

Introduction

Environmental Ethics as Historical

What are the right actions to take regarding our natural environment? In particular, what should be done in response to the ongoing findings of scientists regarding the environment and climate change? What ethical principles should guide us in answering these and related questions? We live in a time of intense conflict regarding the right courses of action to take regarding the natural environment and the changing climate. While there is now a widespread consensus that substantial new actions must be taken, there are also strong and influential dissenting voices. How are we to sort through these intense conflicts over the right course forward?

Over the past several decades, these conflicts played out intensely in several parts of the world, including presidential politics in the United States. In September of 2016 President Barack Obama committed the United States to join the other 195 signatories to the UN Paris Agreement to reduce greenhouse gas emissions.¹ Shortly after his inauguration a year later, President Donald Trump reversed that commitment, announcing that the US would withdraw from the Paris Agreement. In addition to withdrawing from the Paris Agreement, the Trump administration took many other steps to block or reverse initiatives that would have helped to realize this goal, as well as numerous other environmental protections. These policies were in turn again reversed by his successor, President Joseph Biden.

It would be a mistake, however, to assume that the election of Joseph Biden has resolved the conflicts. Climate change denial and opposition to environmental protection did not begin with Donald Trump. His opposition to environmental and climate control policies, and even

his publicly expressed doubts about the reality of climate change and about the role of human causation in it, appealed to large numbers of voters and played a major role in his election. Trump appealed to a significant portion of the electorate in the United States that had been profoundly influenced by a widespread network of climate change denial, which had been growing well before the election of 2016. (For further details, see chapters 15, 16, and 17.)

Although the election of President Biden, the US return to the Paris Agreement, and the reversal of many of the Trump-era policies were important events favoring one strong side of the conflict, the underlying culture of climate change denial and opposition to environmental protections has not gone away. These conflicts need to be addressed on many levels. While I personally side with those who affirm the reality of the grave threats to our planet and the ethical urgency for appropriate actions, this book contends that it is just as important to attain critical understanding of the underlying ethical reasons for these claims. This book therefore endeavors to address some but certainly not all of the deeper philosophical and cultural issues that would contribute to attaining this critical understanding.

I will argue that knowledge of the history of ethical and scientific thought is essential to attaining that critical understanding of the foundations needed for ethical responses to environmental and climate change. This claim may sound puzzling if not preposterous to many readers. What could history have to do with environmental and climate change ethics—or any form of ethics, for that matter? After all, it seems that history is about what happened in the past, about things long dead and gone. Ethics, and especially environmental ethics, is about what needs to be done now. Present environmental crises are so serious that we do not have time to waste on such antiquarian curiosities. In fact, if people did know all the complexities of the history of environmental scientific and ethical thought, would it not only confuse them and enervate campaigns that press for political action?

But history is not dead in the past. Countless thoughts, values, beliefs, and actions from the past continue to influence us today. We inherit the achievements of our predecessors as well as their biases and the consequences of their misdeeds. It is important, therefore, to understand the many factors from the past that live on in us today. In this regard I am in fundamental agreement with historian Spencer Weart, who writes that only by “following how scientists in the past fought their

way through the uncertainties of climate change, [can we] judge why they speak as they do today.”² There is a widespread consensus among scientists today about the scientific facts of environmental degradation and climate change. But that consensus did not always exist. Their consensus rests upon the history of more than a century of scientific research. In order to have a solid grounding for ethical actions based on these scientific advances, it is therefore essential to have some grasp of how scientists arrived at them.

Another objection may be raised against the idea that history of ethical thought and of environmental science are essential to environmental ethics. The historical study of ethics, it may be objected, will rob it of its austere moral authority. After all, it seems that moral claims (environmental and otherwise) must be the same for all times and places, and this has certainly been the position of some of the most important ethical thinkers. History seems to reduce ethics to ethical opinions that happened to be held in different historical periods and different cultural settings, thus undermining the normative claims of ethics even in the present. If ethical claims are no more than the products of their own historical epoch, then even present ethical norms must be just as relative as those of the past, and like them, present ethical claims will soon pass away. Why, then, should they be taken seriously, as ethically compelling?

