

Introduction

What is the right thing to do? Answers might come in the form of responses to particular ethical controversies – abortion, capital punishment, what to do about world hunger. Or they might focus on whether ethical judgements are rooted in universal principles, compassionate interpersonal connection, attempts to create the most happiness and least suffering, obedience to God, or the pursuit of spiritual enlightenment.

In the context of the environmental crisis, this book will address both particular questions (e.g., How responsible are ordinary people for pollution?) and the more general concerns of whether and how environmental ethics are rooted in rights, emotional connection, concern for suffering, or the development of environment benefiting virtues like gratitude and compassion.

Yet there are already many fine books that cover such issues. Why write – or read – this one?

Because what is too often ignored or taken for granted in these discussions is a more fundamental question: Can historical situations arise in which basic preconditions of moral action either do not exist or are significantly weakened? When it is very hard or even close to impossible to be – as almost all of us want to be – morally good? Before we decide what we ought to do, what our obligations are, or how a virtuous person would act, we must believe that we can answer these questions reasonably and act on what we know.

My first concern in this book, and one that will run through all the particular discussions, is with a general, widespread moral malaise that afflicts, in varying degrees, all of us – whether we realize it or not. It is the effect of the environmental crisis on our capacity to think and act morally:

to trust in our own ability be good people. And this is not just a question about each of us as individuals. Clearly many environmental issues – energy policy, laws governing pollutants, how children are educated about the moral meaning of nature – require collective responses. It is not only our personal morality that is at stake, but also the ethical meaning of our society, our culture, our entire civilization.

And that is why much of what I will offer here will be questions, dilemmas, and difficult choices. Of one thing only I am sure: Moral life in the face of environmental crisis offers few, if any, easy answers.

I

Environmental Crisis and Moral Life

I A CRISIS OF THE BODY AND THE WORLD

In this Internet age the facts are not hard to find. They are, however, emotionally very difficult to take in.

So let us begin with a few typical environmental facts, just to set the emotional tone and create a context for what I am saying about moral life today.

- 2017 was the twenty-first consecutive warmer-than-average year since 1997. During the fall of 2016, the Arctic recorded temperatures 30 degrees higher than normal.¹
- In a 2004 St. Louis study of newborns, the average baby was found with 187 toxic substances in their blood.²
- The World Health Organization recently estimated that three to six million deaths per year are attributable in whole or part to air pollution.
- A precipitous drop in insect populations, estimated to be as high as 75 percent, indicates potentially catastrophic effects on human agriculture in particular and plant species life in general.

¹ “Assessing the U.S. Climate in 2017,” National Centers for Environmental Information Website. Accessed January 16, 2018, www.ncei.noaa.gov/news/national-climate-201712.

² “Body Burden: The Pollution in Newborns,” Environmental Working Group Website. Accessed December 15, 2017, www.ewg.org/research/body-burden-pollution-newborns#.WjQJJ1WnGpo.

- In the United States 40–50 percent of rivers and lakes cannot support life.³
- Oceanic dead or low-oxygen zones now cover areas larger than North America, have dramatically increased over the last 50 years, and seriously threaten the ocean’s ability to sustain life.⁴
- Human activity is leading to the fastest and largest die-off of species in seventy million years – approximately one species every 11 minutes.
- In August 2017, during Hurricane Harvey, some towns received 5 feet of water in less than 48 hours.
- Noise pollution, outstripping population growth, has many negative physical and psychological effects on people and animals. Significantly worse in minority and poor communities, such pollution can lessen children’s ability to learn, worsen high blood pressure, increase risk of strokes, and degrade people’s emotional states.⁵
- Rainforests, overburdened by what we have done to the atmosphere, are now giving off rather than absorbing CO₂.
- Somewhere between 700 million and a billion people live in densely packed urban slums that are part of the megacities resulting from global urbanization. While racial minorities in the United States suffer from unjustly environmental ills, conditions in developing countries in Latin America, Africa, and Asia can be staggeringly bad. Examples are shanty towns literally built on or immediately next to gargantuan toxic facilities, so little sanitation that excrement is an immediate presence of daily life, people charged a significant percentage of their meager daily income for clean water or a toilet, housing sites in areas weakened by overdevelopment and correspondingly liable to flood or landslide. In short, there is an immediate and overwhelming level of human-generated pollution in the daily lives of somewhere between 10 and 20 percent of the human race.⁶

³ Water Benefits Health Website. Accessed December 15, 2017, www.waterbenefitshealth.com/water-pollution-facts.html.

