenous and European Americans. I am not saying that all societies are equally guilty of environmental sins. What I am saying is that, because Native Americans had the advantage of empty continents to fill, they did not face the pressures to develop (or the possibility of developing) agriculture for several extra millennia. They were thus at a different point on the technological development curve when European's arrived. The differences are so well explained by this fact, that the history does not give us clear evidence of more sustainable cosmologies and values. They may have had these, but we cannot conclude this from the historical evidence. In any case, it is not clear how, once agriculture had unleashed the pressures of population growth and density, Native spirituality *could have* allowed them to escape the binds into which this would eventually place them. Once numbers exceeded what the land could support through hunting and gathering, it is not clear that *any* value system, no matter how well suited for environmentalism, provides the specific knowledge that would be needed to solve the technical challenge of abandoning agriculture (or of living agriculturally without increasing population pressure). Once a society is stuck in agriculture, it is unclear how environmental values help it avoid new population pressures and the need for new technologies and more intensive use of land. The problem is not that Native environmental values are not better than European ones; the problem is that values do not seem

[37] For a good overview of the condition of pre-Columbian America and the sources of the wilderness myth, see Charles C. Mann, *1491: New Revelations of the Americas Before Columbus* (New York: Knopf, 2005); For a quick introduction, see, Charles C. Mann, "1491," The Atlantic, March 1, 2002, https://www.theatlantic.com/magazine/archive/2002/03/1491/302445/.

obviously able to prevent the ultimate destruction of what is valued. The environmental history of the Americas certainly does not stand as a case of people successfully resisting the trajectory of human history.

In his *The Ecological Indian*, Shepard Krech, III, argues that the myths about American Indians'[38] environmental practices do not match the historical record.[39] His goal in the book is not to disparage Indians, but to show them displaying the full range of human capacities and propensities. He worries that the myth he calls "the Ecological Indian," in which Indians are held up as perfect environmental exemplars, denies the humanity of those whom it means to extol. About the damaging nature of such myths, he writes:

> For while this image may occasionally serve or have served useful polemical or political ends, images of noble and ignoble Indigenousness, including the Ecological Indian, are ultimately dehumanizing. They deny both variation within human groups and commonalities between them. As the historian Richard White remarked, the idea that Indians left no traces of themselves on the land "demeans Indians. It makes them seem simply like an animal species, and thus deprives them of culture."[40]

We have seen that the historical record shows that there was no evidence of anything which allowed Indians to escape an accelerating trajectory of environmental impact, never mind a monolithic cosmology that could do so. Krech helps us to see that viewing Indians as monolithically attached to *any* single value system, good or bad, strips them of the fullness of human freedom and variability. Doing so perpetuates a history of dehumanizing distortions.

Rather than saying that Indigenous peoples, across the globe, hold the secret to stable immersion within nature, it seems less prejudicial and more accurate to credit them with all the

---

[38] I have usually referred to "Indigenous Americans" and "Native Americans" so far and am now adding "American Indians" and "Indians." I do not mean to take a side in the ongoing, unsettled debates about preferred nomenclature, but am largely reflecting the usage of the authors I am citing, within the range of generally accepted names.
[39] For example, he shows ways in which some Indian practices, like irrigation, led to salination and loss of soil fertility, in ways farmers would not have been able to predict or avoid. Shepard Krech, *The Ecological Indian: Myth and History* (New York: W. W. Norton & Company, 2000), 45ff.
[40] Krech, 26.

possibilities and capacities of full human beings and explain their lesser impact in other ways. Some of the perceived differences are illusory, as in the myth of the Ecological Indian (their impact was not so different as the myth holds). Some real differences are due to groups being on a similar trajectory, but being later arrivals to their territory, as with the differences between Eurasia and the Americas. Others can be explained as due to occupying lands without suitable plants and animals for domestication, as in Australia. Still others can be explained by the fact that Indigenous groups today are often relegated to inhospitable landscapes[41] where more powerful groups did not settle, like deserts, jungles, and the arctic (environments that are difficult to modify for human ends and thus seem less disturbed). Again, I do not mean to claim that Indigenous people, past or present, are morally equivalent to other groups, environmentally speaking. The claim is only that evidence for cosmological environmental advantages needs to be drawn from other sources, like current activism, and that cosmology does not seem suited to provide the ability to escape the traps of history. Any perceived lack of modification to the land is either a myth or better explained by other mechanisms.

In conclusion, whenever and wherever we find human beings in landscapes that allow for it, we find an accelerating trajectory of power over nature. The outcomes for nonhuman nature are devastating and are worsening along with the increase in human numbers and technological power. We also find that the human condition does not improve unambiguously. We find ourselves falling into traps we cannot avoid. Many decisions to improve life (farming a little more, working a little harder) ironically make life worse. Historical outcomes thus do not always reflect human aims, because our choices have unanticipated and sometimes unwanted effects.

[41] Harari, *Sapiens*, 59.

Thus, the hypothesis that cosmologies direct environmental history is not well-supported by historical evidence. The story of our broad ecological history can be told sufficiently without reference to the cosmologies of the people involved. Because of this, there is no pressing need to explain why some groups have different environmental impact than others, once context is taken into account. The cosmological approach does not address a pressing explanatory need. Even if there was such a need, it is not clear how religious cosmology is a plausible mechanism to allow groups to resist the inexorable pressures produced by the creative human capacity to meet our needs and secure our goods in the face of an indifferent and often hostile world. As long as we have that capacity and succeed in that task, we will face the problem of facing new limits pitched on a wider scale. It is not clear how cosmology can remove that problem.

Chapter Five: Interpreting the Drivers of Environmental History

The aim of this chapter is to offer categories from Christian realism (evil, tragedy, fallibility, and irony) as patterns discernible in the environmental history covered in the previous chapter. To the extent these categories make better sense of environmental history than other candidate interpretations, Christian realism shows itself to be a valuable perspective for environmental ethics. The chapter proceeds by introducing the four categories, exploring problems in dominant modes of environmental thinking that make using them necessary, and then developing them in the context of our environmental situation as illuminated by environmental history.

The history we saw was messy and its implications for how we are to live are not obvious. How do we make moral sense of a pattern of relentlessly accelerating destruction? How can our analysis move from what happened to the features of human beings that give rise to this pattern? Does it all come from evil? Can we even be better? Is environmental harm unavoidable? If so, would that mean we are not guilty of environmental wrongdoing, since we cannot help it? Or does it mean we are all guilty, because we all do it? Are we doomed to make mistakes and fall into new patterns that are worse for both us and the earth?

This chapter looks at the connection between internal stances, choices, and actions and environmental outcomes. It aims to help make sense of what it is in us that leads to environmental harm. Whereas Chapter Three criticized the cosmological approach for its simplistic use of history, this chapter criticizes its simple diagnosis of how effects in the world follow from causes in people. The thesis is that expanding our moral concern beyond the scope of intrahuman social relations must drive a fundamental change in our understanding of the causes of conflict, disvalue, and destructiveness. Its role in the overall dissertation is that it aims

to make sense of history of the previous chapter, using theological symbols, thus laying the groundwork for the turn to Christian moral and theological realism in the next chapter.

Agency and Outcomes

Let us begin with a hypothetical: imagine for a moment a village facing a hard winter in which food will be scarce. It might seem to be the case, intuitively, that the wide adoption of a moral commitment to altruism and to the even distribution of food will help the villagers survive. And, in fact, it may turn out to be the case that if everyone in the village thinks first of others' needs and eats only what he or she requires, sharing the rest with others, there will be enough food for everyone. We can imagine that this village will maximize the number of villagers who survive the winter, especially compared to one that values individualism or that privileges one group over others. It is certainly possible that there are cases in which the adoption and practice of the right values and norms of behavior leads to the best outcome.

However, we can also imagine a village which faces an even harsher winter. In this village, the food supply is so low that, even if food is shared optimally, a number of the villagers are going to starve. In this case, the adoption of the right moral stance toward food distribution might help minimize, but will not prevent, starvation; food is just too scarce. Perhaps no one will survive the winter, no matter what anyone does, and ethics makes no difference in the outcome. We can call such situations **tragic**, because a negative outcome is unavoidable, whatever efforts might be undertaken by the villagers.

Thus, it seems uncontroversial to suggest that, while there are some situations in which adopting the right stance toward an issue as subjects (such as the right norms of food distribution) means that the objective outcome will be good (people will have enough to eat), there are other situations in which the right stance is insufficient to bring about a good outcome

(everyone has the right stance, but people starve anyway). To sustain the idea that the adoption of the right moral stance will guarantee the desired outcome (surviving the winter), we would first need to know something about the situation (i.e., the absolute limits of the food supply relative to the caloric requirements of the village). There is no reason to think that the right subjective stance will always guarantee a good objective outcome.

There are many reasons why our subjective stances do not lead directly to objective outcomes. We can imagine villages where there is enough food (unlike our second village) but the right moral stance is nevertheless insufficient to guarantee the best outcome. For one, perhaps in some villages the villagers have a moral stance that would regulate their behavior, but are insufficiently constrained by it and violate its norms. We can call failures to do what they ought, not tragedy, but **sins**.[1] One form of sin is moral weakness: fear or anxiety about survival might overwhelm villagers' moral stances, leading them to do what they do not want to do: hoard food, to lie, cheat, and steal.[2]

However, there are subtler factors that can prevent moral stances from leading to the best outcome. Perhaps if everyone is allowed to decide how much food they need (before sharing the rest), people will tend to allot themselves a bit more food than they require to survive. In this case, there is enough food for everyone, but not if people decide for themselves how much to keep and how much to share. The villagers can all survive, but only if people eat less than they

[1] I do not mean anything technical by this other than acts of moral evil. Within a theological frame, sins are offenses against God, but what matters here is that they are wrong, not that they are particularly transgressive of divine law. We will discuss Niebuhr's position on the anthropological roots of sin later in the chapter, so I stick with that nomenclature here. All I mean to name here are cases in which a moral stance fails to bring a good outcome because people do the wrong thing.

[2] Consider the words of Saint Paul: "I do not understand my own actions. For I do not do what I want, but I do the very thing I hate. Now if I do what I do not want, I agree that the law is good. So then it is no longer I that do it, but sin which dwells within me. For I know that nothing good dwells within me, that is, in my flesh. I can will what is right, but I cannot do it. For I do not do the good I want, but the evil I do not want is what I do. Now if I do what I do not want, it is no longer I that do it, but sin which dwells within me." Romans 7:15-20 (RSV) For a helpful discussion of types of wrongdoing, see Book III of Aristotle's *Nicomachean Ethics*

think they need. This need not be the result of acting from the wrong stance about food distribution: perhaps even people acting from a deep commitment to justice will tend to misjudge how much food they are eating relative to others or the minimum that they require, in ways that consistently (even if unconsciously) benefit themselves. In this case, even though everyone adopts and earnestly practices the right moral stance toward food *and* there is enough food for everyone to survive, people still starve because their actual practice is imperfect because of agential limits. In this case, unlike the previous example, no one cheats. No one loses the battle with temptation and succumbs to moral weakness. Instead, people are wrong in their estimates of how much they need to survive. Some of this is innocent: errors in judgment may be just a result of human **fallibility**: we cannot know everything and are judgments are fallible. However, the consistent *tendency* for these errors to favor the person making the judgment is better understood as a result of sin.

There is not always a clear line between conscious sins and innocent errors due to fallibility. Rather, there seems to be a wide range of actions that seem like errors, but nevertheless benefit the one deciding. Some of these are toward the innocent end of the spectrum; they are just a result of limits of our perspective. In some cases, people genuinely believe they are making a sufficient sacrifice, because they cannot (or do not) see the suffering of others as clearly as their own.[3] We can also imagine cases in which we believe we are acting from innocent motives, but these motives are corrupted by self-interest. There are conscious sins, innocent errors, and a large range in the middle in which we are more or less culpably mistaken

[3] Sometimes my wife cleans our dishes without me realizing it, but I *never* clean them without my knowledge. As a result, I consistently overestimate what I do compared to her because I am limited in what I know about her actions. If we are both fully committed to justice (understood as an even split of work), conflict is inevitable, because what is in fact justice will appear unjust to both of us.

about what we are doing and why. We can call the sorts of sins in which we misunderstand or misconstrue our actions and motives 'self-deception.'

Thus, accurate predictions and responsible judgments about food distribution might require, not just being right about which moral stance should govern behavior and natural threats to the food supply (harsh winters, droughts, etc.), but also an understanding of the propensities and limits of human beings. Knowing something about not just what people should and must do, but also what people are *likely* to do in a given context is a necessary prerequisite for prudent collective action. To maximize survival, steps might need to be taken beyond inculcating the villagers with the right moral stance toward food distribution. Perhaps reflection on the structures and limits of agency might lead us to conclude a central food authority is necessary to allot people less food than they think they need, but enough to keep them alive. To put such a program in place requires that we anticipate ways in which the stance a community holds ("food should be distributed evenly so everyone may live") might be resisted by factors in human nature.[4]

Because of tragedy, sin, and fallibility, we can imagine cases in which efforts to feed the village (through moral stances or otherwise) are actually counterproductive and make outcomes worse. We could imagine a village where people attempt to act prudently and eat the minimum amount of food needed to survive, storing away the extra food in the first half of the winter, but the stored food spoils and people starve in the latter half of winter; if they had eaten all the excess food when they wanted to, they would have had the fat reserves needed to survive the end of winter. Their efforts to survive led to their deaths. Perhaps a village sets up a centralized

[4] We can also imagine a village in which people who just want to maximize their own chances of survival enter into a social contract, creating a sovereign food authority to distribute food fairly. It is at least possible that such village would achieve a more equalitarian distribution of food than one committed to altruism. I have not included this scenario in the main body of the argument, because it is not an example of a village failing to achieve its best scenario, but it is another sort of case in which moral stances are not the best predictor of outcomes.

authority to distribute food, but it becomes a corrupt kleptocracy and people starve, when they would have survived if they had not set up the food distribution regime. These cases of our efforts betraying our aims are examples of **irony**: actions taken for the sake of survival can lead, ironically, to fewer people surviving. Ironic betrayal of our aims might come, as we have just seen, with moralistic[5] approaches or more political ones (it does not much matter whether the food-sharing practice that led to increased starvation was voluntary and moral or compulsory and political; it is ironic in any case where efforts contribute to bringing about what they aim to avoid).

To review, there are many reasons why a community could fall short of its ideal outcomes. They could fail to adopt the right moral stance toward the relevant issue and not value what they should. Even if they do have a strong moral stance on the subject, moral weakness means they may violate their convictions and sin. Even if they do not succumb to conscious temptation, they may be self-deceived and unaware of the ways in which their behavior falls short of their perception. Even if they have the right stance and avoid temptation and self-deception, they may still *accidentally* fail to achieve their aims because of the fallibility of finite agents. Their efforts might even be ironically counterproductive. Even if they have the right stance, avoid sin and self-deception, and fail to make any errors due to their finite limits, they may still fall victim to tragedy (their aims undone by factors beyond their control, like famine)**.**

[5] By 'moralistic' I mean theories of activism and social change that diagnose societal problems as results of either moral error (people hold the wrong moral stance) or moral weakness (people fail to live out their moral convictions). Moralistic theories, in my usage, then prescribe the wider adoption or more consistent practice of values and norms to solve the problems they have diagnosed. Examples of moralistic theories range from economic theories that diagnose poverty as a result of the laziness of the poor or greed of the rich to environmental ethics that diagnose environmental degradation as the result of non-anthropocentric values. To be moralistic these theories do not need to hold that morality is the sole or exclusive cause or solution to the problem. Moralistic theories can acknowledge complicating and compounding factors. What makes them moralistic is thinking that morality is a *sufficient* explanation of the problem's roots and remedies and suffices as a means of response.

This survey of factors resisting the achievement of our ideals likely seems remedial and its observations obvious (perhaps painfully so). We are all too aware of our own moral weakness. I imagine the experience of being confronted by a loved one and realizing that we have hurt them unintentionally (but culpably) is also all too familiar, as is the realization that our motives were not as pure as we had convinced ourselves. We have all taken shortcuts that ironically delayed our journeys. We have all been thwarted by tragic impossibilities, even if minor ones (I cannot work and play with my kids at the same time, for example). So, why belabor the obvious?

It is important to remind ourselves of the factors that complicate moralistic explanations because the difference between attention or inattention to them can mean the difference between realism and anti-realism, responsibility and irresponsibility, or even coherence and incoherence in environmental ethics. We saw in Chapter One that for many (if not most) environmental ethicists, the presence or absence of non-anthropocentric values is the determining factor in a culture's environmental impact. We saw that Lynn White, Jr. and those who share his assumptions diagnose global environmental collapse in terms of the rise of anthropocentrism. We saw that many thinkers cite the capacity of our moral stances to shape environmental outcomes as the justification for the changes to theology and ethics they recommend.

These hypothetical villages are not meant to show that the effect of moral stances on environmental outcomes is insignificant or even that values are not the most important factor. They are meant as a way to start our thinking about the history in the previous chapter, specifically why the values of different groups did not seem to be the sole, or even a particularly good, predictor of environmental outcomes. I hope that these sources of disjuncture between morality and outcomes seem reasonable. No one doubts that people with non-anthropocentric

values remain fallible. It is obvious that the pursuit of nontrivial human goods exists in tragic conflict with natural goods, at least at times. The presence of evil and weakness in the world seems apparent. These factors taken together mean ironic failure is inevitable. It should be obvious that there is more going on than the direct dictation of environmental outcomes by moral stances.

What is of consequence for method in environmental ethics, then, is not the mere recognition of complicating factors beyond moral stances. What really matters is how we take them into account. Take, for example, Rasmussen's claim (from the third chapter) that our crisis is caused by a "habit of mind." In this approach, while we can recognize that some portion (say, hypothetically, ten percent) of environmental impact is due to other factors, the crisis is caused by the problem with how we think, with our habitual stance on the subject. There is some perennial, low level of damage we have always done, but the crisis is due to stances. While Christian ethics might have something interesting to say about that nonmoral ten percent (but probably not), the urgent intervention is to address the ninety percent of our impact due to moral stances. If, in Jenkins's words, "Christian axioms lie at the root of catastrophic cultural practices, then they must be vindicated, reformed, or replaced with better ones."[6] Religion must stay "at the center of cultural reflection." On such an account, yes, someone needs to think about responsible environmental politics, but the most urgent and effective intervention to be made, by far, is fixing the religious imagination.

If, on the other hand, we recognize that stances matter, but flip the ratio (ten percent stances, ninety percent everything else), we see Christian environmental ethics in a very different light. In this view, our religious and moral ideas may have catalyzed the crisis to some extent and

[6] Jenkins, "After Lynn White," 287.

left us ill-prepared to grasp its depth and complexity, but they did not "cause" it. Fixing theology will not end it. In this view, pristinely non-anthropocentric stances would not have saved us from the traps and tragedies that drove the trajectory of environmental destruction. We would still have sinned, made mistakes, and caused harms in our pursuit of good ends. Here, fixing our stances is important (especially for us to have the depth to see our situation clearly), but the primary need is to figure out how to live as responsibly as possible in a world in which anthropogenic environmental degradation is a fact of life. The task of Christian environmental ethics looks very different from this perspective. The assignment of these hypothetical percentages is meant to be merely illustrative, but I hope the point is clear: our approach to weighing the relative importance of different elements that contribute to our environmental problems is very important to how we see the contributions a theological perspective can make.

Based on the history covered in the previous chapter, we have good reason to doubt that moralistic approaches (the crisis is caused and can be fixed by moral changes) are adequate for our environmental situation. Environmental issues arise from a whole host of complicating factors that make responsible action challenging. However, the argument here is not just that environmental issues are beset by the same challenges as other areas of our collective lives (and thus moralistic explanations are inadequate to the same extent as in other areas); the argument is that Christian realism's standard worries about moralism are *particularly* acute when it comes to the environment (and moralistic explanations particularly inappropriate). Compared to say, committing violence against our neighbors, the temptations to harmful environmental actions are subtler and the consequences more gradual and distant. The distance of environmental effects means it is particularly easy to be self-deceived about our own impact. The complexity of natural systems means our knowledge is particularly limited and error particularly likely. The

probability of unintended consequences means ironic worsening of situations is particularly likely. The indeterminate, unchecked development of the human project within the set limits of the biosphere and means tragedy is particularly unavoidable.[7]

The attention to factors which resist the close connection between our morality and outcomes makes the present chapter an example of political realism[8] in environmental ethics. We have to be realistic about political possibilities because of factors, especially in human nature, that work against the simple realization of our moral aims. Political realism requires us to look, not just at why people do wrong things, but why people doing the right things might still lead to bad outcomes. If we remain beholden to the common (but often unexamined) belief that acting in the right way as subjects leads to good environmental outcomes,[9] our reflections will be slanted

[7] My argument is that Christian realism is particularly convincing on environmental issues because its concerns about moralism are particularly appropriate. I do not argue, but take as given, that environmental issues pose unique challenges to moral action. The ways environmental problems, particularly climate change, stymie moral agency have been pointed out by a variety of authors, most notably Stephen Gardiner in *A Perfect Moral Storm*. [Stephen M. Gardiner, *A Perfect Moral Storm: The Ethical Tragedy of Climate Change*, 1 edition (New York: Oxford University Press, 2011).]