I offered a general answer to such questions in the last two chapters of my book, *The Ethics of Discernment*. There I proposed a method for ethics based upon the method that Bernard Lonergan developed for theology—namely, his method of eight integrated “functional specialties.”³ This is a method for critically evaluating what we have received from the past—especially the deep historical sources of our contemporary conflicts—and for discerning the best courses of action heading into the future. It is a method in which the critical study of history and its conflicts plays a fundamental role. At the time I wrote *The Ethics of Discernment*, I knew that a concrete illustration would be needed to flesh out what in those chapters I proposed only in a general way. This book is intended to provide that concrete illustration by applying that method to the field of environmental and climate change ethics. In doing so, I intend to show why it is of ethical importance to have a critical understanding of the history of environmental and climate change science, as well as of the developing ethical thought about environmental issues.

There is a prejudice that we have inherited from Enlightenment thinking, a prejudice especially prominent in American culture. It is

the prejudice that one ought to think for oneself, and not rely on the ideas of others, especially those from the past.⁴ Though many Americans will readily regard this prejudice as a normative ideal, we must not forget that it blinds us to an important reality: we always rely on some ideas that we received from others when we deliberate, whether we recognize this or not. We may be intently resisting the influence of some past ideas, but inevitably we will fail to notice the more subtle influences of others. Even the people who claim to be freely thinking for themselves are in fact tacitly relying on unacknowledged ideas from the Enlightenment about what it means to be a “free thinker.” No one is free of prejudices and traditions, good or bad; they are just more or less implicit in our thought and action. Critical thinking and authentic ethical actions, therefore, do not come about by completely detaching oneself from all thoughts inherited from the past, for this is impossible. Authentic thinking and action require not separation from but critical evaluation of what one has inherited from the past.

This is the task for which Bernard Lonergan developed his method of eight functional specialties. His method is really an extension and a self-critical refinement of what people already do spontaneously as they evaluate ideas from the past, although they do not always do so carefully or without bias. All of our thinking—whether ordinary commonsense, scientific, or thinking about matters of ethics—utilizes ideas we have absorbed from others who came before us. Among other things, people act toward the future on the basis of what they believe about the past, beliefs that are largely inherited from others. This means that both environmental science and environmental ethics are intrinsically historical, whether we wish this to be the case or not. We inherit both scientific and ethical ideas and attitudes from those who went before us. Often we absorb them unreflectively and rely upon them in the decisions and actions we take. Scientists utilize what they have learned from their predecessors as they conduct their research. Ordinary people use ideas they inherited in their ethical reflections about how to conduct their daily lives. Both scientists and nonscientists alike inherit a mixture of ideas and values, some correct and others erroneous, often without explicit awareness that this is happening. Hence a method that operates with critical self-awareness of this historicity is essential to achieve genuine ethical normativity. This is a book about what we have inherited and the ways it has and has not affected our ethical deliberations and actions with regard to the environment.

In *The Ethics of Discernment* I argued that authentic ethics is the attentive, intelligent, reasonable, responsible, and loving response to what is known about the facts of our concrete circumstances. This means that authentic ethical action cannot ignore objective factual knowledge of real situations. Science contributes mightily to objective knowledge of facts; hence, exactly what is known scientifically about our natural environment and climate change, the degree of probability of that knowledge, and the time it became known are all essential to environmental ethics. This is one more reason why the history of environmental and climate change science is crucial to ethics.

Knowledge of history is also relevant to environmental and climate change ethics for still another reason. Ethics itself evolves. Yet its evolution is not a matter of pure progress. The history of ethics is permeated by conflicts about what is good and right. The history of conflicting ethical views bequeaths an evolving set of conflicting norms from one generation to the next. Therefore, if actions are to be ethical, they have to rest upon critical assessment not only of historically evolving scientific knowledge, but also critical assessment of the evolving and conflicting norms that have been handed down and form the basis for thinking and deciding about ethical responses.

Lonerger's method endeavors to make us more self-aware and make more effective our nonmethodical, spontaneous evaluation and use of inherited ideas. This is to say, he intended to make ordinarily critical evaluation more methodical.⁵

Like ethics in general, the history of environmental and climate change ethics is fraught with conflicts. Conflicts arise in the public domain as well as among scientists themselves. The conflicting versions that people believe about their past histories affect whom they trust and whom they distrust in the present. In addition, conflicts also arise among historians who study and endeavor to understand and document the historical progressions of thought, action, and conflict among laypersons and scientists alike. This means that any adequate method of environmental ethics would need to address the problem of the persistence of conflict in history. Lonergan's method does this, not in the functional specialty of History itself, but in the specialties of Dialectic and Foundations that are connected to it.⁶

The following is a very brief outline of this book. By relying on Lonergan's method and the works of numerous historians, I will show how, over the course of history, scientific and ethical thought about

the environment and the changing climate have run up against two moments of extreme crisis that have left us at seemingly irresolvable impasses. The first is a crisis of how to properly understand and value the environment as a whole. The second crisis is the denial of scientific knowledge about climate change.