⁴ Denise Breitberg, et al., “Declining Oxygen in the Global Ocean and Coastal Waters,” *Science Magazine* Website. Accessed January 30, 2018, <http://science.sciencemag.org/content/359/6371/eaam7240>.

⁵ Florence Williams, “Sound Effects,” *Mother Jones*, January/February 2017. Stephan Stansfield, “How Noise Pollution Affects Your Health,” Independent Website. Accessed October 9, 2017, www.independent.co.uk/life-style/health-and-families/features/how-noise-pollution-can-affect-your-health-a6853746.html.

⁶ Mike Davis, *Planet of Slums* (London: Verso, 2007).

These facts, and many more, signal a transformation of both the planet and our own bodies. Or, we might say: it is a decisive transformation of the world, and because our bodies are part of that world, of our bodies as well.

These facts tell us is that the world is neither stable nor safe. The trees and birds, the water and the fish, may be poisoned, or contain poisons. Our own breasts and prostrates, afflicted with carcinogens, may cause our deaths. And so much grace that we've loved – the previously crystal clear ocean polluted with oil, the mountaintop littered with broken glass – has been destroyed, wounded, or threatened.

These reflections make us anxious, so let's have a nice glass of water to help us calm down.

But is there lead in our drinking water – like there was discovered in Flint, Michigan, and which some estimate is common in 10 percent of American communities?⁷ The old pipes could be dangerous, better not risk it. And whom can you really trust to tell you the truth about those pipes? Authorities in Michigan knew for years that the Flint water was not safe but didn't inform the public.

Let's have a nice long drink from a water bottle instead – either the flimsy plastic ones that hold mass distributed “spring” water or the sturdier ones we carry around ourselves and fill with filtered water. But wait a minute, it seems that the plastic bottles may contain BPA, a carcinogen that leaches into the water from the plastic. So much for Poland Springs or Fiji Water. But our REI super-duper water bottle promises to be BPA free. Is it? How could we know? Keep in mind that for years no one knew that BPA was dangerous. Could there be something else they are missing in the water bottle, the one from which we just drank?

Forget the water. It's a nice day, let's go outside and relax, and sit under this beautiful maple tree. It's so hot. Unusually hot. But the shade is great. But, wait a second, what are all these black spots on the maple tree's leaves? They don't look too healthy. Could they come from the drought we've been having? Will the tree make it through the weather that is warmer from climate change? Will it succumb to one of the

⁷ Grennan Millikan, “Lead Contaminated Water Is Much More Common Than You Think,” Motherboard Website. Accessed December 15, 2017, https://motherboard.vice.com/en_us/article/yp3kg5/lead-contaminated-drinking-water-is-much-more-prevalent-than-you-think.

increasingly powerful storms? Should we worry about all the trees of childhood, the ones we sheltered under on hot days, climbed when we got older and stronger, whose leaves we raked after admiring their brilliant colors – how long will they resist illnesses to which they are made more vulnerable by global warming?

Why do we cough so much in summer? What lingers in the hazy air that is labeled in weather reports as “unhealthy”?

What is the sticky black substance that sticks to our feet at the beach (it is oil, from oil spills). What must it be like, around the Cape of Good Hope off extreme Southern Africa, where overloaded oil tankers routinely deal with bad weather by dumping excess oil into the oceans?

When the doctor looks at the x-ray a second time, clears his throat, and tells us we have to talk, do we think back to what might have been in the water, the air, the food?

When our child is diagnosed with autism, or attention deficit hyperactivity disorder (ADHD), or neurological deficits, or intellectual delay, or cancer – do we wonder what was in the toys/crib/carpet/wood panels that might have affected her genes or lungs or brain? Especially, that is, if we are aware that “Trillions of pounds of tens of thousands of toxic chemicals pour into the environment and into the products in our homes, workplaces, and schools . . . no child can escape exposure . . . no matter how wealthy their parents, how large their homes, how exclusive their schools.”⁸

2 WHAT’S CHANGED?

It is not that human destructiveness toward the natural world, with dire consequences for nature and people alike, is unprecedented. The ancient Babylonians decimated their fields by overirrigation. In the *Critias*, Plato described how poor farming practices turned once-thriving agricultural land into barren wastes and ravines. Thousands of years ago Native Americans overhunted many large mammal species to extinction.⁹ Anticipating suburban sprawl by two millennia, a biblical prophet criticized

⁸ Philip Shabecoff and Alice Shabecoff, *Poisoned for Profit: How Toxins Are Making Our Children Chronically Ill* (White River Junction, VT: Chelsea Green Publishing, 2010), p. 14.