[8] Which is not to say that this is a chapter on *politics* (in the sense of the exercise of power by states). It is on factors in human agents that constrain the possibilities of successful collective action, but it does not cover particular problems in the institutions by which we act collectively. This sort of realism is "political" because it sets the parameters of political expectations and points to the means required for political successes. The moral-anthropological focus of the chapter is perhaps described well as "pre-political," in that it covers factors in the human situation that political reasoning must then take into account.

[9] There are ways of thinking, of course, that do hold moral stances and objective outcomes together. For example, a consequentialist ethics does, in one sense, connect the subjective and objective side by saying that whatever subjective choice optimizes the objective outcome is the right one: the right choice for the villagers was whatever would have led to the best consequences. In this case, yes, the right subjective choice leads to the optimal outcome; it does so axiomatically. The right just is what maximizes the good. However, we should not confuse this *evaluative* framework for a prudential, action-guiding stance one can take to guarantee the best outcome. That is, we should not think that adopting a consequentialist stance in the moment of choice is the best way to optimize consequences. Making a claim about the rightness of a choice using consequentialist criteria is not the same as making the claim that a consequentialist would have made the right choice. Decisions made from a commitment to maximizing good outcomes can still lead to bad ones because of sin, fallibility, tragedy, irony, and so on. It is not a novel observation to point out that consequentialist ethics can involve us in paradoxes wherein seeking a consequence works against its achievement. It is not guaranteed that hedonists are happy. So, while it is the case that there are approaches to ethics which judge the right choice to be the one with the best outcomes, even in such frameworks it does not follow that holding to the right stance leads to good results. A village of rigorous consequentialists is not immune from famine; there is not even a guarantee that such a village is the one best prepared to deal with famine when it comes. Even if we evaluate the actions of subjects only by their objective consequences, we have not thereby arrived at a moral stance that we can prescribe to subjects that will optimize objective outcomes. For more on the paradoxes of consequentialism, see Henry Sidgwick, *The Methods of Ethics* (Indianapolis: Hackett Publishing Company, Inc., 1981).

toward a narrow range of explanations of environmental disruptions. That is, when explaining the roots of environmental harms, we will be tempted to look only at factors such as sin and weakness. In looking for the roots of *bad* environmental developments, we will only try to discover why we do *wrong* things. We will neglect the possibility that we can cause bad outcomes, without doing anything wrong.

Investigating whether bad outcomes come only from wrong actions and good ones from right actions: this only makes sense if we see a difference between the dyads "right and wrong" and "good and bad." Here I do not mean to employ the terms in any technical sense other than the following: by "right" I mean actions, choices, or values that are obligatory or required, whereas "wrong" refers to those that are forbidden or illicit. By "good" I mean to describe what is valuable, desirable, or excellent and by "bad" I mean the opposite. A delicious, ripe strawberry, for instance, is good, but not right (or wrong). It is desirable, but not obligatory or forbidden. A rotten strawberry is bad, but not wrong. Henry Sidgwick's description of the good as attractive and the right as imperative is another way of stating what I mean.[10] The question before us is whether bad environmental outcomes are attributable entirely to wrong or forbidden subjective orientations or whether they emerge from right or at least permissible subjective orientations as well.

If we automatically look to explain the sources of bad environmental outcomes in the world by looking to moral wrongs in human beings, we can miss the ways in which benign, even good, features of human nature may lead to environmental harm. We may not be disposed to notice if the character of human environmental existence turns out to be tragic or ironic; that is,

---

[10] Sidgwick, 105ff.

we might miss the possibility that we cannot help but disrupt nature in pursuit of the range of human goods or that our efforts to secure natural goods might be counterproductive.

The most simplistic approach environmental ethicists have taken is to assume that promulgating a sound environmental ethics is likely to work to end environmental evils. Thus, it represents a real step forward when thinkers are realistic about the features of the situation that resist the adoption and consistent practice of environmental ethics. However, taking only this step leaves in place the assumption that, *were* everyone to become committed environmentalists, the crisis would be adequately addressed (an assumption with the convenient effect of reassuring environmentalists they are not part of the problem). But what if it is the case that a worldwide conversion to environmentalism as a moral stance would not solve the problem? Here I do not just have in mind the potential environmentalist worry that it may already be too late to turn back the tide of environmental collapse. I mean the more fundamental concern that changes in our values were never sufficient to constrain environmental behavior, no matter when they would have been undertaken. What if values just do not determine outcomes in this way? What if the environmental ethics that a population holds is a poor predictor of its environmental impact? Yes, it would be hard to convert everyone in our hypothetical village to the belief that equitable food distribution is a binding moral requirement, but whether such conversions would prevent or even minimize starvation is a separate question, as is whether food ethics correlates with survival rates at all. It is good when environmental ethicists recognize that making everyone into environmentalists is difficult, if not practically impossible. But the question whether the widespread presence or absence of committed environmentalists is a plausible determinant of environmental impact is a separate, stickier question.

If, as we saw in the last chapter, all human populations have exhibited a trajectory of expanding impact on the environment, then we need an account of the drivers of environmental behavior that is tied to general human propensities and capacities (without denying that something like moral stances might make certain populations worse environmental citizens than others). Even those societies that seem to have the right moral stance toward the environment have enormous deleterious effects on their ecosystems, and trajectories pointed toward even worse outcomes. It seems unlikely that our environmental outcomes can be explained, altered, and predicted with reference to moral stances alone.

Beyond morality: the depth of environmental problems

Moving beyond the assumption in environmental ethics that environmental harms arise only from wrong ways of thinking and acting is not easy. It is worth spending some time reflecting on how we often think about the connection between what motivates and shapes actions, on the one hand, and the effects those actions have on nature, on the other. Thus, before we turn to an extended reflection on the factors resisting our ideals, it is important that we clarify how we connect judgments about outcomes to judgments of moral stances. Before we can address the question of agency (those factors in human nature that make possible and resist the achievement of our aims) in this chapter, we need to clarify issues in the meta-ethical dimension. There are two linked questions: 1) how do we imagine the connection between moral stances and actions, on the one hand, and to environmental outcomes, on the other, and 2) what are our ethical criteria for evaluating both the internal and external sides of that connection? In other words, on the one hand, we need clarity about how subjective orientations—holding moral stances, acting from certain principles, affirming different cosmological visions—affect our actions as agents and thus the extent and intensity of our ecological footprints. On the other hand,

we need clarity about how we appraise both the subjective conditions of choice and their objective results. Doing so will show how moralistic approaches cannot account for the history in the previous chapter and lay the groundwork for a different account.

Let us start with the second question, about the criteria of ethical evaluation, then see how it shapes possible answers to the first, that is, how we connect subjective orientations (moral stances and actions) and objective effects (environmental outcomes). A natural place to begin is with the classic articulation of an environmental normative theory, Aldo Leopold's "land ethic." Leopold proposed the simple formula, "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."[11] In terms of moral theory, this is a consequentialist claim; the rightness of an action depends wholly on environmental outcomes, not on the motives of the agent. Leopold does discuss moral stances (i.e., we should hold to the land ethic), but his land ethic is consequentialist in form.[12] What is right according to this principle is not that we hold the right moral stance, but that we produce good environmental outcomes. Because of its consequentialism one could, conceivably, intend to harm the biotic community, do so incompetently, *accidentally* preserve its integrity, and still fulfill the demands of Leopold's land ethic. If we started our political realist interpretation of environmental ethics with something like the land ethic and then looked at the agential drivers of environmental behavior, we would look only at what drives behaviors with good or bad outcomes. It might turn out to be the case that non-anthropocentric attitudes are the primary drivers of such outcomes, but perhaps not. It might be the case, hypothetically, that an Indigenous group that is driven by a thoroughly anthropocentric antipathy toward nature happens

[11] Aldo Leopold, *A Sand County Almanac*, Reprint edition (New York: Ballantine Books, 1986), 262.
[12] By "land ethic" I do not mean the whole of Leopold's ethics, which is more complex, but his statement of it quoted here (which he also calls the "land ethic").

to be constrained by its landscape and technology such that its behavior conforms to the land ethic far more than group of wealthy Manhattanites committed to deep ecology. A politically realist investigation into the sources of bad outcomes, if we begin with a consequentialist position like the land ethic, would focus on what aspects of human beings and human societies shape outcomes, independent of attitude, intention, or principle of choice (though these *may* turn out to be decisive). It would look at what went *right* with the Indigenous people and *wrong* with the Manhattanites (and find something other than moral stances as the decisive factor, such as technology or affluence).

If, on the other hand, we start with something like Paul Taylor's environmental ethical theory in his book *Respect for Nature,*[13] our investigation into our environmental agency would take a very different shape. Taylor's ethic is Kantian and deontological, focusing on duties that are required by the adoption of an attitude of respect for nature. He aims to extend an ethic of respect for persons outward to consider elements of nature as moral subjects (even while restricting moral agency to human beings). If we start with Taylor's position, our investigation into the drivers of environmental outcomes would primarily involve looking at the origins of wrong attitudes and principles which guide our actions. Looking for the source of environmental misbehavior within an ethical framework like Taylor's would look very different from what would proceed from Leopold's consequentialism. Returning to the previous example, a Taylor-inspired approach would lead us to try to discover what made things go *right* with the Manhattanite deep ecologists and *wrong* with the Indigenous group that fails to respect nature, the opposite of the previous case. We would be after, not the aspects of agency that lead to bad outcomes, but those that lead to a lack of respect for nature, whatever the consequences.

[13] Paul W. Taylor, *Respect for Nature: A Theory of Environmental Ethics* (Princeton, N.J: Princeton University Press, 1986).

One way to ground a deontological environmental ethics (like Taylor's) would be to employ a rational deduction. In such a case, the attitude of respect for nature would be a categorical imperative. If a few humans were transplanted to an alternative earth a million times larger, one on which there was no immediate danger of depleting its resources or overwhelming its capacity to absorb pollution, the attitude of respect for nature would be just as binding there as it is here. This moral stance is consequence-independent. Other approaches are as well: we could ground an ethical requirement for environmental concern on divine command, natural law, or any other non-consequentialist ethics, without reference to the current crisis. Political realism in these cases would involve attention to why we fail to adopt the required attitude, individually and collectively, not why we produce bad outcomes.

Both the consequentialist and deontological positions are consistent and coherent, though we will see their weaknesses in a moment. What seems completely unfounded, however, is simply to assume that the best way to optimize consequences is by recommending the "right" subjective orientation, because you assume it will work. A consequentialist warrant for a deontological norm confuses categories. Having the right moral stance (such as respect for nature) may be required of us, for the reasons listed in the previous paragraph. Simply assuming that it will lead to good outcomes, and is thus required by a consequentialist moral theory, begs important questions about whether moral stances lead to good outcomes.

The problem with holding together subjective environmental morality and objective environmental outcomes is clear if we take into account the historical perspective of the previous chapter. The history covered there led to the conclusion that serious environmental impact is perennial across time and cultures, at least in terms of trajectory, if not magnitude: the human footprint has always expanded. It also showed that environmental impact emerges from a variety

of factors, many of which are not guided by moral decisions and attitudes. The impact of our species on nature has increased relentlessly over time and emerges from the basic structure of life: the infrastructures we inhabit, the movement of people, the basic metabolism of collective life. If we take this history seriously, but still hold to the idea that bad outcomes primarily come from wrong moral stances, two problems result: we must either restrict significantly the environmental outcomes that we consider bad or vastly expand the range of moral stances we condemn. That is, we have to say much of the destructiveness in deep environmental history is not bad or virtually all moral stances are wrong.

Both approaches lead to problems. If we say, with Taylor, that what matters are stances and that most premodern and non-Western people have the right stances, it follows that, if right stances do not lead to bad outcomes, all of the massive environmental disruption brought about by those people is not bad. It was not bad that ninety-six percent of all large animals went extinct when humans arrived in Australia. It was not bad when, as Krech details in *The Ecological Indian,* the Indians of the American southwest salinized and denuded their fields through over-irrigation. If we prioritize subjective stances and are realistic about the fact that humans who hold what environmentalists consider the right stances degrade their ecosystems, then we have to conclude that all these degradations are not bad.

The other, consequentialist option maintains a strict standard of what sort of impact on nature is permissible and thus must condemn a huge range of moral stances. Here, instead of restricting the scope of outcomes that we consider bad, we expand the range of stances we consider wrong. Thus, to the extent that the first humans to move into the Americas disrupted the biotic community, for example, then to that extent they must have been acting from wrong moral stances. To the extent we find ourselves living within structures that cause even decisions made

according to non-anthropocentric attitudes to have negative outcomes, then those attitudes are wrong. This is like saying that if there is starvation in a village, the people must have had wrong stances toward food. Because all human populations have shown an expansive, disruptive tendency, if we want to say that such tendencies are the result of anthropocentrism, then anthropocentrism must be a general feature of human beings; we have almost no examples of human populations that lived with the right (non-anthropocentric) stance.

The problems with such a strict evaluation of stances are evident when we propose that we can fix our current environmental situation by adopting right attitudes toward nature. Given a realistic view of history, this means recommending the widespread adoption of attitudes that have perhaps *never* marked a significant human population since our origin as a species (because all human populations have had bad environmental outcomes, then their stances were to that extent wrong). Taken far enough, this leads to a position like that put forward by environmentalist writer Kirkpatrick Sale. Sale is an interesting figure because he maintains the idea that our environmental impact derives from attitudes toward nature, while also acknowledging the reality that a disruptive trajectory of impact is as old as *Homo sapiens.* Sale thus puts forward a remarkable proposal for the historical turning point in environmental attitudes: the displacement by modern humans of *Homo erectus.* For Sale, the decisive difference between the environmental behavior of *erectus* (whom he postulates "must have lived in deep, permeating bond with the natural world") and *sapiens* (whom he says have always lived in an "adversarial relationship with other creatures" [14]) is a *cultural* one. It is not cognitive capacity, linguistic flexibility, or any other structural difference that matters, but cultural values. His diagnosis is reflected in his prescription for addressing our problems. He writes

[14] Sale, *After Eden*, 8.

> I propose that there are ways for us today to come to an appreciation of the Erectus consciousness, for something like it lingers on in the various tribal societies on the fringes of civilization, in the core of such religions as Hinduism and Buddhism, even in certain parts of the worldwide environmental movement—and in our still-extant primal selves.[15]

For Sale, *Homo sapiens* have been hostile to nature from our genesis because of our culture and now must change that culture by turning to the Erectus-like thinking of Eastern religions.

Even if we can look past Sale's deeply troubling suggestion that non-Western religions resemble subhuman cultures, we still see the damning confusion that comes when we give priority to outcomes as the basis of evaluation of stances, while taking environmental history seriously. That is, we see the problem that comes when we link all bad outcomes to bad stances, but recognize that *sapiens* has always caused bad outcomes: all human stances, since our origin as a species, have been wrong. For Sale, the search for exemplars of an attitude that makes ecological balance possible takes him *outside the species*.

To review: given the near universal tendency of human populations to overrun ecological constraints and to disrupt and destroy our natural surroundings since our origin as a species, it follows that maintaining the conviction that *right* stances produce *good* environmental outcomes leaves us with two choices. We either posit that there *are* significant examples of groups with correct stances, and therefore much of the disruption of nature is not bad, or, with Sale, conclude that workable examples of right stances are not found in true form within the history of *Homo sapiens* (even if something like it "lingers on" in certain cultures). Since human populations have never lived in balance with their ecosystems, we must either accept that living out of balance is acceptable or conclude we have never had the right stance toward nature (if we maintain the idea that bad environmental outcomes only come from bad stances toward nature).

[15] Sale, 9.

The answer to this problem in the cosmological approach is the same as it was in thinking about food in the village: there are, in fact, reasons why stances and outcomes swing free of one another. We have to reject the idea that environmental *harm* is a result only of environmental *wrongs*. It is obvious that there may not always be enough food to keep everyone alive, even with the right attitudes. Perhaps the pursuit of human goods, morally pursued, leads to environmental disruption, accidentally or even inevitably; it might be the case that our environment cannot support over 7 billion humans without disaster, even if behavior is optimized. Or, it might be the case that attitudes are not the best way to optimize behavior because of factors in human nature (as when people in the village judged their own food needs too generously, even though their attitudes were correct).

There are serious consequences to the elision of the morality of human choices and good and bad outcomes in nature; this is not a minor quibble about an inconsistency in environmental-ethical argumentation. Consider the case in which the village has a food supply that cannot meet the caloric needs of the villagers, even if behavior were optimized, but the strategy to prevent starvation remains moralistic: people repeat the creed that everyone could live if we were more devout and more committed to our ideals of frugality and altruism. As starvation continues to worsen, is it not likely that people would turn to self-hatred, despair, cynicism, or even self-righteous suspicion and fanaticism? It is true that the creed *if everyone sacrifices, then all can live* is inspiring, until it begins to show itself to be false. The tragedy of extreme scarcity is compounded when it is blamed on moral evil. This is, of course, not to say that starvation is never (or even not usually) caused by moral evil. To see the value of the Christian realist contribution, we do not need to reject the idea that evil actions play a role in bad outcomes; we

need to reject the idea that bad outcomes must mean evil actions were the cause. We need a more rigorous and nuanced account the factors that contribute to bad outcomes.

It is also likely that the reduction of environmental degradation to wrong stances and evil seems simply implausible to many people. Recall what happens if we take seriously Lynn White's claim that the marriage of science and technology that was arranged by Christianity, because it was based on a dualistic vision of nature as inert material, is the root of ecological crisis and should be reversed: because this change has led to bad environmental outcomes, it must be wrong. In one stroke, he condemns the whole complex of science, industry, and economics of the last few centuries. This includes all advances in food production, public health, medicine, transportation, commerce, and so on. It dismisses the escape of literally billions of people from crushing poverty, from desperate conditions of low life expectancy, illiteracy, and limited political possibilities, particularly in Asia, Africa, and Latin America. For many people, coming to see the bad ecological effects of modern industrialized society can at most qualify and trouble our sense it was a move in the right direction. Environmental issues are, of course, not the only qualification. Modern advances are ambiguous and unevenly distributed. There have been new forms of war, injustice, and suffering. We can affirm the benefits of modern advancements without dismissing the vast scale of exploitation and evil they also make possible. To say something is not entirely evil is not to say it is entirely good. Not many of us would endorse all of the manifestations of the wedding of science and technology in dualistic worldviews, but neither would we give up the benefits of scientific technology: modern medicine, food, transportation, communication, and so on, that White credits to them. Despite the grave evils, the benefits are so profound that people are justified if they wonder whether, if it were true that Christian axioms produced the whole complex of modern advancements, this

would not constitute a limited historical *confirmation* of those axioms—at least they are justified in not feeling it was a disaster to be utterly undone.

Thus, when environmentalists condemn the roots of all of modern progress as evil, it rings false to many people and prevents them from taking environmentalists' claims seriously. Recall from Chapter One Al Mohler's deep skepticism about climate-change science and environmentalism. The presupposition that Mohler blames for corrupting climate science is environmentalism's anti-human bent. He believes that environmentalism "largely sees human beings ourselves as the problem and the exercise of dominion as the great evil… [It] is very clear in seeing human beings as the problem and denying any kind of divine purpose to the creation, not to mention to the role of human beings within it."[16] And Mohler is right that environmentalism often presents itself as saying all human impact on the environment is wrong. Virtually every modification we make degrades the integrity and stability of the biotic community, since human action proceeds from thinking that is outside of evolutionary and ecological mechanisms. He is not wrong that such beliefs preclude a positive role for human beings. It is hard to blame him for rejecting a way of thinking that takes as its foundation a value judgment that human effects are bad and must have an evil cause. Mohler is wrong to reject environmental *science* on the basis of this presupposition, but he is not wrong to believe environmental*ism* is often framed in a way that leaves little room for positive judgments on human advancements. If all human impact on the environment is bad, and all environmental bad comes from evil, then the human project (which cannot but impact nature, at least to some degree) is to that extent evil.

[16] Mohler, Albert, "The Briefing 06-02-17 - AlbertMohler.Com."

The argument here is that explaining environmental modifications as harms due to evil, when confronted with the fact that virtually all human goods require some modification of the environment, leads to a profound negative judgment on the goals and actions that give human life meaning. This contributes both to despair and cynicism on the part of environmentalists and to a rejection of environmentalism by people for whom human goods are more obvious and basic than ecological ones.

As I have been arguing, the explanation of environmental harm as resulting from something amiss in human morality and values is only necessary if we are bound to the idea that, if humans were not evil, there would be no environmental harm. But, what if environmental harm is a result of tragic scarcity? or the ironic result of good human aims? or the inevitable result of human freedom, which makes seamless immersion in natural harmony a structural impossibility? or the fact we are finite and fallible people? What we need for environmentalism to be tolerable (for the convinced) and choice-worthy (for the unconvinced) is an account of the drivers of environmental impact that includes more than just blaming bad outcomes on evil inputs (while not denying that a significant part of the current crisis might be due to evil).

What follows is a Niebuhrian account of factors in human nature that resist the achievement of an ideal like Leopold's land ethic (a society in which all behavior would promote the integrity, beauty, and stability of the biotic community). Evil has a role, but so do a variety of other factors. The goal is a description of the human condition within its ecosystems that makes better sense of our experiences and which can guide action in the present and inform predictions of the future.