First, scientific and ethical thought about the environment have pushed beyond the limitations of certain utilitarian frameworks toward a more holistic approach. I will show that the important task of properly formulating this more holistic framework has proven exceedingly difficult and has been fraught with conflicting opinions. I will argue that the difficulties of formulating a coherent articulation of this holistic approach has led to many of the divisions and conflicts in our present situation—dividing those on the “left” who are deeply committed to preserving a pristine nature from human encroachment from those on the “right” who advocate meeting human wants and needs in an economically efficient way. This book intends both to trace the movement that led up to this crisis and to offer a more adequate formulation of holism by drawing on Lonergan’s own work in *Foundations*. This formulation will show the integral connections among the values of both human and nonhuman nature.

Second, I will also show that the history of human thought about climate change ran up against a grave roadblock in a controversy regarding uncertainty and probability in scientific knowledge. This philosophical problem severely undermined efforts to address the perils of climate change in profound and widespread ways. Once again I will offer contributions from Lonergan’s own *Foundational* work regarding probable knowledge that offer a way beyond this impasse.

Rather than delaying direct engagement with the history of environmental science and ethical frameworks, I have deferred a detailed, technical discussion of Lonergan’s method to an appendix: “A Method for Environmental Ethics.” I trust that the concrete applications of that method in the main chapters of this book will bring clarity to that technical exposition in the appendix, and that the technical exposition will answer questions about the method that arise out of the body of the main chapters.

It is my hope that the approach in this book provides something of value to two different kinds of readers. First, for those concerned with ethical responses to the challenges presented by our changing environments, I offer some new ideas that integrate many of the previous

advances in thinking about environmental ethics and environmental science. I also engage some of the crucial conflicts, identify their most fundamental roots, and point to ways toward resolutions. Second, for those interested in Lonergan's method, it is my intention to provide a model of how it can be applied and adapted in ways that are beneficial to fields besides theology.

This book is divided into two parts. Part 1 concerns the history and evaluation of environmental ethics and science. Part 2 focuses on the history and evaluation of the science and ethics of climate change.

By "environmental ethics and science," I mean the human endeavors to understand and act responsibly with regard to limited terrestrial domains, such as bodies of water, the air, areas of land, forests, prairies, tundras, ecosystems of species of plants and animals in limited regions, and the human dependencies upon and interactions with each of these. Such are the topics of part 1.

Ethical thought about these matters has been part of human history from time immemorial. But with the advent of the Industrial Revolution, human impacts upon environments began to accelerate and to raise new kinds of questions for scientific study. The results of these scientific studies, in turn, have begun to raise new kinds of ethical questions about human impact on climates.

While environments are specific and local, climate is global. It is not limited to the environments of particular regions or domains or ecosystems. The climate in one area of the planet is dynamically linked to climate in all other areas. Climate especially concerns the distributions of heat and of water in its liquid, vapor, or frozen forms. As such, climate sets the conditions under which all other environmental domains function. Climate began to change dramatically with the onset of the Industrial Revolution. However, unlike environmental impacts that began to appear almost immediately, the nature of the Industrial Revolution's impacts on climate were initially hidden from view. Scientific knowledge of climate change lagged two centuries behind the reality of its onset. Furthermore, scientific understanding of climate itself has changed dramatically over the past century. As such, it poses a different order of ethical challenge than even that posed by the sciences of environmental impacts. These issues are the focus of part 2.

Environmental ethics, therefore, has to be integrated with climate change ethics. I have chosen to treat climate change ethics second to facilitate the task of integrating these two dimensions—environmental

and climate change ethics. The history of environmental ethics reveals the importance of understanding and valuing not merely this or that component of an environment, but environments as wholes that include human as well as nonhuman components. The history of climate change ethics opens out into understanding and valuing a far more comprehensive and dynamic whole that incorporates all the lesser environmental wholes. Human scientific and ethical thought, therefore, have shown a marked movement toward wholeness.

With the help of Lonergan's method, I will show how an adequate holistic ethics is not only possible but already implicitly operative in decisions being made and actions being taken for and against the environment and the climate. The goal of this book is to uncover, account for, and reverse what is mistaken in our past and current ethical responses to the environment and climate, but it is further meant to identify, affirm, and develop the good that is already being thought and done.