⁹ On Native Americans, see N. Scott Momaday, “A First American Views His Land,” in David Landis Barnhill, ed., *At Home on the Earth* (Berkeley, CA: University of California Press, 1991), pp. 19–29.

those “who join house to house, who add field to field, until there is room for no one but you” (Isaiah 5:18).

But this present environmental threat, moving at an accelerated pace and caused by us, is something new and terrifying. We have done what no human power, no matter how powerful, could do. The chemical balance of the oceans was set by forces far beyond human control – until now, when the excess of human-produced CO₂ has made the oceans 30 percent more acidic. We are making mother’s milk unsafe to drink because of pollutants in the mother’s body.

The extent of this change can be indicated by noting a few instances of what we used to think of the natural world. In the Hebrew Bible, it was a sign of God’s unlimited power to fashion forms of life and an earth on which they would dwell; and a marker of how much humans could neither control nor understand them. In response to a critical question about why he, a just man, was suffering, God puts Job in his place by asking some obviously rhetorical questions:

Can you pull in Leviathan with a fishhook
 or tie down its tongue with a rope?
 Can you put a cord through its nose
 or pierce its jaw with a hook?
 Can you make a pet of it like a bird
 or put it on a leash for the young women in your house?
 Will traders barter for it?
 Will they divide it up among the merchants?
 Can you fill its hide with harpoons
 or its head with fishing spears?
 Any hope of subduing it is false;
 the mere sight of it is overpowering.

(Job 40:2–9)

Yet now humans can not only catch whales, but also hunt them to near extinction, implant radio transmitters to track them, teach them tricks in theme parks, and catalog their DNA.

Earlier in the Bible God describes humanity’s relation to a difficult, demanding nature: “The ground is cursed on your account; you will work hard to eat from it as long as you live. It will produce thorns and thistles for you, and you will eat field plants. You will eat bread by the sweat of your forehead till you return to the ground – for you were taken out of it: you are dust, and you will return to dust” (Genesis 3:17–19). As difficult as this promise is, there are no human-created poisons lurking in the water. Getting food is hard, but neither the earth nor the food that comes from it is tainted with hidden, lethal dangers.

Two thousand years later, in Renaissance England, we find an appeal – an extremely common one in world literature – to the soothing and morally beneficial effects of nature. How it provides a respite from and alternative to the corruptions of society. In Shakespeare’s *Twelfth Night*, on their primitive, undeveloped island, the exiled Duke addresses his comrades:

Hath not old custom made this life more sweet
 Than that of painted pomp? Are not these woods
 More free from peril than the envious court?
 Here feel we not the penalty of Adam,
 The seasons’ difference; as the icy fang
 And churlish chiding of the winter’s wind,
 Which when it bites and blows upon my body,
 Even till I shrink with cold, I smile and say
 ‘This is no flattery; these are counsellors
 That feelingly persuade me what I am.’ . . .
 And this our life, exempt from public haunt,
 Finds tongues in trees, books in the running brooks,
 Sermons in stones, and good in everything.

Yet once we take in the full scope of the environmental crisis, we know every part of what would have soothed the Duke is threatened. Mountaintops have cell phone towers crowding each other for space; forests are threatened by exotic species, climate change, and loggers. Each area of wilderness must be constantly protected from encroachment, an encroachment that need happen only once for the wilderness to be paved over, sold at a profit, consumed.

Much more recently, hiding in a crowded attic during the Holocaust, Anne Frank reassured herself:

The best remedy for those who are afraid, lonely, or unhappy is to go outside, somewhere where they can be quite alone with the heavens, nature, and God. Because only then does one feel that all is as it should be and that God wishes to see people happy, amidst the simple beauty of nature. As long as this exists, and it certainly always will, I know that then there will always be comfort for every storm.¹⁰

Yet what would happen if Anne had gone outside, and instead of simple beauty had seen a beach covered with plastic debris, trees dying from acid rain, or an oil slick covering the pond?