The rest of this chapter is an attempt to account for the factors (especially in human nature) that contribute to bad environmental outcomes—one that begins, not with the

presuppositions of environmental ethics, but with Niebuhrian anthropology (as it is here being reconstructed in environmental context). This account will be successful to the extent it can help us make sense of the history covered in the last chapter, inform responsible action in the present, and guide predictions of future human behavior. This account at times requires revision of Niebuhr's thinking. The hope is that Niebuhrian Christian realism, so revised, will shed light on our environmental situation by drawing our attention to three factors that resist the achievement of our ideals: sin, tragedy, and fallibility and to the ways they combine in the irony of environmental history.

Sin

That human beings are prone to sin: this is obviously a major driver, not just of environmental problems, but of all human destructiveness. Human collective life, despite its incredible capacity to secure and distribute the goods we require, is also marked by selfishness, greed, and violence that threaten those goods. Many evils that afflict people today would be entirely removed, were human beings selfless, moderate, and peaceful. It seems uncontroversial that some significant portion of our environmental destruction would be avoidable, were there no greed and selfishness. A critical question for environmental ethics is the size of the remainder: what portion of environmental destructiveness is due to factors other than sin? This question is important because it helps us frame the ideal possibility for an environmentally-adjusted society, which is vital to any accounting of how and why we deviate from it. But, for us to see a remainder, at all, requires a nuanced account of environmental agency in which not all human pursuits, which lead to harm to others, are necessarily sins. If we have a flat understanding of sin, in which all efforts at self-realization are seen as sinful (because self-regarding), then we end up in the situation of condemning all human striving that leads to environmental disruption as sin.

We need a way of thinking about sin that is subtler than this, one that can differentiate between evil and benign human pursuits.

Niebuhr might seem, at first, to be a particularly unlikely choice as a source of a nuanced account of sin. There is a prevalent reading of Niebuhr on sin—that he explains sin as the fruit of pride and selfishness—that will not work for our current purposes and which will obscure the current argument if not addressed. The classic statement of this reading of Niebuhr is Valerie Saiving Goldstein's 1960 article "The Human Situation: A Feminine View."[17] And, I should say, its interpretation is a justified one; Niebuhr is often monistic in his descriptions of the psychology of sin. However, if we can reconstruct a more adequate account of sin in answer to this criticism, we can secure the sort of theoretical frame needed to analyze our environmental situation more helpfully. Thus, it will be helpful to begin our reconstruction of Niebuhr's position by addressing this reception of it directly, so that the more sufficient account of sin can emerge by contrast.

Saiving's article made the case that theology as written by men, particularly in its treatment of sin, took the male experience to be normative and failed to address the female experience. Niebuhr in particular was singled out[18] as representative of male theologians' tendency to "describe man's predicament as rising from his separateness and the anxiety occasioned by it and to identify sin with self-assertion and love with selflessness."[19] Her argument, briefly, is that pride and self-assertion are the characteristic sins of men, not women. Saiving believes that freedom and separateness, and their attendant anxiety, which Niebuhr sees

[17] Valerie Saiving Goldstein, "The Human Situation: A Feminine View," *The Journal of Religion* 40, no. 2 (1960): 100–112. I chose this particular articulation of the criticism of Niebuhr because of its clarity, fame, and wide initial influence. I do not mean to claim it represents anything like the full range of feminist (and other liberationist) criticisms of Niebuhr.
[18] The other culprit Saiving mentions is Anders Nygren.
[19] Goldstein, "The Human Situation," 100.

at the root of sin, are not common to women's experiences. According to her, women are free from the cultural pressure of accomplishing their gender identity, which is seen by society as occurring naturally. Boys have to accomplish their difference from the other sex. She writes, "on the whole, the process of self-differentiation plays a stronger and more anxiety-provoking role in the boy's maturation than is normally the case for the girl. Growing up is not merely a natural process of bodily maturation; it is, instead, a challenge which he must meet, a proof he must furnish by means of performance, achievement, and activity directed toward the external world."[20] Men are thus led, via cultural constructions of masculinity, toward characteristic sins of anxiety-driven self-assertion and pride and must pursue their opposite: selfless love.

Women, on the other hand, face a different set of cultural pressures, centered around child-rearing and domesticity, and thus experience different temptations. Saiving believes selfless love is easily known by many women *as* women, in the bonds of motherhood. This facility with selflessness does not mean, however, that women are free from sin, as would seem to follow from the account of sin dominant in theology. According to Saiving, there are "feminine forms of sin" which,

> have a quality which can never be encompassed by such terms as "pride" and "will-to-power." They are better suggested by such items as triviality, distractibility, and diffuseness; lack of an organizing center or focus; dependence on others for one's own self- definition; tolerance at the expense of standards of excellence; inability to respect the boundaries of privacy; sentimentality, gossipy sociability, and mistrust of reason—in short, underdevelopment or negation of the self.[21]

Since, for Saiving, women are already susceptible to the sin of self-negation, if they embrace Christian theology's dominant conception of sin as self-assertion and seeks to compensate for it, they are in fact pushed further into their characteristic sins. Thus, the male focus of theology both

[20] Goldstein, 104.
[21] Goldstein, 109.

fails to account for the problem of sin as experienced by women and furnishes an account of sin that multiplies their characteristic pressures and temptations.

If we read Niebuhr through this critique and the tradition of criticism it helped spawn, then my proposal—that a Christian realist account of sin is helpful for making sense of our environmental experience—is in serious trouble. For one, many readers will approach the argument, convinced that Niebuhr's account of sin is impoverished, if not misogynistic. For another, readers may bring to this dissertation a simplistic notion of sin that is inadequate to the task of a Christian realist environmental ethics. What is required, as I said above, is a reconstruction of the Niebuhrian position on sin that can both mollify readers' concerns and be more adequate for making sense of our environmental agency.

Let me say, first, that Saiving and those who have developed this line of criticism after her are not wrong that Niebuhr's discussions of sin take no account of gender (or race, class, sexuality, etc.). He talks about the condition of "man" that leads to sin in a generic, universal way, and treats the psychology of sin as if it is common to all. Because Niebuhr was remarkable in his time for his attention to dynamics of power in society and the way they warp our perspectives and was well aware of how particular social location shapes experience, it is disappointing that such insight does not carry over when he talks about the roots of human sin.

It is also true that Niebuhr is often guilty, not just of ignoring the different experiences of different groups, but of a reductionist account of the roots of sin per se. He writes in the second volume of *The Nature and Destiny*, for example, that, "the evil in the human situation arises…from the fact that men seek to deny or to escape prematurely from the uncertainties of history and to claim a freedom, a transcendence and an eternal and universal perspective which is

not possible for finite creatures."[22] While there is a long history (dating at least to Augustine) of Christian theologians claiming that there is one basic shape to all sin (say pride), it is hard to see how Niebuhr's description here can possibly do justice to the breadth and variety of human sinning. While monistic accounts of original sin (e.g., sin is *really* just self-love) may have a valuable explanatory role at some level, they are open to Saiving's criticism and insufficiently nuanced to illuminate the drivers of human choices in history. A more nuanced account of human motivation is necessary.

Fortunately, there are resources in Niebuhr's own work that make possible an account of sin that is more adequate for a Christian realist environmental ethics. Niebuhr gives us a much fuller account of the roots of evil in his 1944 book, *The Children of Light and the Children of Darkness*. Niebuhr argues here that the many of the attitudes of liberal democratic culture (the "children of light") are based on erroneous, simplistic estimates of human nature. Specifically, he believes much of that culture's optimism comes from the belief that humans are simple machines, whose egoism is reducible to the survival impulse. Niebuhr counters that this misses a significant distinction between the animal and human world, namely, that animal impulses are "spiritualized" upon incorporation into the human psyche. He writes:

> There is, of course, always a natural survival impulse at the core of all human ambition. But this survival impulse cannot be neatly disentangled from two forms of its spiritualization. The one form is the desire to fulfill the potentialities of life and not merely to maintain its existence. Man is the kind of animal who cannot merely live. If he lives at all he is bound to seek the realization of his true nature; and to his true nature belongs his fulfillment in the lives of others. The will to live is thus transmuted into the will to self-realization; and self-realization involves self-giving in relation to others. When this desire for self-realization is fully explored it becomes apparent that it is subject to the paradox that the highest form of self-realization is the consequence of self-giving.[23]

[22] Niebuhr, *The Nature and Destiny*, 1996, 2:2.
[23] Niebuhr, *The Children of Light and the Children of Darkness*, 19.

Here we see that the first spiritualization of the will-to-live is what Niebuhr calls later the "will-to-live-truly," the will to realize our true nature. Thus, a basic human drive, according to Niebuhr, is a will toward self-realization. It is not sin. It is, in fact, the basis of altruism and self-giving, when understood as the highest form the self can realize.

Now, one way to interpret this passage is as a confirmation of Saiving's claim that Niebuhr over-emphasizes selfishness and thus the need to be self-giving as a corrective. It is true that he here calls self-giving the height of self-realization. But interpreting Niebuhr as only recommending self-giving misses the fact that he assumes the need for the prior step of self-realization. Self-giving is the height of self-realization, but only as an achievement of the realized self. He is not here lauding the self-giving demanded of women raised in a culture that requires their self-abnegation. It is fair to conclude that Niebuhr's description of self-giving requires that it be the fruit of the realized self and that a failure to realize the self is its own form of sin. Saiving says that the characteristic female sin is the "underdevelopment or negation of the self."[24] Niebuhr's account of self-giving here seems rather the opposite of underdevelopment or self-negation. His account of sin (at least in *The Children of Light*) does not push self-negating women into further negation; rather, it implies that the journey to virtuous self-giving must first travel the path of self-realization.

The implication of Niebuhr's position is that it is not wrong to aim to develop the self (and, as will be important to our argument soon, the effects of that effort are not the effects of sin). We have an innate, created drive to do more than merely live. We are driven to seek fulfillment, to realize our potentialities, to develop who we are. This fulfillment is found in others as well: we have a drive to be who we are truly by forming friendships, families, and

[24] Goldstein, "The Human Situation," 109.

communities. Recall that, for Niebuhr, human beings are creators as well as creatures; the true human self is a creative self. Developing the self is not a disembodied, meditative quest. Developing the self means exercising our natural drives to create, to innovate, to remake the world around us into new forms, to cooperate to produce art, to build, to expand, to improve.[25]

Niebuhr writes in many places that we are driven to give significance to our lives by seeing them as part of a more final meaning. We might say, combining different ideas from Niebuhr, that a will-to-live-truly includes a will-to-live-meaningfully. He writes in *Faith and History* that "individuals and nations seek a deeper or higher dimension of meaning than the mere record of their continuance in time. They require some structure of meaning which will give various events a place in a comprehensive story."[26] We have what we might call an innate drive for meaning, a need to see what we do as a significant part of a story that extends beyond us.

Unfortunately, Niebuhr does not often describe human drives with the depth, richness, and naturalism his framework allows. In the passage from the *Children of Light*, above, he jumps over the will-to-survive as natural, but then jumps to its spiritualizations. This would be an opportunity for him to talk about levels of goods necessary for human flourishing. An environmental reconstruction can here make one of the amendments proposed in Chapter Two and include natural and material goods: healthy food, clean water and air, a stable climate, and so on. The inclusion of natural goods is critical if Christian realism is going to help us make sense

[25] Unfortunately, Niebuhr does not often enumerate lists like this in rich enough detail. He says, as we have seen, that we realize the self in community. He says we are free and creators of history. He talks about the need for meaning. But, he does not often weave them together into descriptions of the human experience that are as appealing and well-rounded as his corpus would allow. Perhaps this is because his focus is often political, so our drives for self-expression, friendship, art, and so on are not as salient. They seem to be implied by his thought, however, at least in my reading.

[26] Niebuhr, *Faith and History*, 23.

of the issues of the first half of this chapter, from the villagers caloric needs relative to their landscape to the connection of moral subjectivity to environmental outcomes.

In terms of higher levels of goods, he says, as we have seen, that we realize the self in community. He says we are free creators of history. He talks about the need for meaning. That said, he does not often weave them together into descriptions of the human experience that are as appealing and well-rounded as his corpus would allow. Perhaps this is because his focus is often political, so our drives for self-expression, friendship, art, and so on do not seem as relevant. They seem to be implied by his thought, however, at least in my reading. In the passage from *Faith and* History in the previous paragraph, he talks about our need for meaning, to make sense of the events of history beyond just survival across time. We do need meaning, but not just to make sense of our history and the fate of the nations that we inhabit. He could say something about art, literature, family lore, work, and other ways we give meaning to ourselves and our actions.

Adding these in, we can reconstruct from Niebuhr's work a picture of human beings in which multiple levels of goods are required for flourishing and in which we have an essential drive to integrate them into a whole, placed within a comprehensive story that gives them significance and meaning. That we have a will to live means that we require goods of the body necessary for survival. That we have a will-to-live-truly means we require goods necessary to realize the full self. We require opportunities for development, for creativity, expression, work, family, and community. Finally, we require a story with which we can make these parts imaginatively into a coherent, meaningful whole.

If all of those drives are integral to being a human self, then depriving subgroups, such as women or racial and ethnic minorities, of the possibility of expressing them is not gifting them a

head start toward the virtue of selflessness, but rather challenging their possibility of becoming selves that can be given. This is violent. This violence is especially pernicious when it denies groups a story in which they can find significance, a story in which their lives and work and relationships matter and have meaning.

According to Christian realism, so reconstructed, it is harmful and violent to deny people the possibility of living truly because the will-to-live-truly is not evil, not something which we are better off without. It is part of the created nature of human beings, not a result of sin. The desire to be a fully-realized self is not egoism, self-preference, or selfishness. It is the drive to live a life that is worth living, understood as worth living in relation to a realm of meaning that justifies its worthiness. It is a necessary requirement of all the goods of human society, finally including all the goods of love and self-giving.

The will-to-live-truly, however, is only the first of the two "spiritualized forms" the animal will-to-live takes upon incorporation into the human person. The other is the will-to-power. The will to realize the self is closely related to the drive to be recognized as such. Niebuhr believes that we develop a drive for "prestige and social-approval" and this bleeds into a will-to-power. He writes of humans, "having the intelligence to anticipate the perils in which he stands in nature and history, he invariably seeks to gain security against these perils by enhancing his power, individually and collectively."[27] This has profound significance for the possibilities of social harmony, the aim of the moral life. If we possessed only a survival impulse, perhaps even a will-to-live-truly, we could imagine a society in which the proper adjustment of interests and incentives might lead to frictionless coexistence and shared satisfaction of our drives. Power and prestige, however, cannot be achieved by everyone at once.

[27] Niebuhr, *The Children of Light and the Children of Darkness*, 20.

Niebuhr claims that "the very possession of power and prestige always involves some encroachment upon the prestige and power of others."[28] Prestige and power are relative measures. I only win security against your threat to my possibility of living truly by acquiring power *relative to you.* Rather than conflicts between wills-to-survive, human conflicts "are conflicts in which each man or group seeks to guard its power and prestige against the peril of competing expressions of power and pride" meaning that human conflict "is by its very nature more stubborn and difficult than the mere competition between various survival impulses in nature."[29] This last phrase is, of course, false, if it means that conflicts in the natural world are never about power and prestige. Conflicts about social status and standing are ubiquitous among many other social animals. However, the larger point that conflicts derived from the will-to-power and prestige are more stubborn and difficult than conflicts about survival is, if anything, confirmed by these nonhuman examples.

In this account, then, the basic division between good and evil is not between selfishness and self-giving. It is rather between the benign drive for self-realization, to acquire and integrate meaningfully a range of human goods, and a drive to secure that realization via the acquisition of power and prestige relative to other individuals and groups. This is a much more profound analysis of the roots of social conflict than one that pits self-interest (understood as wrong) against a concern for the interests of others (understood as good). The interpretive power of the Christian realist position is evident when we look at the shape of social conflict. If the development of the self is bad, then any self-assertion that contributes to conflict is indefensible. If the development of the self is essential to being human, then self-assertion is a defensible justification for destructive conflict.

[28] Niebuhr, 20.
[29] Niebuhr, 20.

To be clear, for Niebuhr, it is not the will-to-live-truly that leads to conflict. It is possible that humans could live truly in concert with one another. It is, in fact, necessary to live and find meaning in community in order to live truly. It is the will-to-power that begets conflict. The position begins to show its value with the insight that we rarely recognize in ourselves the difference between the two. Our drive to be our true selves and our drive for recognition and security for ourselves are not easily kept separate in our minds, and we tend to identify our problematic expressions of the latter as benign expressions of the former. Thus, attempts to separate good and evil actions as arising from wholly different parts of the self are doomed to confusion and error. Niebuhr writes,

> The fact that the two impulses, though standing in contradiction to each other, are also mixed and compounded with each other on every level of human life, makes the simple distinctions between good and evil, between selfishness and altruism, with which liberal idealism has tried to estimate moral and political facts, invalid. The fact that the will-to-power inevitably justifies itself in terms of the morally more acceptable will to realize man's true nature means that the egoistic corruption of universal ideals is a much more persistent fact in human conduct than any moralistic creed is inclined to admit.[30]

The widespread recognition that something like the will-to-live-truly is morally acceptable—in fact, is the wellspring of altruism—means that it is possible to justify (to ourselves and others) acts derived from the will-to-power in terms of a will to be a true self. We can justify what is in fact a blameworthy encroachment on the rights of others as a benign development of my true self or—what is a more stubborn source of conflict—as a praiseworthy, even self-giving defense of *others'* ability to be who they are. This is why almost every conflict is justified as a defensive one by both sides. This is why soldiers' deaths in wars, even wars fought for the sake of imperialism, are celebrated as altruistic sacrifices in defense of others.

[30] Niebuhr, 22.

To be clear, it is not the case either that acts resulting from the will-to-power are, in fact, justifiable on these grounds, on the one hand, or that people offering such justifications are necessarily being duplicitous, on the other. The depth of the problem is that there are acts of self-realization that are good (or at least not wrong) and there are acts stemming from the will-to-power that are wrong, and there is no obvious line between them. From which side of the divide an action appears to originate often depends on the perspective of the one judging. This is the root of the "egoistic corruption of universal ideals" Niebuhr refers to in the previous quote. The earnest belief that one is acting, not from the will-to-power, but from the "morally more acceptable will to realize man's true nature," is a far more stubborn and intractable cause of evil in the world than is the conscious transgression of ideals. I am much more likely to cause a conflict acting from the belief that I am defending or asserting my true self than by consciously violating my convictions about the value of peace and the dignity of the other. This is what "moralistic creeds" fail to grasp: moral suasion is an insufficient check on behavior, not just because people will sometimes choose to violate norms, but, more fundamentally, because catastrophic conflict can result even when everyone involved believes he or she is upholding the universal ideal.

For an example of this corruption of ideals, take the case of just war theory: while it is potentially a coherent and helpful way to evaluate the reasons for and conduct of war, Niebuhr's position implies that it will not be an effective way to prevent or restrain war. It should be obvious that moral theories like this are always in danger of being discarded in the face of some overriding value, like the survival of the nation itself. A nation that is otherwise committed to the moral conduct of war might (is perhaps likely to) choose to break that commitment rather than lose the war: this much is clear just from acknowledging the strength of the will to survive.

Niebuhr's position is subtler: it implies that just war theory is unlikely to restrain the conduct of war, not just because it will be abandoned when survival is threatened, but because it will be corrupted by the confusion of motives.[31] Take the criterion that war is only permissible for defensive purposes or to correct serious wrongs. It is unlikely that a country will just shrug off that qualm and embrace imperialist, aggressive justifications for going to war. It is much more likely that a country's leaders will present the need for even preemptive, aggressive war in terms of national security, defending the country's interests, and correcting grave injustices. Even the Nazis understood German expansionism as a correction of the gross injustice of the Treaty of Versailles and as a defense of the fatherland. The problem with using moral ideals to restrain behavior is not so much that people do not feel bound by them strongly enough, but that people can too easily justify their actions in terms of morally more acceptable motives. Rare are conflicts between one group espousing noble ideals and one espousing diabolical ones. Much more common are conflicts between groups, each of which takes itself to be acting according to universal ideals.[32]

One neat way to apply Niebuhr's account of the will-to-live-truly and the will-to-power to our environmental situation would be to blame the will-to-power for environmental degradation. We could say that it is our anxious drive for power and security against nature that leads to ecological overreach and destruction. Perhaps the will-to-live-truly is compatible with ecological balance, but the will-to-power is what lifts us out of nature, alienates us from it, and

[31] By "corrupted," I (and I believe Niebuhr) do not mean that some flaw is introduced into the universal ideals. Rather, it is the *use* of the ideals to justify action that is corrupted. The ideal can remain valid; the corruption consists in the use of the ideal to justify actions that in fact violate it. Thus, one or both sides will claim to be acting in line with the ideal, but be wrong. The example serves as a criticism of the expectation that just war theory will *restrain* conflict, not a criticism of its validity as a way to *evaluate* it. I do not mean to commit myself to any judgment of the theory itself.

[32] For an interesting perspective on this issue in conversation with H. Richard Niebuhr, see Richard Brian Miller, *Interpretations of Conflict: Ethics, Pacifism, and the Just-War Tradition* (Chicago: University of Chicago Press, 1991), 138ff.

drives our current crisis. We could make the Christian realist turn in environmental ethics by noting that environmental problems will be stubborn and intractable because we cannot easily distinguish when we are acting from the will-to-live-truly or the will-to-power. Moralistic approaches will thus be ineffective: actions we believe are due to our will-to-live-truly are immune to moral restraints on the will-to-power because we do not recognize them as such. Purely moral restraints on environmental behavior will be insufficient because we will excuse environmental impact that arises from our will-to-power as permissible expressions of our will-to-live-truly.

While we will see in the following section that such an interpretation is insufficient, it is not entirely unhelpful. The will-to-power and the sins that result are major sources of environmental problems. Greed, materialism, selfishness—these are all drivers of environmental destruction. We choose to drive when we could walk. We buy things we do not need. Corporations work around environmental regulations. We do not care enough about people distant in both time and space. This much is obvious. What Niebuhr's account shows us is that moralistic attempts to address these problems will be insufficient, both because even people convinced of these moral stances will continue to sin and because we will be self-deceived into thinking we are not sinning when we are. We will excuse environmental sins as benign expressions of our will-to-live-truly. Committed environmentalists will sin, consciously, but also unconsciously. In short, sin is responsible for a large part of environmental problems.

Because it sees sin as a human universal, A Christian realist perspective that interprets environmental destruction as a result of sin helps explain why it has marked all of human history. To say environmental destruction comes only from a certain cultural form or set of values requires, as we saw with Sale, that we suppose there is a universal culture or universal values

shared by all *Homo sapiens*, given our history. It seems much more adequate to explain the generality of human environmental impact with reference to something intrinsic to human beings, not to value systems and myths which vary across groups and eras.

Diagnosing environmental destruction as a result of sin also allows for prophetic critique. Just because sin is a human universal does not mean that particular sins cannot be identified, denounced, acknowledged, confessed, and repented. In the Christian realist view, we are equally sinful, but unequally guilty.[33] The concept of sin helps makes sense of a history in which environmental destruction is universal, but certain societies and individuals are guiltier of environmental sins than others. In short, it helps to see at least a major part of environmental problems as coming from the will-to-power.

This neat application of Niebuhr's thought is an appealing path to take. However, the unique character of environmental problems makes such an interpretation inadequate. Here we begin to see in earnest the difference which including natural goods and nonhuman nature makes to Niebuhr's ethics. I suggested above that Niebuhr's depiction of sin permits us to imagine that a society with only the will-to-live-truly could avoid social conflict, because what it requires is in abundance. The will-to-power is what makes conflict inevitable because security against the encroachment of others, guaranteed by advantages in power and prestige, is a zero-sum game. For Niebuhr, the frictionless society is thus an ideal possibility, were we to overcome the corruption of the will-to-live-truly by the will-to-power. However, it is not obvious that, when we turn to environmental issues, this ideal can remain in place. If we are realistic about ecological limits, it might turn out that what is required by the will-to-live-truly may not be in

[33] See, for example, Niebuhr, *The Nature and Destiny*, 1996, 1:233ff.

abundant—or even adequate—supply. Our environmental situation requires a fuller account of the drivers of environmental harm.

Tragedy

To explain environmental destruction only as a product of the will-to-power keeps in place the assumption that a lack of evil in human actions means that we are not harming the environment. As I suggested with the hypothetical village, this assumption is unfounded. Imagine, for a moment, that our village was marked only by the will-to-live-truly, with no corruption by the will-to-power. This village might avoid social conflict, but there is no reason to think it will avoid famine (even if the lack of social conflict prepares it well to deal with famine when it comes). The inclusion of extra-human material considerations should remove any assurance that a lack of sin guarantees that bad outcomes will be avoided. The absence of moral evil obviously does not remove the threat of natural evil (unless we want to say something like famines only affect bad people).

The critical point for environmental ethics, however, is not just that a society moved only by an uncorrupted will-to-live-truly might still be a victim of a famine, fire, or flood; the critical point is that such a society is not immune from self-inflicted environmental disaster. In fact, it is likely *inevitable* that a society governed by the will-to-live-truly will run up against anthropogenic environmental problems. What this means is that environmental problems raise the specter of tragedy in the human condition in a new way. Environmental awareness means we have to amend an aspect of Christian realism's account of human creativity, specifically the belief that it is not inherently destructive. Niebuhr thinks the human condition is not tragic: this needs revision.

According to Niebuhr, writing in *The Irony of American History*, the "Christian view" is not tragic, because, "according to this faith man's freedom does not require his heroic and tragic defiance of the forces of nature. He is not necessarily involved in tragedy in his effort to be truly human."[34] Niebuhr distinguishes the Christian view, in which "it is not invariably necessary to do evil in order that we may do good"[35] from the worldview of Greek tragedy, according to which "man becomes involved in evil by breaking the harmonies of nature and exceeding its ends."[36] Whereas the Greek tragic view of humanity condemns our Promethean impulses, with the Christian faith, "Man is…not involved in guilt merely by asserting his creative capacities."[37] In Niebuhr's interpretation of the Christian view, human creativity does not invariably lead to destructiveness or guilt.

Niebuhr's belief that the Christian view is not finally or predominantly tragic lends support to the interpretation that expressions of the will-to-live-truly need not involve environmental destruction (problems begin with corruption by the will-to-power).[38] His treatment of tragedy in *Irony of American History* is in this way in concert with his interpretation of the two spiritualizations of the will-to-live in *Children of Light*. However, as he lays out in *Irony* the way the Christian view is able to avoid the conclusion that our condition is tragic, we begin to see the need for an environmental reconstruction. The Christian belief that life is not tragic is built on environmentally-dubious assumptions. He writes:

> [T]he Christian faith is surely right in not regarding the tragic as the final element in human existence. The tragic motif is, at any rate, subordinated to the ironic one because evil and destructiveness are not regarded as the inevitable consequence of the exercise of human creativity. There is always the ideal possibility that man will break and transcend the simple harmonies of nature, and yet not be destructive. For the destructiveness in

[34] Niebuhr, *The Irony of American History*, 155.
[35] Niebuhr, 157.
[36] Niebuhr, 156.
[37] Niebuhr, 156.
[38] of course, he does not deny the reality of particular tragic dilemmas

> human life is primarily the consequence of exceeding, not the bounds of nature, but much more ultimate limits. The God of the Bible is, like Zeus, 'jealous.' But his jealousy is aroused not by the achievements of culture and civilization. Man's dominion over nature is declared to be a rightful one…It is clear that the great evils of history are caused by human pretensions which are not inherent in the gift of freedom. They are a corruption of that gift.[39]

Here, Niebuhr again writes in a way that lends support to the interpretation that environmental evil must be from the will-to-power: the main part of the "destructiveness in human life" is not due to something "inherent in the gift of freedom," but in its "corruption." However, he does so in a way that should trouble an environmentalist reading.

Most obviously, this interpretation (that environmental destructiveness comes only from the will-to-power) falls apart as soon as we give moral significance to the destruction of nature.[40] This passage makes clear that, for Niebuhr, human creativity can avoid guilt and destructiveness, only because he does not count the breaking of "simple harmonies of nature" as destructive or a source of guilt: the "ideal possibility" is that we can break the harmonies of nature without destruction. But, breaking the harmonies of nature is just what environmentalism finds problematic. His claims only make sense with a positive judgment on "man's dominion over nature" such that destroying natural harmonies need not trouble us. Niebuhr avoids the conclusion that human existence is tragic—that is, he believes that our creative "efforts to be truly human" need not involve us in guilt—because he thinks we can exercise our creativity and freedom (which he suggests necessarily involves breaking natural forms) without guilt. Put differently, Niebuhr assumes that destruction of nature is inherent in human expressions of freedom and creativity,[41] but also assumes that such destruction is not a significant moral concern. The destruction that does matter is a result of the sin that comes with the corruption of

[39] Niebuhr, *The Irony of American History*, 158.
[40] Even purely anthropocentric significance.
[41] And the terms are closely linked, as we saw in chapter two.

freedom, because these expressions of the will-to-power are the source of intra-human conflict and social disharmony. As long as what matters to us is the human sphere and our dominion over nature is a "rightful one," such that it is acceptable to "break and transcend the simple harmonies of nature," then we can reject the tragic vision of humankind (and maintain the belief that the sinful will-to-power is the only wellspring of the destruction we really care about). In short, human freedom entails disruption to natural harmonies, but guilt is not inherent in human freedom because we do not incur guilt with such disruptions.

Niebuhr's position here is an example of the sort of theology Lynn White and other advocates of the cosmological approach worry about. He assumes that, yes, human creativity is destructive of nature, but destruction of natural forms is not morally relevant because of the mandate of dominion. Environmentalist critics have sustained a consistent (and I would say persuasive[42]) attack on the latter point, showing that natural destruction is morally significant. But, they have left the former point largely in place. That is, it is now clear (or should be) that our transformation of the natural order is not a simple, divinely-sanctioned good; it is clearly an ambiguous development that has brought harms with its goods. This much environmentalism has accomplished. However, it has not been shown that the development of the creative capacity of human beings is possible without such transformation. When environmentalists show that our development and use of the natural world involves us in guilt, this in no way proves that such

[42] I realize it might seem surprising to some readers that I am now agreeing with White and others that nature has value. To be clear: if natural forms had no value, then there would be no reason to bother with environmental ethics, including Christian realist versions. My criticism of the cosmological approach is not because it says we should value nature and natural forms; the criticism is of its diagnosis of the roots and remedies of the crisis in the presence or absence of non-anthropocentric versions of such values. Environmental awareness just is awareness of the value of natural forms. It is a form of environmental awareness to realize that the integrity of a watershed is necessary for the flourishing of its fisheries and thus has monetary value. No intrinsic or non-anthropocentric values are necessary. This is very different from diagnosing watershed degradation as ultimately resulting from bad values and prescribing better ones as the cure. Thinking nature has value is not the same as thinking values will save nature. The former is obvious to any observer of good will; the latter is the mistake I criticize.

guilt was an avoidable error due to sin. The environmentalist insight shows us that human beings being fruitful and multiplying, filling the earth and subduing it, makes us guilty of damaging natural and human goods. However, such an insight only implies that such guilt is avoidable if it is also the case that the world is equipped to provide a perpetually sufficient store of human goods, were our drives to remain uncorrupted. Environmental awareness teaches us that exceeding the bounds of nature is necessarily destructive in ways that involve us in guilt, but it does not prove that the exercise of even uncorrupted freedom can proceed neatly within those bounds. Showing something to be bad does not, in a tragic view, show it to be avoidable.[43]

One could object, of course, not just to Niebuhr's contention that breaking natural forms is acceptable, but also to the idea that human creativity requires breaking natural forms. In one sense, such an objection is just obviously true. Writing poetry and composing music are creative acts, which do not require breaking natural forms in a way that involves us in guilt. This is because the guilt comes not with creativity per se, but in the required application of our freedom and creative imaginative capacity to the effort of securing goods that are integral to human flourishing. We are creatures of need at a variety of levels. We face natural barriers to meeting those needs. Human beings do not encounter the natural world as an abundant storehouse of readily-usable goods. We confront a world that is indifferent and often hostile to our needs. This is why we are bound to the nonoptional task of overcoming barriers to our flourishing and rendering the world more hospitable and amenable. Overcoming natural barriers requires breaking and remaking forms, such as forming natural materials into new weapons for hunting, clearing land for agriculture, or inventing new means of refrigeration and transport. The extent of our creative capacity means we succeed well enough to flourish, which causes our needs to

[43] In the tragic view "ought not" does not imply "can avoid."

expand, leading us to run up against new limits to be overcome (e.g., we develop new hunting strategies and get so proficient at feeding ourselves that our population expands and game animals become scarce, demanding the development of new feeding strategies). We have had to disperse to new territory and intensify our use of land and resources. Having both needs and the capacity to meet those needs, the creative freedom in our essential structure makes environmental destructiveness unavoidable. Our creative freedom is the difference between *Homo sapiens* remaining one land ape among others in southeastern Africa and it becoming a species capable of destroying global ecological systems. Since natural forms are not immediately amenable to human flourishing and we cannot abdicate our responsibility for the creative pursuit of that flourishing, the breaking of natural forms is an unavoidable fact of life.

One could conclude that Niebuhr's insistence, despite the inevitability of breaking natural forms, that the Christian view is not tragic means Christian realism is a bad candidate for guiding Christian environmental ethics. However, this seems more like a case of Niebuhr simply failing to develop the implications of his own thinking in environmentalist terms. We can find the possibility of an environmentalist revision of his thought if we look at the way he was critical of modes of social and political thought that took lightly the intractability of social conflict. He criticizes the Catholic position because it overestimates the Church's capacity to harmonize competing interests in society. He thinks, as we have seen, that such moralistic approaches do not take seriously enough the corruption of universal ideals by the will-to-power. What he does not note is the way such sanguine visions of society also rest on cornucopian visions of inexhaustible natural abundance.

We can expand Niebuhr's critique along those lines if we note the way such sanguine visions rest on theories of natural abundance. For one example of such optimism about the

natural world, we can see that in the encyclical *Rerum Novarum*, Pope Leo XIII asserts that class competition is not intractable because everyone's needs can be met by natural abundance. He writes,

> Man's needs do not die out, but recur; satisfied today, they demand new supplies tomorrow. Nature, therefore, owes to man a storehouse that shall never fail, the daily supply of his daily wants. And this he finds in the inexhaustible fertility of the earth… For that which is required for the preservation of man's life and for life's well-being, is produced in great abundance by the earth.[44]

Niebuhr disagrees with such positions, just not on the grounds of ecosystem limits. Rather, he thinks a harmonization of social interests is impossible because self-deception means we will always mistake wants for needs in a way that makes our perceived interests indeterminate and expansive (thus the problem is self-deception and the will-to-power, not tragedy). He would disagree with Leo's contention that our needs simply "recur." Our needs are indeterminate because we corrupt our perception of them with our will-to-power. Niebuhr grants that "the satisfaction of primary needs, particularly if it is achieved with a fair degree of equity, may ease social friction" but argues that "there is no basis for…hope that an 'economy of abundance' will guarantee social peace." However, his reason for skepticism about abundance is not because the earth is limited, but because "men will fight as desperately for 'power and glory' as for bread."[45] It is the will-to-power, not the will-to-live-truly, that drives social conflict. But what if bread becomes scarce because of drought and famine due to climate change? With an environmentalist recognition of the limits of nature, we can suggest that an ever-expanding human race stands in tragic relation to the finitude of earth's resources.

I should note that Niebuhr does recognize that our conquest of nature imperils us, but he does not have environmental concerns in mind. For example, in *Children of Light,* he writes,

---

[44] LEO XIII, "Rerum Novarum," in *Seven Great Encyclicals* (Glen Rock, NJ: Paulist Press, n.d.), 4.
[45] Niebuhr, *The Children of Light and the Children of Darkness*, 63.

"The conquest of nature, in which the bourgeois mind trusted so much, enriches life but also imperils it."[46] This sounds like environmentalism, but it is clear from context that by "conquest of nature" he has in mind the growth in our technological power to manipulate materials, not the expansion and intensification of our use of land and resources, deforestation, and the like. The perils he has in mind are things like the grinding inhumanity of industrialization and the invention of weapons of mass destruction. In *Faith and History,* he worries about a new "technical civilization in which men are in greater peril of each other than in simple communities."[47]

Salient for the current argument is the fact that Niebuhr does worry that such technological development might put tragedy back into play as a plausible interpretation of the human condition. He writes, "Since modern technical achievements include the development of atomic energy and this development has put an almost unmanageable destructiveness into the hands of men, [the] purely tragic view of human freedom seems to have acquired new plausibility."[48] For Niebuhr, the advent of nuclear weapons plunged us into a situation in which the United States either had to build a nuclear arsenal capable of destroying life on earth or place ourselves at the mercy of totalitarian states willing to do so. Our situation became plausibly tragic, both because it now seemed that the development of human creativity was making new levels of destructiveness inevitable and because we were in a situation in which acting and refraining from acting would both involve us in guilt.[49] In any case, Niebuhr's position seems

[46] Niebuhr, 132.
[47] Niebuhr, *Faith and History*, 78.
[48] Niebuhr, *The Irony of American History*, 157.
[49] The inevitability of destructiveness is more neatly 'tragic,' while the guilt involved in both building or not building nuclear weapons might be better described as a 'moral bind.'

open to the possibility that the non-tragic view of the Christian faith might need to be amended in light of negative consequences redounding from our conquest of nature.

It seems clear that the threat of environmental collapse also gives new plausibility to the tragic view. To return to our hypothetical villages, the Christian view expounded by Niebuhr and much of traditional Christian theology is that the world is like a village in which there is enough food to feed everyone: if we avoid greed, selfishness, and violence, then everyone lives. The source of social conflict is the will-to-power and sin. Each individual acting from the will-to-live-truly can do so without guilt, because it does not necessarily encroach on others. Environmentalist thinking can alter this view in two ways: first, if it argues for non-anthropocentric value structures, then the villagers are guilty of the changes made to the landscape that are unavoidably necessary to feed the village: guilty of displacing other creatures, destroying habitat, clearing land, and disrupting watersheds. The village feeding itself takes actions that, if carried out consistently by a global human population, lead to mass extinctions and biodiversity loss, groundwater depletion, downstream pollution, and so on. Second, even if we do not introduce non-anthropocentric values, an environmentally-informed ethics shows us how such actions, when carried out extensively enough, harm our human neighbors and threaten the human future. In much of traditional theological thinking, focused on intra-human ethics, life is not tragic because we can develop and realize ourselves creatively without harming others. Environmentalism reintroduces tragedy by showing how such benign or good efforts toward self-realization make us guilty of harm. If there is plenty of food in a village, I can avoid guilt when feeding my family, so long as we do not hoard food at the expense of others. If a village has too little food, then feeding our families without sinful overreach can nevertheless contribute to the starvation of others. The will-to-live-truly, the obligation for self-realization, the effort to be truly

human: these lead invariably to guilt in a tragic context. We can find ourselves in such contexts as we try to forge a life in a biosphere that is not stocked with limitless abundance, but is hostile and indifferent to our needs. This is especially the case because our creative attempts to overcome the barriers to our flourishing and render the world less hostile to our needs can lead unavoidably to the opposite effect (as when we degrade systems required for our flourishing).

The use of 'tragedy' as an interpretive frame can help us reckon with the intractability of our environmental problems. We saw in the previous section that moralistic approaches are insufficient because of sin and self-deception. We can see now that, even if sin and self-deception were removed in an ideal society, some disruption of natural systems would remain (since it is the case that the creative pursuit of human goods inherently means the breaking of natural forms). Corruptions of freedom cause destruction, but so does the exercise of uncorrupted freedom. To be sure, sin matters; our impact on the earth has always been greater than necessary because of anxiety, greed, selfishness, social conflict, and war. That said, if no human being had ever sinned, our creative efforts at self-realization would still have displaced and destroyed natural harmonies. We can imagine that, if anything, without war and violence there would be more of us living more affluently and we know population-growth and affluence are major drivers of environmental impact. Complicating matters more, there is no way to know how much of our disruption of nature is sin and how much is tragic. Because of self-deception, there is no way to draw any clear line between environmental destruction due to the will-to-power and that due to the will-to-live-truly.

Fallibility

The last of our three anthropological drivers of environmental destruction is fallibility. We have seen that some major part of our environmental destructiveness is due to sin and

another significant portion due to the tragic consequences of the self-realization of the species. This is, of course, not an exhaustive account. There are certainly harms we bring about that are neither evil, nor necessary. We are finite. We make mistakes. We employ strategies that backfire. We fail to anticipate negative consequences of our actions.

The use of the chemical Dichlorodiphenyltrichloroethane (DDT) as a pesticide, to pick one famous example, was not a sin, at least not in the sense that it was obviously driven by factors like greed and selfishness. Controlling agricultural pests is an important part of feeding ourselves.[50] The development and improvement of the food supply has been a significant aspect of improving the human condition. It turned out that DDT caused eggshells to thin, threatening several species of wild birds with extinction (most famously the bald eagle). Using DDT was avoidable and led to bad outcomes, but was not obviously sin. It was a mistake. We regularly discover that our inventions or efforts causes unanticipated environmental consequences. We find out that the chemicals used in refrigerators threatened the ozone layer. Hormones in birth control pills make their way into waterways and affect fish. This does not make birth control or refrigeration into sins. We build levies to protect a town from flooding and then realize we are increasing the danger of flooding in other towns downstream. As finite creatures, we cannot anticipate the full impact of our actions, especially in situations of complexity like ecosystems. Some major part of our environmental harm is a result, not of sin or tragedy, but fallibility.

Fallibility is by far the simplest of the three categories to show. Readers (at least human readers) need little convincing that we are a species that makes mistakes. One clarification is perhaps in order, however: while error is inevitable, particular errors are avoidable (just as sin is inevitable, but no particular sin is necessary). Because particular mistakes may be more or less

[50] Pesticides also have major humanitarian value in fighting insect-borne diseases across the globe.

avoidable, they can be more or less blameworthy. Because I am finite and fallible, it is inevitable that I will drop and break dishes over the course of my life. This does not mean that I do not deserve blame for all instances in which this happens. If, for example, I am juggling the plates or carrying too many at once, then dropping them is not an innocent mistake. In these cases, I am guilty of wrongdoing, but the sin is not the dropping of the plates, but the reckless actions that led to it. We are not criminally liable for pure accidents, but we are for any negligence or recklessness that precipitates them. Attitudes and levels of attention and care can have a marked effect on the rate at which mistakes are made.

Because of this last point, it is possible to interpret what might seem like innocent environmental mistakes ("we didn't know DDT was bad!") as symptoms of problems in attitudes and cosmology ("well, if you viewed nature as an interdependent web, you would not have risked spraying dangerous chemicals on farmers' fields!"). The point, however, is that, however much care we do take, no matter how perfect our values and cosmologies, there will remain an ineliminable element of environmental destruction that is due to error. Yes, humans are often reckless. Hubris and greed can lead to negligence and risky behavior. However, we cannot explain away all errors and every failure to anticipate the negative effects of our actions in terms of anthropocentrism or failures to learn from nature. Even if we were to want nothing more than to respect nature and act with the grain of natural systems, it is not clear that we have adequate access to the patterns of nature to do so. It is hubris and arrogance to think we can master nature. We can be culpable for "mistakes" that follow from such attitudes. However, it is also an error to think that we could act in accordance with nature if we had a different value system. Acting humbly can reduce the magnitude of our errors, but it is not clear how any imagination of ourselves in relation to nature could unlock its secrets and remove the danger of errors.

This last point, about the difficulty of separating mistakes from sinful attitudes that exacerbate them, suggests a deeper point: what we do is not usually a product of just one of the three categories above. Consider, again, the example of the American Indians ruining their fields by excess irrigation. Was this sin? Was it a tragic necessity because of population pressure? Was it a mistake due to lack of foreknowledge? While it is possible that knowing all the details would allow us to render a judgment, it is more likely it would not. Their actions could have (and likely did) combine elements of all three. The line between needs and luxuries, between the will-to-live-truly and the will-to-power, between an innocent mistake and reckless overreach: these are all hard (if not impossible) to draw, making self-deception and misdiagnosis a perennial danger. No one of these symbols captures the shape of our environmental history. Taken together, however, they help us to see the irony of environmental history

Irony

If we look at the broadest pattern of human environmental history, we see sin, tragedy, and fallibility at work, but none of these names the pattern itself. To say it is a combination of the three does not reveal the pattern, either. However, if we say the basic structure of environmental history is irony, this can help bring coherence to our imagination of the whole. Before we can see that pattern, we need to be clear what I mean by the term.

It is ironic, in the most general sense, when efforts achieve the opposite of their aims: plans to defeat an enemy that end up strengthening him, endeavors to help others that end up harming them, and so on. Insisting too much that you are honest may make you seem untrustworthy. Being adamant that you are not racist can create suspicion you are. 'Irony' in this simple sense, however, is merely a subgroup of error and tragedy. We try to help, but accidentally hurt, or we try to help in a case where hurting is tragically unavoidable.

Niebuhr uses 'irony' in a narrower sense that is helpful for our current purposes. For Niebuhr, ironic developments must be significant, in the sense that there is some meaning in the way the outcome flows from the input. He writes,

> Contrasts are ironic only if they are not merely absurd, but have a hidden meaning. They must elicit not merely laughter but a knowing smile. The hidden meaning is supplied by the fact that the juxtapositions and contrasts are not merely fortuitous. They are related to each other by some foible of the person who is involved in both. The powerful person who is proved to be weak is involved in an ironic contrast only if his weakness is due to some pretension of strength. If "pride cometh before the fall," the fall is ironic only if pride contributed to it. A wise person may be ignorant in some areas of life, without his ignorance being ironic. It is so only if the ignorance is derived from the pretension to wisdom.[51]

In Niebuhr's use of "irony," which I will adopt here, an effort to help which ends up hurting is only ironic if there is some "foible" in the person involved that contributes to the harm. If villagers try a new farming technique to increase the food supply, but it fails and reduces it instead, this is a mistake, but not necessarily irony in the Niebuhrian sense. Finite creatures make mistakes. It is ironic in his sense only if the new effort is undertaken because of some pretense which contributes to the failure and the failure reveals as a pretense. If the villagers are proud of their farming prowess and this pride leads to recklessness, which contributes to crop failure, which humbles that pride, then this is irony in the sense Niebuhr uses it.[52]

To make the environmental turn, harms to nature are ironic only if there is some virtuous aim, which leads to destruction, *and* there is some pretension or vice in the one acting that is meaningfully related to the harm. For example, if engineers build a levy system to control flooding, but make flooding worse downstream, this may only be a mistake, not irony in

[51] Niebuhr, *The Irony of American History*, 154.
[52] We can see the difference if we think in terms of different forms of story. If a character's fate is inevitable, this is tragedy. It is tragic irony in the general (non-Niebuhrian sense) if the character's efforts to avoid fate contribute to it. It is irony in the narrower sense Niebuhr means, only if some flaw or "foible" on the part of the character influences her efforts in a way that undermines them and reveals the flaw.

Niebuhr's sense. The situation is ironic, however, if this humbling of the engineers' aims is a result of some pretension of pride or wisdom on their part. It is ironic, for example, if the mistakes in the engineering project were due to overconfidence in our ability to master nature.

However, because, as we have seen, effects do not follow in lockstep with human causes, ironic failures are not just the outward manifestation of the inward condition. While the engineers were not sinless, it was not the case that the downstream harms were scaled to the engineers' sins. They were moved by good motives, but tainted by hubris, and the outcomes were beyond their ability to anticipate or control. It is possible that their attitudes and actions were blameworthy, but also the case that they would never have built the system if they knew the results. The engineers sinned, but were not driven by vice commensurate with the harm they caused.

'Irony' helps clarify our environmental situation because it allows us to name that aspect of environmental destruction that is avoidable and unintended, but not entirely innocent. It shows how actions taken for largely good reasons with good aims can lead to bad outcomes, in ways that reveal that the agents involved were not as pure as they judged themselves. However, it does not show that the motives themselves were wrong, only that there was a flaw, sin, or pretense hidden within them. It allows us to make nuanced criticisms that acknowledge virtue mixed with vice.

Describing environmental problems as ironic can have the advantage of coming across in a way people may be more willing to accept. We can see why "irony" is a charge people are more willing to hear if we look at whom Niebuhr thinks can observe the irony of a situation. He writes,

> Ironic contrasts and incongruities, though obvious, are not always observed because irony cannot be directly experienced. The knowledge of it depends upon an observer who is not

> so hostile to the victim of irony as to deny the element of virtue which must constitute a part of the ironic situation; nor yet so sympathetic as to discount the weakness, the vanity and pretension which constitute another element.[53]

Identifying irony requires both sympathy and distance; sympathy to see the good and distance to see the flaws and foibles that undo it. 'Irony' is thus a charge well-suited for immanent critique. The victim of irony hears that her critic understands the good she was pursuing, while still feeling the bite of criticism. If we return to the case of Mohler, we can see how an ironic explanation of environmental destruction avoids his charge that environmentalism sees no positive role for humanity, that it is inherently anti-human. We can say that negative human impact on the earth is an ironic consequence of the flawed pursuit of real human goods.

Irony has this potentially greater persuasive power, not because it flatters sinners, but because it picks up on a truth about human history that seems undeniable: it is not just a story of sin. When authors like Lynn White argue that we need to address Christian axioms because they unleashed scientific technology which led to the crisis, as we have seen, they ask us to accept that such a leap forward must have been wrong in its entirety because it contributed to environmental destruction. If on the other hand, we see ecological destruction as the ironic production of flawed, sinful, and fallible creatures seeking to solve creatively the challenges to their flourishing in a tragic context, we see how such a disaster forms part of the ambiguous, indeterminate unfolding of history. The industrial revolution, like the agricultural one, was the result of a series of choices, each of which could be made for the sake of a permissible or even good aim (making life easier, preventing famine and disease, etc.), but which in total, trapped human beings into a new form of life that was less humane and further alienated from what came naturally to us. However, the fact that choices that could be made from pure motivations can lead

[53] Niebuhr, *The Irony of American History*, 153.

to bad outcomes does not mean that the choices that drove the Industrial Revolution were all innocent. “Irony” allows us to grant the full range of human strengths, weakness, and propensities to people who brought about these changes to society and see the mix of good and bad outcomes that resulted. If this is a more persuasive vision it is because it acknowledges the virtue mixed with vice that caused the problems and does not deny the undeniable goods that accompanied the bad outcomes.

The irony in our environmental lives is perhaps easiest to see if we look, not at specific examples (like levy systems), but the expansion of human impact on nature in general. Humanity has sought, throughout its history, to render an inhospitable world hospitable. We have sought to make ourselves less vulnerable to nature’s caprices by making it less capricious. The growth of technology and the remaking of landscapes has aimed at making our sources of food, water, fuel, and shelter more predictable and stable. It is easy for environmentalist thinkers to write as if this attempt to modify nature for our ends was pure hubris and greed. But is that really the only reason why have we been so intent on mastering nature? Was it hubris and greed for parents to feed their children, for village elders to work of the good of the village? Should humans have chosen starvation over agriculture, violent death over the eradication of predators? Should modern humans have chosen to abstain from advances in medicine, public health, communication, transportation, and all the other ways we have sought to advance the human good? If we see the whole pattern of environmental history as ironic, we can see affirm the good in the motives and the results, while acknowledging the vice and corruption of motives that is revealed by the results.

The irony of our situation is that the shared human effort to render the world more hospitable, stable, and predictable is now threatening to make it inhospitable, erratic, and

unpredictable. The situation is ironic, and not just a case of humanity facing the wages of its sin, because the aim of securing ourselves, our families, and our neighbors against famine, fire, and flood is good. What gives the charge of irony bite is that this is not just an unlucky failure, but an ironic refutation of our pretensions that we can bend nature to our will. We pursued good aims recklessly; we worried too little about the consequences of our actions because of our confidence that we had mastered nature. Seeing the irony of our situation allows us to articulate a role for humanity in the world, to acknowledge the development of the human species as a real good, while still condemning the flawed way we have pursued that good. We do not have to say that, because it led to bad environmental outcomes, the pursuit of human development was evil. It can be good. We can avoid Mohler's charge of having an anti-human agenda, without forfeiting the ability to condemn human overreach. We can say that the humanitarian advances of modernity and the intentions behind them are good, without saying that they are above criticism.

Conclusion

The aim of this chapter has been to articulate a politically realist account of the factors that resist the achievement of our environmental ideals. We began by seeing that the assumption in the cosmological approach that moral stances and environmental outcomes are closely linked is problematic in light of a realistic account of environmental history. Humans of all moral stances have brought about ecological disasters, even though some have been and are certainly worse than others. We saw that insisting that our environmental outcomes derive directly from our moral stances, in the face of such historical evidence, leads to problems, particularly cynicism and despair. It also leads to too severe judgments on the human project, making environmentalism seem anti-human and alienating.

In response, I proposed a multi-layered account of why we disturb the biosphere, drawing on Niebuhr's moral anthropology and focusing on sin, tragedy, and fallibility, which together produce the irony of environmental history. I believe these frames of explanation offer a more adequate account of our environmental history than many existing ones. We are all certainly guilty of environmental sins, conscious and unconscious, and some are guiltier than others. Much of our impact also seems to be the unavoidable result of the pursuit of nontrivial human goods. Some of it seems accidental, due to the fallibility of finite creatures. All of it produces irony. I propose that these four hermeneutic lenses bring the ambiguous and intractable nature of our environmental condition into sharper focus than does the belief that environmental outcomes are due to the presence or absence of non-anthropocentric values.

Because, as we have seen, we are fallible and prone to self-deception, it is impossible for us to say exactly what portion of our environmental destructiveness is due to which of the factors enumerated in this chapter (e.g., is it twenty percent tragedy, twenty percent sin, sixty percent fallibility?). This would be impossible to calculate, but we can now see that these factors are all in play and interpenetrating. The difficulty in sorting out the relative contribution of each is a problem because our perception of the distribution of human impact among the three makes a significant difference in how we think we should address environmental problems and how optimistic we should be that our efforts will work. If much of it is due to tragedy, for example, we have little hope for change. If much is due to correctible errors, we can be more sanguine. However we assess our predicament, the conclusion that our environmental history is ironic is much less rosy than blaming it on values we can manipulate (relatively) more easily. Sin, tragedy, and fallibility are, in this ironic view, permanent features of the human condition. Because one aim of this chapter was to explain the universal trajectory toward environmental

destruction we saw in the previous chapter, the picture that results necessarily suggests it will be a perennial problem. In other words, this account of environmental agency is a way of absorbing a lesson of history (the broad pattern of environmental destruction) into our analysis of the present and predictions about the future. There is no denying that this lesson is a disheartening one.

Because this dissertation presents a Christian realist environmental ethics, this account of factors resisting the achievement of our environmental ideals is not a denial of the reality of those ideals. In other words, this effort to be politically realist does not cancel out our commitment to moral realism. It is easy to be blithely optimistic or deeply cynical about our environmental prospects. The difficult challenge is to be realistic about the challenges, without obscuring the reality of the moral demand. The final chapter of this dissertation, on moral and theological realism, argues that our obligation toward an ideal environmental possibility remains real, in paradoxical relation to political realism, in a way Christian theology can help us sustain.

Chapter Six: Moral and Theological Realism in Environmental Context

The dimension of depth in the consciousness of religion creates the tension between what is and what ought to be. It bends the bow from which every arrow of moral action flies. Every truly moral act seeks to establish what ought to be, because the agent feels obligated to the ideal, though historically unrealized, as being the order of life in its more essential reality. Thus the Christian believes the ideal of love is real in the will and nature of God, even though he knows of no place in history where the ideal has been realized in its pure form. And it is because it has this reality that he feels the pull of obligation… The "pull or "drive" of moral life is a part of the religious tension of life. Man seeks to realize in history what he conceives to be already the truest reality—that is, its final essence.

Reinhold Niebuhr , *An Interpretation of Christian Ethics*[1]

This final chapter shifts from environmental history and its anthropological roots to our moral obligations and how to understand them theologically. From what we have seen in the previous chapters, it should be clear that we cannot derive directly from history what we ought to believe and do. For the cosmological approach, the content of the proposed moral and theological beliefs is set by the exigencies of the situation. However, if we accept the Christian realist interpretation of environmental agency laid out so far (that what we do emerges from a combination of freedom and determinations in an ironic context of sin, tragedy, and fallibility), then proposed beliefs need a basis other than changing behavior. We cannot choose what to believe about morality and God on the basis of what will be effective in solving the crisis. A Christian realist approach to environmental ethics must provide a different ground for articulating a moral and theological interpretation of our environmental situation.

This chapter proceeds by laying out the challenge of moral and theological realism in environmental context and by proposing a potential way to meet that challenge. The primary difficulty that comes with a commitment to realism is that, to be realist, we cannot just read from history what is good to believe. We have to articulate what is true. If it is the case, as Niebuhr

[1] Niebuhr, *An Interpretation of Christian Ethics*, 8.

claims, that moral action consists of attempts "to realize in history what [we conceive] to be already the truest reality—that is, its final essence," then we need a way to see ecological processes as part of that final essence.[2] If "every truly moral act seeks to establish what ought to be, because the agent feels obligated to the ideal, though historically unrealized, as being the order of life in its more essential reality" then understanding our moral obligations means we need an ecological ideal, a way of seeing our moral obligations as reflecting, not our own desires and purposes, but the essential order of life.[3]

The tasks of discovering an ideal and the demands of responsibility are especially difficult in the present case because of the novelty of our situation. The global environmental crisis is, in significant ways, unprecedented. Yes, we have seen in previous chapters that environmental destruction is ancient and perennial, but an ecologically-interpreted, global crisis is a new reality, and thus poses a significant challenge to Christian realist interpretation. The ideal of *social* harmony and equality, regulated by the law of love, can be supported from scriptures that command us to love one another and those which articulate eschatological visions of peace and justice. The ecological ideal is not laid out in the Bible or the Christian tradition, at least not in any scientific sense. To the extent that Christian realism's moral ideals come from those sources, environmental ethics poses different interpretive challenges than intra-human social ethics.

Anti-realism in the cosmological approach

This chapter does not focus on the negative apologetic task (and thus on Lynn White and cosmological approach) as much as previous chapters, but one area where a distinction must be drawn is with the use of theological sources. In situations that are significantly novel, like our

[2] Niebuhr, 9.
[3] Niebuhr, 8.

situation of environmental awareness, the temptation is to let the novelty set the agenda for the deployment of scripture and tradition. If the situation is clearly morally significant and God and the Christian faith are perennially morally relevant, then clearly there must be something in the tradition that can be brought to bear on the problem. If we are convinced that God or an authentic expression of the Christian faith must share our moral concerns, we can feel freedom to use Christian symbols in service of our activist aims. However, there is a subtle but important difference between making sense of a novel problem and our beliefs about ultimate truths in light of each other, on the one hand, and mining the Christian tradition for symbolic resources to buttress our already-discerned purposes, on the other. Christian environmental ethicist Laura Yordy is right to worry about the prevalence in Christian environmental theology of the view of Christianity as a "'thing' outside of us, a possible store of earth-faith ingredients." Yordy is concerned about transporting symbols outside a context in which they make sense. She writes, "To describe Christianity as a collection of tools or ingredients for a larger, more relevant project…is to render the beliefs and practices of most Christians unintelligible."[4] To her concern we can add that such a use of sources is not consistent with Christian realism.[5]

---

[4] Yordy, *Green Witness*, 24.

[5] On this last point, a quick note about method may be in order. At this point in the dissertation, it would be easy to lose track of why the requirement of consistency with Christian realism is given priority, seemingly setting the limits of acceptable positions. Readers who are not Christian realists might find these constraints arbitrary and limiting. It is worth remembering, in that case, that the aim of this project is to offer a Christian realist interpretation of our environmental situation. The goal throughout has been to present a Christian realist perspective on these issues. Thus, if I dismiss a position because it is not consistent with Christian realism, I am not saying it is therefore wrong; I am only saying it is not Christian realist. The hope, as articulated in the introduction, is that at least some readers will conclude that a Christian realist interpretation of our environmental situation, such as the one presented here, makes better sense of that situation than other approaches; this would count as a "limited rational validation" of Christian realism. [Niebuhr, *Faith and History*, 152.] Throughout this dissertation, the criteria for any position have operated at two levels: the criterion for inclusion here is consistency with Niebuhrian Christian realism, revised in light of environmental awareness; the criterion for the adequacy of this interpretation of Christian realist environmental ethics is that it works as a "source and center of an interpretation of life, more adequate than alternative interpretations, because it comprehends all of life's antinomies and contradictions into a system of meaning and is conducive to a renewal of life."[5] [Niebuhr, 165.]

Theologian Catherine Keller provides us with a clear example of an approach to Christian environmental ethics that tends in this direction. In her essay "No More Sea: The Lost Chaos of the Eschaton," she writes of her exegetical approach: "I do not work as a biblical scholar but as a constructive theologian who considers the effects of the text within current ecosocial practices. I read these textual figurations for the sake not of their own but of the current context."[6] Now, it is one thing to consider the influence of our context on our interpretation of the text; it is another to offer an interpretation for the sake of its effects, rather than as a discernment of what it means in its current context. She wonders later in the same essay whether "we can reuse, recycle, renew the text, neither demonizing or erasing the apocalyptic heritage."[7] We can see an example of her approach to source material in her worries about the erasure of the sea prophesied in the passage from *Revelation* on which she focuses in the essay. She writes,

> The image of the dry eschaton concentrates in itself the solution of all suffering and death. Paul also makes this apocalyptic gesture, which marks death itself as the ultimate enemy (1 Cor 15:26). I submit that at such points biblical eschatology loses its edge, its very *eschaton*: the focus shifts from the human systems of domination and destruction about which the people of God might *do* something, to natural systems of mortality, requiring a supernatural solution. The possibility of prolonged activism in history thus becomes moot.[8]

Keller's concern with the text is not so much any truth or insight into our situation we might find in it, but with the way it can be deployed to motivate action (as part of a response to a situation sufficiently understood without it). The value she finds in the text is instrumental value. She weighs different eschatological visions in the Bible against the standard of the activist work to which she is committed.

---

[6] Catherine Keller, "No More Sea: The Lost Chaos of the Eschaton," in *Christianity and Ecology*, ed. Dieter Hessel and Rosemary Radford Ruether (Harvard University Press, 2000), 184.
[7] Keller, 187.
[8] Keller, 189.

To grasp the challenge of moral and theological realism in environmental context, we have to see the ways in which Keller's approach is not a live option within a Christian realist perspective. There certainly are similarities: Niebuhr is definitively not a biblical scholar who reads texts only for their original context. He is, like Keller, interested in eschatological visions that help sustain moral and political action in history. The differences, while at in some aspects subtle, but significant. For one, while both Niebuhr and Keller see eschatological ideals as necessary for sustained activism, Keller seems to suggest we need to see these visions as achievable aims (something "about which the people of God might *do* something" rather than something "requiring supernatural solution"[9]). Niebuhr would grant that our visions of the ideal must be something we can work toward *approximating*, but would insist that the need for supernatural solution is actually vital to sustaining activism. Thinking we can achieve the ideal leads to either idolatry (we mistake our actual achievement for the ideal) or frustration and violence (when we run into the inevitable resistance).[10] We sustain responsible politics by avoiding the mistakes of thinking the ideal is either an illusion or a simple possibility.

Keller also assumes our "ecosocial context" is a known quantity which sets the agenda of what we need from scripture. At least in the essay cited, it seems she does not think we need the prior step that I have argued is necessary: rendering that context coherent, making use of theological insight. In her telling, we adapt our scriptural hermeneutics to respond to a given problem. Christian symbols are to be adapted and brought to bear on a clearly-discerned moral imperative. Her overriding concern for "prolonged activism in history" seems an example of what Yordy labeled the "larger, more relevant project" for which Keller sees "Christianity as a

[9] Keller, 189.
[10] Niebuhr, *The Irony of American History*, 5.

collection of tools or ingredients."[11] Keller at least seems to be saying that the purpose of articulating a vision of our eschatological destiny is to move us to act, not to communicate a true statement of fact.

To see the difference between that position and realism we need to continue to refine our definition of the latter term. Philosopher Geoff Sayre-McCord defines 'moral realism' (and the definition is applicable to theological realism) thus, beginning with an example:

> Taken at face value, the claim that Nigel has a moral obligation to keep his promise, like the claim that Nyx is a black cat, purports to report a fact and is true if things are as the claim purports. Moral realists are those who think that, in these respects, things should be taken at face value—moral claims do purport to report facts and are true if they get the facts right. Moreover, they hold, at least some moral claims actually are true. That much is the common and more or less defining ground of moral realism (although some accounts of moral realism see it as involving additional commitments, say to the independence of the moral facts from human thought and practice, or to those facts being objective in some specified way).[12]

We can say, then, that moral realism includes—minimally—two beliefs, but often a third:

1. Moral claims purport to report facts that can be true of false.
2. At least some moral claims get those facts right and are thus true.
3. (often) Whether moral claims are true or false is independent of human thought and practice.

We can see moral realism most clearly in contrast with two positions that reject it: non-cognitivism and error-theory. According to Sayre-McCord, non-cognitivists hold that "moral claims are not actually in the business of reporting facts, but are rather our way of expressing emotions, or of controlling others' behavior, or, at least, of taking a stand for and against certain things."[13] Error theorists, on the other hand, believe that "moral claims are in the business of

[11] Yordy, *Green Witness*, 24.
[12] Geoff Sayre-McCord, "Moral Realism," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, Fall 2017 (Metaphysics Research Lab, Stanford University, 2017), https://plato.stanford.edu/archives/fall2017/entries/moral-realism/.
[13] Sayre-McCord.

reporting facts, but the required facts just are not to be found."[14] Non-cognitivists, then, reject the first premise of moral realism, that moral claims have the form of statements of fact, believing instead that the act of making a moral claim is just a different thing than reporting a fact, while error theorists reject the second premise of moral realism, that at least some moral claims are true. Moral realism differs from non-cognitivism and error theory by holding that claims like "it is wrong to commit murder" purport to be statements of fact *and* that there are conditions under which they could be true (whether or not a particular claim is in fact true).

With these distinctions in mind, we can see that Keller's position at least appears to be an instance of non-cognitivism. She certainly presents her exegetical goals as, if not "controlling others' behavior," at least as "taking a stand for and against certain things."[15] It is certainly the case that a behavioral goal—sustained activism in ecosocial context—plays a central role in justifying her position. Keller's overall theological approach is likely deeper and subtler than it appears, either in that article or in my description of it here. That said, it is also the case that, in at least this piece, she provides no justification for the adoption of her eschatological interpretation other than the need to motivate activism. It does not appear to purport to be a true statement of fact.[16]

Not all Christian environmental thinkers who subscribe to aspects of the cosmological approach share Keller's approach to theological sources. Many others adopt some aspects of the cosmological approach, but not all, and not many are as forward as Keller is about her instrumental use of symbolic resources. Calvin B. DeWitt, for example, shares the cosmological approach's belief that the primary task of environmental theology is to propose cosmologies, but

[14] Sayre-McCord.
[15] Sayre-McCord.
[16] Again, this does not make her wrong; it only makes her not a Christian realist.

he has a very different approach to scripture. DeWitt was an early proponent of the "environmental stewardship" school of thought, but, as a theologically-conservative Evangelical, based his arguments for that cosmology on the grounds that it was (and always has been) the *right* way to interpret the Bible. It is what the original authors meant and it is as true in our context as it was in theirs. For DeWitt, we are to be stewards of creation because that is what the Bible says we are to be. His claims about stewardship purport to be true statements of fact.[17]

While Keller's approach to sources is not representative of all proponents of the cosmological approach, it is not at an extreme, either. Lynn White is even more explicit about his non-cognitivism. He concludes his essay with the lines, "We must rethink and refeel our nature and destiny. The profoundly religious, but heretical, sense of the primitive Franciscans for the spiritual autonomy of all parts of nature may point a direction."[18] For White, the pressing demands of our moment call for a turn to what we had previously decided is error. He thus calls explicitly for a turn to justified heresy, a teleological suspension of a commitment to truth. The question of the truth of the doctrines he suggests is not just secondary, it is irrelevant. He clearly thinks theology is not in the business of communicating facts, if he recommends it teach what it has (at least up until now) thought untrue. For White, the test of a religious doctrine is its capacity to alter environmental behavior, not its truth.

Showing that there is a strain of anti-realist non-cognitivism in the cosmological approach does not mean it is thereby wrong. It *does* mean Christian realism needs another approach to theological sources, one in which it can present moral and theological claims as true statements of fact. However, there is at least one reason to worry that the non-cognitivist

---

[17] Calvin B. DeWitt, "Behemoth and Batrachians in the Eye of God," in *Christianity and Ecology: Seeking the Well-Being of Earth and Humans*, ed. Dieter T. Hessel and Rosemary Radford Ruether (Cambridge, Mass: Center for the Study of World Religions, 2000).
[18] White, "The Historical Roots of Our Ecologic Crisis," 1207.

approach to environmental theology is problematic on its own terms: It is not clear how it can appeal to anyone who would need to hear it. That is, if the proposed exegesis is explicitly motivated by its usefulness to an activist cause, then it seems to lack any attraction for anyone not already committed to that cause (since sustained commitment to the cause is the only inducement offered). White calls for conversion to a spirituality that he himself calls "heretical" *because* it will motivate environmentalism, offering the incentive that it will help the environment. It is not clear whom he imagines wants to save the earth enough to embrace "heresy" *and* still requires such a conversion. If the whole justification is to motivate people and the proposal only appeals to the motivated, how can it be expected to motivate anyone in need of motivation?[19]

Our Christian realist interpretation needs a way to describe the theological basis of our moral obligations in a way that can purport to be true statements of fact. This is not because of a stubborn and arbitrary commitment to moral and theological realism. If we are correct that our environmental history can be described sufficiently without reference to the influence of religious cosmology and moral stances, then the appeal of the non-cognitivist position goes away (since our theological imagination cannot redirect our behavior sufficiently). Moral and theological realism is not the only possibility, but anti-realism is not a live option.

[19] The cynical way to save proposals like White's from the charge of being absurdly self-defeating is to charge them with elitism. That is, perhaps their arguments are not meant to convince non-environmentalist Christians, but the already-environmentally-disposed intellectual and clerical authorities who teach them. Perhaps Keller's aim is to "recycle" scripture into a more environmentally-friendly form, with the thought that this is what will be taught to seminarians, who will present it to their congregations in the form of realist statements of fact. Her justification (sustaining activism) is not meant for laypeople who need to be convinced, but for the elites who shape theological instruction. Maybe the audience is environmentalist teachers and preachers who want to know how to move people. I do not insist on this interpretation, but I fear the field of Christian environmental ethics is not entirely innocent of this charge.

What Christian realism requires is not a way of thinking that will work to solve the problem, but a way of thinking that will work to make moral sense of our ambiguous and ironic situation. Like the non-cognitivists, Christian realists want a vision of the moral and theological ideal that is useful, but one that is *hermeneutically* useful. A realist rendering of the situation makes claims that purport to be true statements of fact and the criterion of truth is that the statement works to make coherent sense of the antimonies and contradictions of our experiences. Of course, as we have seen, Christian realism does not then just compose claims it hopes will be helpful in this way. Christian realist claims about morality and theology come out of a "constant commerce" between revelation and empirical discoveries.[20] Theological beliefs and symbols bring coherence to the observed facts, and this capacity is the standard of adequacy for theology.

Requirements for a morally and theologically realist account of our situation

In Christian realism, as we have seen, morality depends on a vision of an ideal social arrangement governed by love, the law of our nature. We need to know what our obligations are, and we do that in relation to an ideal. For Niebuhr, there must be a "tension between the ideal and the real" that "bends the bow from which every arrow of moral action flies."[21] In covering history and anthropology, we have been focusing on the "real." For there to be any sort of sense of obligation, we have to add a sense of the "ideal." We have thus far fixed the string to only one end of the bow, so there is none of the needed tension. To be clear, we are not here looking to create tension, for motivational purposes, but to see the tension that is actually there. Christian realist environmental ethics needs some articulation of the ideal norm of human action, what it would look like to fulfill one's moral obligations in environmental context.

[20] Niebuhr, *Faith and History*, 167.
[21] Niebuhr, *An Interpretation of Christian Ethics*, 20.

Further, the ideal has to be grounded in something real.[22] This is true in two senses. In the first sense, the ideal has to be sufficiently closely related to our experience of our lives in ecological context that it is recognizably a perfection of *our* ecological lives. We have to recognize both our good and the good of ecosystems in it. This does not mean it is just our fantasy, the realization of whatever we happen to want. An articulation of the ideal can, in fact, help us to recognize the insufficiency or error of our current desires. The ideal possibility cannot, in fact, just be an extrapolation of our contingent wants. However, to see it as an ideal, it has to be recognizable as a completion, not annulment, of our good (even if we fail or refuse to recognize it).

In the second sense, it has to be real in a fundamental order of reality. It has to have some connection to something that exists, has existed, or will exist. Niebuhr writes,

> Even the most uncompromising ethical system must base its moral imperative in an order of reality and not merely in a possibility. Somewhere, somehow, the unity of the world must be or become an established fact and not merely a possibility, and actions which flow from its demands must be in harmony and not in conflict with reality.[23]

Niebuhr is here making an empirical claim that ethical systems all provide some account of an order of reality on which their claims are based. Perhaps it is a primeval past or utopian future, but somewhere the ideal is, was, or will be real, and thus the moral claims of the system purport to pick out something true about reality itself. Whether Niebuhr's empirical claim that such realism is common to ethical systems generally is correct is beside the current point. What is at least true of Christian realism is that it insists *its* moral claims pick out something true about

[22] Thus, the word "real" has different senses here. In the previous paragraph about the tension between the ideal and the real, the "real" referred to current reality as it differs from the ideal. If the ideal *is* real, as in this paragraph, then "real" signals that the ideal is grounded in a deeper reality. Thus, the ideal is "real" in the sense that it names a fundamental order of reality, but it is in tension with "the real" insofar as it differs from the world we encounter in our daily lives. This difference assumes that believing that the world we see is not the world as it really is or is meant to be is fundamental to ethics. Our moral ideals tell us how the world as it should be (or really is) is not the same as the world as we find it.

[23] Niebuhr, *An Interpretation of Christian Ethics*, 55.

reality itself. Thus, to be Christian realist, a vision of the environmental ideal has to be a perfection of what is recognizably our good and which really exists, somewhere, somehow.

Next, because this is *Christian* realism, the ideal has to be real in God's creative and consummating will. This is where we see an important connection between moral and theological realism in Christian realism. For Niebuhr, the basis of our obligations is God's creative intentions for human beings. These are revealed by the symbols of "creation" and the "Kingdom of God." As we saw in Chapter Two, the pull of obligation comes not from our attraction to the individual life of self-sacrifice, but to the community constituted by self-giving people ruled by the law of love. Niebuhr believes that "love is therefore the primary law of [our] nature; and brotherhood the fundamental requirement of social existence" because "the individual can realize himself only in intimate and organic relations with his fellowmen."[24] We are created for a coercion-free community, regulated by love (the law of our nature), and constituted by "harmony of life with life."[25] That is the community to which we are destined in the eschaton. Thus, our created nature is fit for our ultimate destiny and the moral relations of that community are our moral ideals. The ideal community, which provides the pull of obligation, is made real by God. Whatever our environmental ideal turns out to be, it has to related to creation and eschaton.

Lastly, a Christian realist environmental ethics needs a way to think about how we are to act responsibly, given the fact that we do not *currently inhabit* the ideal community. Simply knowing the ideal can point us in the right direction and provide creative tension in our moral lives, but it does not tell us what to do in a non-ideal world. This point distinguishes Christian realism from some other approaches to Christian ethics. The relevance of our non-ideal context

[24] Niebuhr, *The Nature and Destiny*, 1996, 2:244.
[25] Niebuhr, *The Nature and Destiny*, 1996, 1:16.

for the moral requirements of the faith is a serious fault line in Christian ethics. Christians are in relative agreement about ideals; disagreement comes when reasoning about what to do in our non-ideal condition. Consider an example from the Reformation: Martin Luther and Menno Simons agreed that Christ teaches that Christians should not use violence, that we are to live in peace and harmony with one another. They agreed that we must love our neighbors. Disagreement began when thinking about what we must do in cases where violence seems the only way to protect our neighbors: either we must intervene violently or are required to find a nonviolent option. Both positions are reasonable attempts to apply biblical teachings about love of neighbor. It is reasonable to conclude that using violence in such a situation is a failure to embody Christian love toward the enemy and oppressor. It is also plausible to think, as Luther did, that refusing to resist violently where able is a failure to embody love toward the oppressed.

The point of the Reformation example is this: the most serious and persistent disagreements about what the Christian ought to do are often occasioned by the non-ideal realities of our world, not usually either by different ideals or by estimates of what is likely to happen. Luther's view of what Christians ought to do (wield the sword in certain situations) was influenced by an expectation that violence is a perennial human reality and we must act responsibly in that world. Menno also recognized that we live in a world marked by violence but did not conclude that this means we can or must be violent; instead, we must be willing to suffer violence. A shared realistic estimate of violence in human society did not lead the two of them either to reject the nonviolent idea or to agree about what we must do in our time.

Niebuhr shares with Luther the belief that Christian responsibility to others means that Christians must deviate from what is dictated by ideal norms. This is why, in our discussion of realism in environmental ethics, a Christian realist intervention has an additional step beyond

articulating the ideal environmental reality in the will of God: we must also articulate what responsible action requires (which may deviate from what is ideal). For example, in an ideal community governed without coercion by the law of love, there would be no need for climate change treaties and certainly not for regimes to enforce them, but both are critically necessary today. We should feel the pull of obligation to the ideal, but the demand on us today is to act responsibly to best approximate the ideal. The actions required by responsibility may look very different than what is prescribed by the law of love in the ideal community.

Articulating an Ecological Ideal

A Christian realist environmental ethics thus needs a clear vision of an ideal community in ecological context. To be realist, we cannot base the description on what we think will motivate behavior. It needs to be an articulation of the "order of life in its more essential reality."[26] This is not a simple process and no complete articulation of such an ideal will be attempted here. A major complication is that, when we try to extend outward to nature what we usually think of as the "order of life" in social context, we find that it is nonecological. We can at least imagine a perfectly nonviolent human society, regulated by love instead of coercion and violence, as the proper condition of human flourishing, even if imagining how it might become so is impossible. As we saw in the previous chapter, Niebuhr thinks the human condition is not finally tragic because social harmony remains an ideal possibility (it is ideally possible that we act only from the will-to-live-truly, not the will-to-power). But, when it comes to natural systems, not only is it difficult to see how nature might ever become nonviolent and harmonious in the way we imagine an ideal human society, it is also hard to see how doing so would represent ecological flourishing. If ecology involves predation and death, then the removal of

[26] Niebuhr, *An Interpretation of Christian Ethics*, 8.

these is nonecological. This is true at an individual and systemic level: the flourishing of a predator, for example, seems inextricably tied to the catching and killing of prey. It is even more true at a systemic level. While we often talk about "natural harmony," this is a loose metaphor at best. Normal ecosystem functions require violence, death, and decay. 'Harmony' in the simple sense of stable, *nonviolent* coexistence is anti-ecological. The biblical image of the lion eating grass like an ox is a romantic metaphor, not an ecological ideal, in any realistic understanding of ecology.

It is fairly uncontroversial among Christians to think the end of human conflict is a constitutive element the order of life as it is fundamentally meant to be, even though it is currently elusive. Even if it escapes us now, it certainly seems to be what is best for us. Peace and justice are human goods. We may want to refrain from violence and find that commitment reciprocated, but we know to expect violence. As Jean Bethke Elshtain puts it, in our age, "If the lion lies down with the lamb, the lamb must be replaced frequently."[27] The question for us is whether we should hope that things will ever be different for actual lions and lambs. A real African lion (*Panthera leo*)*, literally* lying down with a lamb (*Ovis aries*) is not just impossible without frequently replacing the lamb; it is not a relationship for which lions are meant.[28] The morphology of the lion is distinctly predatory. The biotic communities that environmentalists aim to protect are systems regulated by, among other things, predator-prey relations. Leopold's land ethic emerges from lessons he learned about the value of predators to the "land system."[29] Thus, both at the individual level of organisms and at the level of ecosystems, the end of conflict

[27] While she attributes this quote to Luther, the only explicit statements of it I can find are in Elshtain's own work. Elshtain used the quote frequently. For an example, see Jean Bethke Elshtain, "Thinking about War and Justice," *Religion and Culture Web Forum*, May 2003, https://divinity.uchicago.edu/sites/default/files/imce/pdfs/webforum/052003/commentary.pdf.
[28] Though at least individual lambs would likely not mind
[29] Leopold, *A Sand County Almanac*, 137ff.

between animals is not a vision that can play a normative role in our current practice. Biblical visions like the lion lying down with the lamb are as irrelevant to environmental ethics as they are to the practice of shepherding.

Some environmental ethicists and theologians have sought to avoid the problem that biblical visions of harmony are nonecological by interpreting ecology as revealing that nature is, in fact, harmonious and cooperative. For thinkers such as Moltmann and Ruether, the insight gained from the ecological perspective just is that life is interrelated and depends on cooperation. It teaches us to reject the mechanistic and competitive paradigms they see as underlying environmental problems. A full enumeration of this position and its flaws is beyond the scope of this project and would be redundant with existing persuasive criticisms, like Sideris's excellent *Environmental Ethics, Ecological Theology, and Natural Selection.*[30] In that work, Sideris presents a sustained, rigorous attack on romantic attempts to incorporate ecological science into ethics and theology. She writes that,

> From a scientific standpoint this interpretation of an interdependent, ecological community cannot be sustained: nature does not provide for individual beings; interdependence in nature is itself the source of much conflict and struggle, *not* an overriding, harmonizing principle as the theologians such as Moltmann suggest. Ecotheologians' interpretation of interdependence fails to recognize that the good of the parts and the good of the whole cannot be harmonized.[31]

For Sideris, evolutionary and ecological relations are good for kinds, like species, not individuals. One way to think about it is to recognize that lions are good for gazelles, but only because *particular* lions are very bad for *particular* gazelles.[32] Thus, Sideris argues, any

[30] Sideris, *Environmental Ethics, Ecological Theology and Natural Selection*.
[31] Sideris, 265.
[32] in Leopold's words, eliminating predators leads to scenes like this, the result of attempts to increase the deer population by eliminating wolves: "In the end the starved bones of the hoped-for deer herd, dead of its own too-much, bleach with the bones of the dead sage, or molder under the high-lined junipers." Leopold, *A Sand County Almanac*, 140.

environmental ethics built on continuity of moral concern for human individuals and for individual animals involves anthropomorphism of wild animals in a way that misunderstands ecology. Human ethics is usually concerned with the goods, characteristics, dignity, or inviolability of human persons. Similar concerns, applied to *individual* animals, misunderstand ecosystems. Sideris argues that environmental ethics must account for the differences between humans and wild animals, specifically the ways in which death, violence, and suffering are evils to be minimized among humans, but are necessary for the good of animal kinds and of ecosystems.[33] If our visions of ultimate harmony involve the end of conflict between animals, then those visions are nonecological. They are not environmental ideals. It is not clear how they can be relevant to environmental ethics. Attempts to force an ideal of conflict-free harmony and cooperation on the natural world reveal a fundamental lack of understanding of biotic systems.

The other way to remove the problem that traditional ideal visions of harmony are nonecological is to hold that God intends nature in all its death, decline, and suffering as part of the essential reality of creation. This is what Keller does when she suggests we recycle our eschatological visions to avoid sanitizing nature. Here, instead of sustaining traditional visions of ultimate harmony by downplaying conflict and violence in nature, thinkers recycle those visions to include the death and decay we observe in it. However, doing this in a morally and theologically realist way is a challenging proposition, one there may be good reason to doubt is possible. A realist reinterpretation of Christian beliefs in such an ecological direction would mean that we would have to take ecological awareness as really revising (in a fairly radical way) how we interpret Christian theology's core tenets. Adding in death and decay to the order of life in its essential reality has significant implications for how we understand God's intentions for the

[33] Sideris, *Environmental Ethics, Ecological Theology and Natural Selection*, 264.

created order. For our efforts to be realist about morality and theology, as we have seen, new claims have to be incorporated into to our full system of beliefs such that they can purport to be true statements of fact.

We should recall that realism's formal requirement of presenting claims as true statements of fact does not imply confidence in the truth of our beliefs. In fact, it entails recognizing the possibility that our beliefs are wrong by holding them to an independent standard that we cannot know exhaustively and which we do not hold to be identical with our ideas. However, realism does entail that our claims purport to be true facts, even if we know there is a possibility they may be false. Thus, if we are to claim that God intended death and decline as part of "the order of life in its more essential reality" then we have to maintain the formal possibility that this is a true fact about God (not just a useful postulate). This means we need to make sense of it in light of our beliefs about how we know true facts about God and to reconcile it with everything else we believe to be true of God. If, for instance, we have believed on the basis of scripture and tradition that God created the world free from death and suffering and will restore it to that condition, then replacing those visions with ones that include ecological and evolutionary insights will likely have far-reaching effects on what we believe and on what basis. We cannot move such a massive object in the constellation of our commitments and beliefs and expect it not to affect the orbits of all the others.

Incorporating what have always been disvalues, like violence and suffering, into our accounts of the essential reality of life is no minor change. Christians who take evolution as empirical fact can (and often do) suppose it only affects our interpretation of the beginning of

Genesis. However, as Christian ethicist Frederick Simmons points out, Christians[34] regularly make connections between "God's creation and creation's goodness, God's love, and theodicy,"[35] so our judgments of the goodness of creation have wide-ranging implications for how we understand God's love and goodness. Because Christians hold that God created the world, the judgment that the world was free from evil prior to human sin is important for most Christian versions of theodicy. If creation in its original, intended state contains evils, then God created and is responsible for evil. We normally consider death and suffering to be evils. Thus, if creation involved evolution, then God is responsible for creating a world marked by evil, long before humans sinned. Ecosystems contain features which Christians have usually held distant from God's will and nature. Simmons puts it well:

> The decline and death that are endemic to ecological processes and necessary for the subsistence of ecosystems and evolution by natural selection are generally disvalues for the organisms that endure them. Consequently, Christians…who are keen to disassociate all disvalue from God must attribute ecological processes to creatures' disobedience rather than God's creation per se.[36]

That is, if we want to maintain that God created the world free from evils, then God could not have created ecosystems or used natural selection.

Evolutionary theory does not just mean that "decline and death" are older than Eden; it shows that they are part of the divergence and development of life. Such disvalues are integral to how organisms evolve and relate ecologically. If we accept that evolutionary and ecological relations are integral to creation (both as a process and a product) and evils are integral to those relations, then God has used evils to produce systems marked by evil. To be clear, the suggestion

[34] Simmons' talk, from which these references are drawn, is about Wesleyans in particular, not all Christians. I am here expanding his claims to Christians in general. Thus, any instance in which it appears that Simmons is saying something about Christianity that is really only true for Wesleyanism is my error, not his.
[35] Fred Simmons, "Creation, Ecology, and Wesleyan Theology" (Annual Meeting of the American Academy of Religion, Denver, CO, 2018).
[36] Simmons.

is not just God has used evil to bring about good or redeemed evil into good; that would be fairly uncontroversial. Evolution and ecology mean that God used death and decay to create a system whose flourishing, whose good itself, is marked by these evils. God created a system that requires death for its good in its mature state. Evolution is not a set of temporary growing pains which God's willing of the good must pass through. If ecological processes are to be declared part of God's good intentions, then the end of creation is marked by death and decay, not just the process. Thus, to maintain the doctrine that God did not create evil requires that we believe either that ecosystems are somehow the product of moral evil or that these seemingly bad things (death, decay) are not evil.

Simmons takes the latter option. He argues that the solution to this theodicy problem is to stop labelling as "evil" the death and other bad things that are necessary for ecosystems to emerge and thrive. He draws a distinction between bad and evil and uses the umbrella term 'disvalue' to include both. That there are bad things that are not evil, such as dropping your ice cream cone on the sidewalk, is obvious.[37] The more salient and novel point is the way Simmons applies his bad/evil distinction to ecology. Simmons argues that Christians should,

[37] I should also note that Simmons is not the first to make a distinction between bad and evil. The difference is built into a variety of ethical traditions. As one example, ethical discussions that involve "proportionality" often require it. Consider the Doctrine of Double Effect (DDE). Three of its requirements for an action to be allowed are 1) that the action itself is permissible, 2) the agent does not intend bad effects, and 3) that the anticipated bad effects are in proportion to the intended good effects. What this amounts to, then, is two kinds of disvalue: moral evil (either in the act itself or the agents intentions) and premoral bads (the unwanted effects which can be weighed against good effects). The bads are "premoral" because their badness does not require a moral judgment (having adequate food is good, starving is bad, prior to any moral consideration). No amount of good effects can justify an evil action or intention, but they can outweigh bad effects. Proportions have to be between quantifiable variables. (for an explanation and interesting discussion of the proportionality clause in the DDE, see P. A. Woodward, "The Importance of the Proportionality Condition to the Doctrine of Double Effect: A Response to Fischer, Ravizza, and Copp," *Journal of Social Philosophy* 28, no. 2 (1997): 140–52, https://doi.org/10.1111/j.1467-9833.1997.tb00382.x.) Proportional reasoning has applications far beyond the DDE, such as Just War theory and medical ethics. For other examples, see the work of Peter Knauer, Richard McCormick, Charles Curran, Josef Fuchs, Hans Kung, Lisa Cahill, Don Browning, William Schweiker, and James Gustafson (all credit for this list goes to William Schweiker in his lecture on the topic).

For a different way of drawing the distinction between non-good values ("benign" and "evil") see, Edward Farley, *Good and Evil: Interpreting a Human Condition*, 1st edition (Minneapolis: Fortress Press, 1990).

> posit a qualitative distinction between those disvalues that are necessary for the sustainability of ecologically ordered systems—which I call bad—and those disvalues that are not—which I call evil. For example, given this doctrine of disvalue, organism's physiological decline, death due to senescence, and susceptibility to pain, frustration, and suffering are all bad; murder and injustice, by contrast, are evil. On such a scheme so-called 'natural evil' would refer to natural disvalues that human beings have culpably exacerbated, for instance wild fires that have become more destructive because of culpably human-induced desertification, drought, global warming, and land use that puts human homes and livelihoods in places more susceptible to catastrophic harm.[38]

This axiological move, Simmons argues, allows Christians to say that the created goodness of the cosmos includes disvalues,[39] but not evil. When Christians say that God's creation is good, according to Simmons, they must mean something like "its suitability to God's purpose, its marvelous fecundity and penchant to support an astonishing array of biological creativity and capacity, its beauty and ingenuity."[40] It cannot mean, Simmons goes on, that it was tame, pleasant, and free from suffering and death.

This axiological revision is an example of conducting "constant commerce" between theological belief and empirical knowledge. If a Christian perspective holds that God did not create evil and science reveals that death is integral to both the process and product of creation, one way to make sense of the apparent contradiction is to revise death's status as an evil. Other options are available (rejecting the requirement that God could not create evil, for example), but Simmons's solution is an example of a realist approach to assimilating novel discoveries. The revision absolves God of the charge of creating and intending evil, but not of creating and intending bad things necessary for natural goods. For Simmons—and this is why his position is a helpful example for the present argument on ideals—this revision has profound implications for

[38] Simmons, "Creation, Ecology, and Wesleyan Theology."
[39] Simmons regularly uses the term "disvalue" to refer to thing which is a disvalue *to* someone, not just the judgment. Thus, to say "disvalues were present at X point in creation" is not to say there were people there making that judgment, but that there were things there that are typically disvalued, like death.
[40] Simmons, "Creation, Ecology, and Wesleyan Theology."

interpreting God's salvific and redemptive work. If salvation is a restoration of creation and a deliverance from sin, then we are saved from evil, but not from bad. In one sense, this seems noncontroversial: Christians face frustration, get sick, and die along with everyone else. However, going further, it seems to call into question core Christian beliefs, like the resurrection of the dead and the life everlasting, since these require the overcoming of disvalues that are now seen as part of created goodness, not the wages of sin.

Simmons, however, believes even these doctrines can be saved, if they are understood eschatologically, not soteriologically. In Simmons's words, Christian eschatology can be "extravagant," far exceeding original creation. Building on the example of John Wesley, he proposes that Christians can maintain an,

> audacious hope that God's consummation of creation will far exceed even its initial, supralapsarian goodness simply by envisioning that consummation the way Wesley described creation—namely, as free from all the disvalues endemic to extant ecological exigencies—and just as scripture depicts the eschaton—namely, as the lion lying down with the lamb; freedom from struggle, scarcity, competition, or tears; life everlasting.[41]

So, Simmons argues, God's salvation, to the extent it restores creation, frees us only from evil, while consummation, because it can be understood as transforming creation, can free us from all disvalue, including death and decay. In this reading, ecosystem processes have a place in creation and our present epoch, but not in the eschaton.

Simmons's axiological proposal has a clear application in environmental ethics. It places the ultimate ideal for environmental existence away from the eschaton (because it is non-ecological) and to a sin-free world, either as created or redeemed (because these still involve the bad things necessary for ecosystems). This ideal can work to define environmental evils in a Christian realist environmental ethics. Recall Simmons's statement that, "On such a scheme so-

[41] Simmons.

called natural evil would refer to natural disvalues that human beings have culpably exacerbated." Natural disasters and death that are part of the natural ordering of things are "bad"; those that are culpably made worse by humans are natural evils ("natural", because they are mediated by natural processes, "evil" because they are the result of culpable human action). The vision of an ideal ecological arrangement that emerges is one in which disvalues like death and decay are restrained within the level necessary for ecological processes.

Simmons's position is helpful because it avoids romanticism about nature by taking seriously the disvalues it includes in a way that is morally and theologically realist. He does not propose adjustments to theology to sustain activism, but to make sense of what we have discovered about the history and complexity of life on earth. His approach is closer to Niebuhr's recommendation that there should be a "constant commerce" between particular truths gained through experience of the world and final truths discerned through faith (as we saw in Chapter One). Simmons presupposes no environmentalist motivation as grounds for his revisions, merely seriousness about what we know to be true of the world and what we have believed to be true of God. It is a helpful example of a way to reconcile hopes for final harmony and the messiness of ecological processes evident in creation. It has real promise for how we might think about disease, death, and dying among humans, in addition to environmental ethics.

Unfortunately, however, it does not neatly resolve the problems, raised in Chapter Five, that come when we try to distinguish which environmental destruction is due to sin and which is due to tragedy, error, and irony. Simmons says natural evil (not bad) is due to "culpable" human exacerbations. While he does not address the issue explicitly, the implication is that there are human exacerbations of natural disvalues for which we are not culpable. However, he also says that the "bad" disvalues are just those necessary for ecosystem processes. The only categories,

then, are necessary, natural bads and anthropogenic exacerbations, which are all evil. But, if there are non-evil human exacerbations of natural disvalues (those that are unavoidable or due to error), it is not clear they are necessary for ecosystem processes. Simmons is right that humans "exacerbate" disvalues in the natural world, but we do this not just by sinning, but also by pursuing goods in tragic context, making innocent mistakes, and by ironic failures.

Consider a case in which a community exacerbates downstream flooding because of the way its agricultural methods affect ground permeability and thus runoff. Calling this excess of disvalue "evil" does not do justice to the complexity of factors involved. Perhaps some greed or self-preference is involved. But, perhaps the farmers were trying to feed their families as best they could; some of the effects of this effort were avoidable mistakes, while others were unavoidable effects of the pursuit of nontrivial human goods. Calling this exacerbation of natural disvalues (in this case, damage due to flooding) "evil" flattens our perception of what is really going on. Some of the anthropogenic disvalues are necessary, but they do not seem necessary *for* ecosystem processes.

How do we categorize these disvalues? There seem to be two ways one might go about this task. One is to include *Homo sapiens* as part of the ecosystem. If we are animals like the others, then disvalues necessary for our flourishing should be categorized as necessary for ecosystem processes (since we are member of the ecosystem). Categorizing human effects as natural parts of ecosystem functions would remove the problem of tragedy entirely; the unavoidable consequences of the pursuit of nontrivial human goods would just be natural aspects of ecosystem processes. The worry about unavoidable environmental destruction would be incoherent: if it is an unavoidable result of the pursuit of human goods and human goods are natural, then the effects are natural. The increased runoff would be axiologically identical to the

flooding caused by beavers. Only what is unnecessary and sinful would be "unnatural" and considered disvalues for which we are culpable.

The problem with seeing humans as merely part of ecosystems is that it ignores the reality on which the argument in favor of the tragic interpretation has been built: human flourishing is more than natural. Recall Niebuhr's argument that "Man is the kind of animal who cannot merely live…The will to live is thus transmuted into the will to self-realization."[42] The heights of human freedom, creativity, and self-transcendence means that goods necessary and natural to human beings are not "natural" in the sense of being simply part of natural processes. Sideris, as we saw above, argues that extending human moral reasoning (which is concerned with the wellbeing of individuals) to nonhuman nature (in which the health and viability of kinds requires indifference to individuals) is an anthropomorphic misunderstanding of ecology. The converse of this point is that it is also a misunderstanding to think that human goods are qualitatively similar to ecosystem goods, without remainder. Humans are paradoxically natural and free, and the goods of free beings are not of a type with natural processes. So, while this approach removes the problem of how to categorize axiologically the unavoidable exacerbations of natural disvalues, it does so by eliding the important distinction between ecological and human goods. Among other things, it fails to account for our experience of a significant difference between human artifacts, however benign, and the products of nature. Making humans simply part of ecosystem processes solves the problem of how to categorize sinless human exacerbations of disvalue, but does so by denying important features of human nature and our environmental experience.

[42] Niebuhr, *The Children of Light and the Children of Darkness*, 19.

The other way around this problem, if we stay within Simmons's vocabulary would be to call at least some ecological destruction by humans 'bad' instead of 'evil.' Unlike in the first approach, here we acknowledge the reality of natural disvalues that are not necessary for ecological processes but are necessary for the pursuit of human goods. In other words, we would categorize *some* human exacerbations as evil, while seeing others as merely bad—those that result from the tragedy, frustration, misalignment, and error inevitable in finite life. In the Niebuhrian language of Chapter Five, exacerbations of disvalues resulting from the will-to-live-truly are bad, while those resulting from the will-to-power are evil.

Such a revised axiology does not remove the practical problem of self-deception, but it clarifies our moral situation. That is, practically, we will still tend to believe that much of the evils we cause are really just bad, to label things as tragic pursuits of the will-to-live-truly that are really sinful expressions of the will-to-power. But, in terms of making moral sense of human environmental impact, Simmons's proposal gives us a vocabulary with which to distinguish environmental effects that are due to sin from those that are part of God's purposes in creation, even if we cannot say with precision which are which. Applying this interpretation to our previous example, at least some substantial portion of the increased runoff due to the community's efforts to feed itself is not necessary for ecological processes, but is necessary for human processes. There are three categories of nonhuman disvalue in this picture: those necessary for ecosystem processes and those we exacerbate culpably, which Simmons mentions, but also those that we exacerbate, but without sin. What we exacerbate without sin as a result of the will-to-live-truly would be bad, not evil.

How do we go from this axiological intervention to an ecological ideal that can orient the moral life in a Christian realist environmental ethics? Recall that a realist ideal must describe the

order of life in its essential reality. While this is often understood eschatologically, Simmons's framework (following Wesley) makes a distinction between the order of creation and the extravagance of eschaton. If we want to preserve doctrines like the resurrection of the dead, we can maintain that the ecological ideal may be superseded in some way by God's consummation.[43] Here the ideal for the moral life is ecological and names the fundamental character of the created order, but it is not eschatological. The ideal possibility for our environmental impact is what would be found in a sin-free world, not in an eschaton that includes the removal of all disvalue (which is non-ecological). If we revise Simmons's position in the proposed way, the ideal would still include all the disvalues (death, decay, etc.) necessary for ecological processes *and* those made worse by human disruptions of nature due to non-evil sources, like tragic inevitabilities and human error. It includes human exacerbations of disvalue due to these non-evil sources (disvalues we can call 'bad'), which might be quite significant, but not those due to sins (which we can call 'evil'). The ideal environmental arrangement that results includes the disvalues—habitat loss, extinctions, and so on—that are the inevitable result of the pursuit of human goods (goods necessary to live truly, not those that merely appear necessary to sinful humanity). I will refer to this as the "sinless ideal," because it includes all human disruptions on the environment except those due to sin.

Justification of the sinless ideal

The sinless ideal, which includes anthropogenic extinctions and other significant disruptions of nature, may not seem like an "ideal" at all. It might seem that the sinless ideal I have described in the previous section is more like the sub-optimal goals of responsibility (the "best we can realistically hope for") than an ideal possibility which provides a pull of obligation

[43] Of course, there are other ways of doing this or the option of not preserving those doctrines. This is merely an example.

while standing in judgment of all historical achievements. I want to be clear that this is not what I mean to argue. A world in which humans cause significant environmental disruptions may not seem ideal, but we must keep in mind that our sinless ideal is still, well, sinless. It does not deviate from God's intention for creation. It is free from the influence of the will-to-power, from human conflict, greed, and self-preference. It is perfectly loving and, at least between human beings, harmonious. Any disharmony with the nonhuman world is at the absolute theoretical minimum. It is not a sub-optimal, realistic aim of human action; it would represent the fundamental reality of the created order, outside the influence of any human evil. It just recognizes that this includes extinctions and other bad (but not evil) effects on the natural order. The achievement of this ideal possibility would be, by any prudential and realistic calculus, impossible.

Acknowledging the practical impossibility of the sinless ideal might seem problematic, not just for the human future, but for the argument of this chapter. The whole reason to turn to the sinless ideal, rather than one with no human exacerbations at all, is that it is impossible for us to live without such exacerbations. We cannot help but disrupt natural harmonies, so a complete lack of such disruption cannot be our ideal. It is reasonable to wonder how I can dismiss one potential ideal (zero human exacerbations of natural disvalues) because it is impossible for us to live without some disruptions of nature, but now suggest a potential ideal that is also impossible. If zero impact cannot be the ideal, because it is impossible, then how can a sinless ideal be consistent with realism, given its impossibility?

The answer is that there are different senses in which something is impossible. For example, consider two impossible physical achievements I might attempt: going the rest of my life without stumbling while walking or leaping the forty feet from the sidewalk onto the roof of

my apartment building. Both are impossible, but in different senses. It is possible for me to walk without stumbling for a time, but not the rest of my life. I can avoid mistakes, but not indefinitely. Leaping more than a few feet is simply beyond my capacities. Walking a lifetime without stumbling is an ideal possibility for me, but not a real one. It is not necessary that I stumble in any given instance of walking, but it is inevitable I will do it in many of them. Leaping forty feet is no sort of possibility for me, ideal or otherwise. It is not even an ideal possibility because it is beyond the absolute limits of my body, even operating perfectly. If I attempt to leap onto my building and nothing goes wrong, I will still fall miserably short of my goal. A flawlessly executed jump that represents the limit of my ability is insufficient. Niebuhr talks about ideal possibilities (like my example of walking without ever stumbling) as "impossible possibilities."[44] They are possibilities because they are within the range of what we can do, if nothing goes wrong, but impossible ones because something inevitably will go wrong at some point. Accomplishments beyond what we can do, even if nothing goes wrong, are more like impossible *im*possibilities.

For Niebuhr, the ideal human society (symbolized as the Kingdom of God), in which harmony of life with life is regulated by the ideal norms of the law of love, is an impossible possibility. It is possible in the sense that, at any moment, human beings are capable of acting from love, but impossible because it is inevitable that human society will be marked by sin. The impossible possibility is practically impossible and thus it is a mistake to take it as the simple aim of political and social reform. But, because it is not necessarily impossible (only realistically so), the ideal acts as the ground of prophetic critique; we are guilty when deviating from the ideal, even though achieving it, collectively and consistently, is not realistically possible. The

[44] See, for example Niebuhr, *An Interpretation of Christian Ethics*, 58.

ideal acts as an "indictment upon all of human life"[45] to the extent that all historical realities fall short of their ideal possibility. Were harmony of life with life absolutely impossible, we would not be guilty for failing to achieve it; were it practically possible, then some historical realities might not be guilty. The impossible possibility of the ideal sustains the creative tension needed for the moral life, in which things always can be better and always must be.

For an ideal possibility to work within the frame of Christian realism, it must be an impossible possibility. The sinless ideal (free from all sin, but with non-evil human exacerbations of natural disvalues) is a plausible candidate to be one. The ideal of zero exacerbations is not, and for two reasons. First, it is impossible even if nothing goes wrong, closer to jumping onto an apartment building than avoiding stumbling. Second, it is not in close enough relation to human experience. Regarding the first: in the last chapter, we saw that harmony of human interests is only any sort of possibility if human life is not finally tragic. It is possible because the destructiveness that matters comes only from sin and it is not necessary that we sin, only inevitable that we will. When we include an environmental perspective, as we saw, the fact that the very exercise of human freedom and creativity necessarily breaks harmonies of nature means environmental life is significantly tragic. Harmony of human life with human life is an impossible possibility because in any moment it is possible to act from uncorrupted freedom, and disharmony comes when freedom is corrupted. Harmony of human life with *non*human life is an impossible *im*possibility because environmental disruption comes even from the exercise of uncorrupted freedom.

Second, we need an ideal possibility that includes human goods. It has to be something we recognize as good and good for us. Robin Lovin argues that, "if there is a final unity, we must

[45] Niebuhr, 61.

also insist that people will recognize their own good in it, that they will choose it, or that they could choose it, over the partial and incomplete goods that satisfy their own interests."[46] The ideal possibility we imagine is not identical with present satisfactions, but it is recognizable as our good. For an ideal to be a possibility, even an impossible one, it has to be something people could choose, even though they will not do so consistently enough to make it a practical possibility. The requirement is not that we need a vision of an ideal possibility that will "work" to motivate people by being attractive enough. The requirement is that it be one that is formally suited to being chosen, even if no one ever chooses it. This means, minimally, it has to be related to our own experience and our own good closely enough to be a *possible* object of choice. Niebuhr writes that the, "Kingdom of God is always a possibility in history, because its heights of pure love are organically related to the experience of love in all human life."[47] The "heights of pure love" in the Kingdom of God are not known in their fullness in our experience, but they are related closely enough to our experience of love that we can recognize our good in them. This organic relation to experience is a necessary condition of possibility of choice. Any prospective environmental ideal has to be related closely enough to our own experiences to at least potentially appear good to us. It is not clear how an ideal of a complete lack of environmental impact can meet that goal, since it involves the self-erasure of the species, the suppression even of the will-to-live-truly, in addition to the will-to-power. To the extent it is not closely related to our experience of our good, it is an impossible impossibility.

Recognizing the difference between an impossible possibility and impossible *im*possibility allows us to see why we can reject the ideal of zero environmental destructiveness, but can still affirm as our imperfect environmental ideal the level of destructiveness that results

[46] Lovin, *Reinhold Niebuhr and Christian Realism*, 37.
[47] Niebuhr, *An Interpretation of Christian Ethics*, 31.

from a sinless society, even though both are "impossible." Human beings cannot exercise creativity and freedom in pursuit of goods integral to our existence without exacerbating disvalues in the natural world, even theoretically, and we cannot choose such an aim even if it were possible. The sinless ideal is theoretically possible, at least for individuals and particular acts, though it is not a realistic possibility for society. It is an ideal in which we can recognize our good. A world free from environmental sins is not a practical possibility, but it is an ideal possibility, and one that could be incorporated into a Christian realist environmental ethics.

The sinless ideal, construed in Simmons's vocabulary, is not the only way a Christian realist moral ideal could be articulated. I am not putting it forward as the only candidate. Its value is in its ability to show us what a Christian realist environmental ethics requires to make sense of the moral life. We have seen that it has to aim to make sense of realities discerned empirically (like evolution and ecological science), not to solve a motivational problem. We have to be able to imagine an ideal, which includes ecological processes, but which can be reconciled with and understood through existing beliefs about creation, God, goodness, eschatology, and so on (even if some of these need revision). We have to consider the implications for disparate doctrines that may at first seem unrelated to the change proposed. It has to make sense of non-evil human disruptions of nature, seeing them as part of God's created purposes. It has to include human goods and be recognizably our good. It has to be an impossible possibility, not an impossible impossibility. These requirements could conceivably be met in other ways, but this example demonstrates how a Christian realist environmental ethics needs all of them.

Once an ideal possibility is known, the interpretive work is not done. Because this is Christian realism, knowing the ideal does not tell us what to do. It tells us our moral obligations,

but it does not tell us how best to approximate the ideal. An ideal, sufficiently developed and articulated, can tell us our moral obligations in general terms, in the same way that the Kingdom of God relates to the commands to love our neighbors as ourselves, etc. What it cannot do is tell us how to structure an international climate deal, regulate aquifer depletion in the great plains, or reduce our reliance on the automobile. Lovin writes,

> Given the complexities of the human situation, a moral ideal alone cannot dictate what we ought to do and will not settle the outcomes of history. To devote oneself exclusively to determining and proclaiming the right thing to do is most probably to render oneself powerless in the actual course of events, and it may – in the unlikely event that the proclamation is heeded – prove horribly destructive, abolishing the necessary balances of power and unleashing potent fanaticisms. Attentiveness to the "factions and forces" at work in each specific situation is the key to effective resolution of conflicts, although the shifting equilibrium of power insures that each solution is only temporary and the creative work will have to begin again.[48]

The ideal cannot tell us what to do in the complex reality of human collective life. It can inspire and point us in a direction, but it cannot reveal the practical steps required of us. The final challenge in making moral sense of our situation is to know what we must do to best approximate the ideal, which likely differs from what we would do if we lived in the ideal community. We need practical wisdom about what moves people, what is possible and what is not, and how to avoid making things worse in our attempts to help. Our responsibilities are to minimize evil and best approximate the ideal, not to try to incarnate the ideal without concern for what works and what does not.

Here we can see the connections between Christian realism's three types of realism. Political realism's close attention to history and what drives actual choices led us to conclude that our environmental problems arise from sin, tragedy, and fallibility. The theological expectation that history is ironic allowed us to see the irony of our situation, which we can miss

[48] Lovin, *Reinhold Niebuhr and Christian Realism*, 6.

otherwise. This interpretation of the roots and structure of environmental history shaped our theological articulation of the ideal possibility, the sinless ideal, which can then form the drive and pull of the moral life. The ideal in hand, we see that acting responsibly, doing the right thing in our present context, requires politically-realist insight into what will work and what will not and the limits of all possible approaches. Theological hope that God is ultimately responsible for the completion and perfection of history and the establishment of peace and justice allows us to pursue these measured political aims without the anxieties and misconceptions that result from making the ideal a simple political goal. A Christian realist environmental ethics succeeds in bringing clarity and coherence to the complexities of our situation to the extent these three realisms work together to enlighten and limit one another.

Epilogue

> *Modern man lacks the humility to accept the fact that the whole drama of history is enacted in a frame of meaning too large for human comprehension or management. It is a drama in which fragmentary meanings can be discerned within a penumbra of mystery; and in which specific duties and responsibilities can be undertaken within a vast web of relations which are beyond our powers.*
>
> *A sane life requires that we have some clues to the mystery so that the realm of meaning is not simply reduced to the comprehensible processes of nature. But these clues are ascertained by faith, which modern man has lost. So he hovers ambivalently between subjection to the "reason" which he can find in nature and the "reason" which he can impose upon nature. But neither form of reason is adequate for the comprehension of the illogical and contradictory patterns of the historical drama, and for anticipating the emergence of unpredictable virtues and vice. In either case, man as the spectator and manager of history imagines himself to be freer of the drama he beholds than he really is; and man as the creature of history is too simply reduced to the status of a creature of nature, and all of his contacts to the ultimate are destroyed.*
>
> *Reinhold Niebuhr,* The Irony of American History[1]

This dissertation began with the question of the place of theology in responding to our environmental situation. We saw how the cosmological approach overstates the importance of theology in causing and correcting our environmental problems. Its skeptics can be at a loss to name any theological contribution to environmentalism. What followed has been a sustained attempt at a potential answer: theology can help us to make sense of our situation, to understand its limits and possibilities by coordinating our thinking into a coherent whole. I have argued that the value of theology is not only in its evocative power to change the world, but in its depth and ability to account for the complexity and mystery of the human situation. It can be a source of "clues" to that mystery, which the "sane life requires."[2]

Too often environmental theorists seek to reduce human beings to creatures who can be directed into simple harmony with our biotic community, while at the same time elevating us into creators of history, capable of directing ourselves into such harmony. We credit to ourselves

[1] Niebuhr, *The Irony of American History*, 88.
[2] Niebuhr, 88

the freedom to restore our natural existence, while denying the reality that our freedom makes immersion within natural processes impossible. Too many theorists worry about ways of thinking that remove humans from nature, while embracing theories of agency that remove nature from humans.

I have argued that a Christian realist perspective on our environmental situation can clarify the task, aims, and prospects for Christian environmental ethics. It cannot disclose the full content of our situation, of course, but it can offer clues to the mysteries involved. For example, Christian realism cannot disclose the content of our environmental history. It can, however, give us the clue that our that history is likely deeper and more ambiguous than what we find in an account like Lynn White's. That skepticism of simple explanations prompted a turn to other sources of insight, like archeology and paleo-genetics. The historical investigation which followed revealed a picture that gave new plausibility to a tragic account of the human condition, which called for an adjustment to Christian realism's account of that condition. This led to an interpretation of the irony of environmental history and the need for a guiding ideal possibility that includes the unavoidability of environmental disruption. This drove further theological revisions. Throughout, theology showed itself to be relevant to, but not directive of, our interpretation of our condition.

The irony of this approach is that whatever insight we gained into the movement and limits of our environmental history was derived from the belief that, "the whole drama of history is enacted in a frame of meaning too large for human comprehension or management."[3] That it is too large for comprehension directed us to supra-rational, theological symbols that can help us find coherence in what is beyond our ability to specify rationally. That it is too large for

[3] Niebuhr, 88

management prompted humility about the mastery of history and chastened our estimate of the extent of human control of environmental outcomes, past, present, and future. Humility before the incomprehensibility of the problem led as well to willingness to accept "fragmentary meanings" in light of which "specific duties and responsibilities can be undertaken within a vast web of relations which are beyond our powers."[4] We cannot but make meaning of our lives in relation to an ideal, and this is true of our environmental lives as well. In the absence of a complete picture of that ideal, we have to wrestle with what we already know to be true, revising each in relation to the other. The resulting vision of a moral and theological ideal was provisional and fragmentary, but humility requires that we attempt to act responsibly with what clarity is possible. This interpretation succeeds, on Christian realist terms, to the extent it contributes to a "source and center of an interpretation of life, more adequate than alternative interpretations, because it comprehends all of life's antinomies and contradictions into a system of meaning and is conducive to a renewal of life."[5] It is impossible to show it meets that standard internally. It succeeds or fails to the extent it helps bring coherence and renewal to the reader.

Further research is needed in a variety of areas. This dissertation is more of an apology or prolegomenon for Christian realist environmental ethics than a complete statement of one. It at most shows the promise of a Christian realist perspective. The most obvious need is to articulate a fuller normative and political framework. Work is needed to specify the norms that govern our obligations in environmental context and what a responsible environmental politics looks like, given the account of the powers, propensities, and limits of human beings laid out here. A fuller treatment of the relation of human nature and history is also needed. A Christian realist response to accounts of the challenges specific to climate change, like Gardiner's *A Perfect Moral Storm*

[4] Niebuhr, 88
[5] Niebuhr, *Faith and History*, 165.

would likely prove useful as well. The hope here is that this project establishes the promise and potential fruitfulness of such a research trajectory.

Bibliography

Berry, Thomas. *The Great Work: Our Way into the Future*. Reprint edition. New York: Broadway Books, 2000.

Bureau, US Census. "Historical Estimates of World Population." Accessed July 10, 2019. https://www.census.gov/data/tables/time-series/demo/international-programs/historical-est-worldpop.html.

Cannon, Katie G. "Moral Wisdom In The Black Women's Literary Tradition." *The Annual of the Society of Christian Ethics* 4 (1984): 171–92.

Conradie, Ernst M. *The Earth in God's Economy: Creation, Salvation and Consummation in Ecological Perspective*. Vol. Volume 10. Studies in Religion and the Environment ; Zürich: Lit, 2015.

DeWitt, Calvin B. "Behemoth and Batrachians in the Eye of God." In *Christianity and Ecology: Seeking the Well-Being of Earth and Humans*, edited by Dieter T. Hessel and Rosemary Radford Ruether. Cambridge, Mass: Center for the Study of World Religions, 2000.

Dewitt, Calvin B., Richard A. Baer Jr, Thomas Sieger Derr, Vernon J. Ehlers, James W. Skillen, and Luis E. Lugo. *Caring for Creation: Responsible Stewardship of God's Handiwork*. Grand Rapids, Mich: Baker Pub Group, 1998.

Diamond, Jared. *Guns, Germs, and Steel: The Fates of Human Societies*. 1 edition. W. W. Norton & Company, 2017.

Elshtain, Jean Bethke. "Thinking about War and Justice." *Religion and Culture Web Forum*, May 2003. https://divinity.uchicago.edu/sites/default/files/imce/pdfs/webforum/052003/commentary.pdf.

Emmerich, Susan Drake. *Faith-Based Stewardship and Resolution of Environmental Conflict: An Ethnography of an Action Research Case of Tangier Island Watermen in the Chesapeake Bay*. University of Wisconsin--Madison, 2003.

"Environmental Ethics > Pathologies of Environmental Crisis – Theories and Empirical Research (Stanford Encyclopedia of Philosophy)." Accessed July 11, 2018. https://plato.stanford.edu/entries/ethics-environmental/theories-research.html.

Farley, Edward. *Good and Evil: Interpreting a Human Condition*. 1st edition. Minneapolis: Fortress Press, 1990.

Gardiner, Stephen M. *A Perfect Moral Storm: The Ethical Tragedy of Climate Change*. 1 edition. New York: Oxford University Press, 2011.

Goldstein, Valerie Saiving. “The Human Situation: A Feminine View.” *The Journal of Religion* 40, no. 2 (1960): 100–112.

Harari, Yuval Noah. *Sapiens: A Brief History of Humankind*. Reprint edition. New York: Harper Perennial, 2018.

Hedlund-de Witt, Annick, Joop de Boer, and Jan J. Boersema. “Exploring Inner and Outer Worlds: A Quantitative Study of Worldviews, Environmental Attitudes, and Sustainable Lifestyles.” *Journal of Environmental Psychology* 37 (March 1, 2014): 40–54. https://doi.org/10.1016/j.jenvp.2013.11.005.

Holt, Douglas B. “Constructing Sustainable Consumption: From Ethical Values to the Cultural Transformation of Unsustainable Markets.” *The Annals of the American Academy of Political and Social Science* 644 (2012): 236–55.

Jenkins, Willis. “After Lynn White: Religious Ethics and Environmental Problems.” *Journal of Religious Ethics* 37, no. 2 (June 1, 2009): 283–309.
———. *The Future of Ethics: Sustainability, Social Justice, and Religious Creativity*. Washington, DC: Georgetown University Press, 2013.

Kaars, Sander van der, Gifford H. Miller, Chris S. M. Turney, Ellyn J. Cook, Dirk Nürnberg, Joachim Schönfeld, A. Peter Kershaw, and Scott J. Lehman. “Humans Rather than Climate the Primary Cause of Pleistocene Megafaunal Extinction in Australia.” *Nature Communications* 8 (January 20, 2017). https://doi.org/10.1038/ncomms14142.

Keller, Catherine. “No More Sea: The Lost Chaos of the Eschaton.” In *Christianity and Ecology*, edited by Dieter Hessel and Rosemary Radford Ruether. Harvard University Press, 2000.

Kerr, Richard A. “Great Oxidation Event Dethroned?” *Science* 324, no. 5925 (2009): 321–321.

Krech, Shepard. *The Ecological Indian: Myth and History*. New York: W. W. Norton & Company, 2000.

Leo XIII. “Rerum Novarum.” In *Seven Great Encyclicals*. Glen Rock, NJ: Paulist Press, n.d.

Leopold, Aldo. *A Sand County Almanac*. Reprint edition. New York: Ballantine Books, 1986.

Lovin, Robin. *Reinhold Niebuhr and Christian Realism*. Cambridge: Cambridge University Press, 1995.

Mann, Charles C. “1491.” The Atlantic, March 1, 2002. https://www.theatlantic.com/magazine/archive/2002/03/1491/302445/.
———. *1491: New Revelations of the Americas Before Columbus*. New York: Knopf, 2005.

Martin-Schramm, James B., and Robert L. Stivers. *Christian Environmental Ethics: A Case Method Approach*. Maryknoll, N.Y: Orbis Books, 2003.

McFague, Sallie. *Models of God*. Highlighting edition. Philadelphia: Fortress Press, 1987.

Merchant, Carolyn. *The Death of Nature: Women, Ecology, and the Scientific Revolution*. New York, N.Y.: HarperOne, 1989.

Miller, Alexander. "Realism." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta, Winter 2014., 2014. http://plato.stanford.edu/archives/win2014/entries/realism/.

Miller, Richard Brian. *Interpretations of Conflict: Ethics, Pacifism, and the Just-War Tradition*. Chicago: University of Chicago Press, 1991.

Mohler, Albert. "The Briefing 06-02-17 - AlbertMohler.Com," June 4, 2017. https://web.archive.org/web/20170604135618/http://www.albertmohler.com:80/2017/06/02/briefing-06-02-17/.

Moltmann, Jürgen. *God in Creation: A New Theology of Creation and the Spirit of God*. 1st U.S. ed edition. San Francisco: Harper & Row, 1985.
———. *The Future of Creation*. Annotated edition edition. Philadelphia: Augsburg Fortress Publishers, 2000.

Niebuhr, Reinhold. *An Interpretation of Christian Ethics*. Reprint edition. Louisville, Kentucky: Westminster John Knox Press, 2013.
———. *Faith and History, a Comparison of Christian and Modern Views of History*. New York: Charles Scribner's sons, 1949.
———. *Moral Man and Immoral Society: Study in Ethics and Politics*. Louisville: Westminster John Knox Press, 2002.
———. *The Children of Light and the Children of Darkness: A Vindication of Democracy and a Critique of Its Traditional Defense*. Chicago ; London: University Of Chicago Press, 2011.
———. *The Irony of American History*. University of Chicago Press, 2010.
———. *The Nature and Destiny of Man: A Christian Interpretation*. Vol. 1. 2 vols. Louisville, Ky: Westminster John Knox Press, 1996.
———. *The Nature and Destiny of Man: A Christian Interpretation*. Vol. 2. 2 vols. Louisville, Ky: Westminster John Knox Press, 1996.

O'Brien, Kevin J. *The Violence of Climate Change: Lessons of Resistance from Nonviolent Activists*. Georgetown University Press, 2017.

Oppenheimer, Stephen. *The Real Eve: Modern Man's Journey out of Africa*. New York, N.Y.: Carroll & Graf, 2003.

Orr, David W. *Ecological Literacy: Education and the Transition to a Postmodern World*. Fir edition. Albany: SUNY Press, 1991.

Pihkala, Panu. *Early Ecotheology and Joseph Sittler*. LIT Verlag Münster, 2017.

Pires, Mathias M., Mauro Galetti, Camila I. Donatti, Marco A. Pizo, Rodolfo Dirzo, and Paulo R. Guimarães. "Reconstructing Past Ecological Networks: The Reconfiguration of Seed-Dispersal Interactions after Megafaunal Extinction." *Oecologia* 175, no. 4 (2014): 1247–56.

Ponting, Clive. *A New Green History of the World: The Environment and the Collapse of Great Civilizations*. New York: Penguin Books, 2007.

Rasmussen, Larry L. *Earth Community, Earth Ethics*. Maryknoll, N.Y.: Orbis Books, 1996.

Rosati, Connie. "Moral Motivation." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta. Vol. Winter 2016 edition, n.d. https://plato.stanford.edu/archives/win2016/entries/moral-motivation/.

Sale, Kirkpatrick. *After Eden: The Evolution of Human Domination*. Durham: Duke University Press, 2006.

Sandom, Christopher, Søren Faurby, Brody Sandel, and Jens-Christian Svenning. "Global Late Quaternary Megafauna Extinctions Linked to Humans, Not Climate Change." *Proceedings: Biological Sciences* 281, no. 1787 (2014): 1–9.

Sayre-McCord, Geoff. "Moral Realism." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta, Fall 2017. Metaphysics Research Lab, Stanford University, 2017. https://plato.stanford.edu/archives/fall2017/entries/moral-realism/.

Schweiker, William. *Responsibility and Christian Ethics*. Cambridge University Press, 1999.

"Sexual Selection - Biology Encyclopedia - Body, Examples, Process, DNA, Life, Used, Make, Species, Form." Accessed July 17, 2019. http://www.biologyreference.com/Se-T/Sexual-Selection.html.

Sideris, Lisa. *Environmental Ethics, Ecological Theology and Natural Selection*. New York: Columbia University Press, 2003.

———. "Pragmatism, Ethics, and the Disciplines." *Soundings: An Interdisciplinary Journal* 95, no. 2 (2012): 179–86.

Sidgwick, Henry. *The Methods of Ethics*. Hackett Publishing Company, Inc., 1981.

Simmons, Fred. "Creation, Ecology, and Wesleyan Theology." Denver, CO, 2018.

Smith, Geoff M. "Neanderthal Megafaunal Exploitation in Western Europe and Its Dietary Implications: A Contextual Reassessment of La Cotte de St Brelade (Jersey)." *Journal of Human Evolution* 78 (January 1, 2015): 181–201. https://doi.org/10.1016/j.jhevol.2014.10.007.

Steadman, David W., Nancy A. Albury, Brian Kakuk, Jim I. Mead, J. Angel Soto-Centeno, Hayley M. Singleton, and Janet Franklin. "Vertebrate Community on an Ice-Age Caribbean Island." *Proceedings of the National Academy of Sciences of the United States of America* 112, no. 44 (2015): E5963–71.

Taylor, Paul W. *Respect for Nature: A Theory of Environmental Ethics*. Princeton, N.J: Princeton University Press, 1986.

Walter, Chip. *Last Ape Standing: The Seven-Million-Year Story of How and Why We Survived*. First edition. Walker & Company, 2013.

White, Lynn, Jr. "The Historical Roots of Our Ecologic Crisis." *Science*, New Series, 155, no. 3767 (March 10, 1967): 1203–7.

Woodward, P. A. "The Importance of the Proportionality Condition to the Doctrine of Double Effect: A Response to Fischer, Ravizza, and Copp." *Journal of Social Philosophy* 28, no. 2 (1997): 140–52. https://doi.org/10.1111/j.1467-9833.1997.tb00382.x.

Yordy, Laura Ruth. *Green Witness: Ecology, Ethics, and the Kingdom of God*. Eugene, Or.: Wipf & Stock Pub, 2008.

Young, Hillary S., Douglas J. McCauley, Mauro Galetti, and Rodolfo Dirzo. "Patterns, Causes, and Consequences of Anthropocene Defaunation." *Annual Review of Ecology, Evolution, and Systematics* 47, no. 1 (2016): 333–58. https://doi.org/10.1146/annurev-ecolsys-112414-054142.