¹⁰ Anne Frank, *The Diary of a Young Girl* (Garden City, NY: Doubleday and Co., 1972), p. 172.

3 ENVIRONMENTAL CRISIS

By “environmental crisis” I mean two things. First, the sheer scope of what we have done. Second, how the leading cultural and political institutions either directly contributed to this damage, failed to foresee it, or refused to recognize it even after it was well underway. The environmental crisis is thus not just a complex and daunting collection of problems with our bodies and the earth, it is a fundamental problem with *our* – in the broadest sense of the term – “civilization.”

To make this point, consider the term *ecocide*, the essential force of which is to associate the environmental crisis with genocide in general and the Holocaust in particular.¹¹ There are clearly some drawbacks to this usage; genocide is typically directed at particular human communities and coordinated by a centralized authority. Generally, the environmental crisis is neither.

But “ecocide” can also help illuminate what is going on. For a start, associating environmental destruction with genocide forcefully asserts the cataclysmic nature of the threat. If the environmental crisis is like the murder of six million innocent people, it requires immediate and decisive attention. This is not a matter of some technological miscalculation that can be remedied by improving gas mileage, eating more organic vegetables, or using cloth shopping bags.

Second, like the Holocaust, the reality of ecocide calls into question the ultimate rationality of modernity. As the Germans used their technical and bureaucratic competence to create efficient forms of mass death, so today’s transportation, energy, and manufacturing systems – each characterized by unprecedented sophistication – contribute to an enormously irrational and destructive overall consequence. We have the fulfillment of Hungarian Marxist Georg Lukacs’s century-old warning: Modern society would combine breathtaking technological competence with a fundamental and sweeping irrationality. The machines are incredible, but the piles of garbage overflow, the seas rise, and our bloodstreams are polluted.

Third, and by implication: As any nation guilty of genocide must question its culture, politics, economics, and religion, so a modern world

¹¹ In 1988 Catholic priest Thomas Berry lamented that “After dealing with suicide, homicide, and genocide, our Western Christian moral code collapses completely: it cannot deal with biocide.” *Dream of the Earth* (San Francisco: Sierra Club Books, 1988), p. 77.

There is also Franz Broschimmer, *Ecocide: A Short History of the Mass Extinction of Species* (London: Pluto Press, 2002).

culture that is committing ecocide must do the same. How can we, collectively and as individuals, deny climate science, use thousands of toxic chemicals, and destroy the rainforest to produce cheap hamburgers for McDonald's?

Finally, some instances of environmental abuse are literally genocidal in that they have devastating effects on particular human communities. Global warming or acid rain may be somewhat widespread and random, though they certainly affect the poor more than the rich. In other cases – e.g., the consequences of uranium mining or other forms of mineral extraction on indigenous peoples – environmental damage rises to the level of physical and/or cultural destruction. The Ogoni of Nigeria have been devastated by oil drilling; the native peoples of China, Canada, and India by the Three Gorges, James Bay, and Narmada River dam complexes; racial minorities in the United States by siting of toxic facilities. For these peoples ecocide simply *is* a kind of genocide.

Indeed, in many areas of the globe economic growth has been paid for by expropriating the land, resources, and ecosystems of indigenous peoples. At the same time, indigenous peoples are disproportionately connected to settings of high biodiversity. The reduction of those settings to simplified commercial contexts – what Vandana Shiva calls “monoculture” – is simultaneously the elimination of the physical and cultural basis for indigenous cultural diversity. With the elimination of cultural diversity – the whittling away of the more than 300 million native peoples in 4,000 distinct societies – there comes a simultaneous loss of irreplaceable traditional knowledge about how human culture and nonhuman nature can mutually exist over long periods of time.¹²

Here the fate of the rivers, the land, the endangered species, and the endangered people are pretty much the same.

4 RELIGION¹³ AND PHILOSOPHY

While there are exceptions, religions have generally taught us to perceive and to act on nonhuman nature in terms of human interests, beliefs, and social structures – to frame nature's significance in human terms. The

¹² For dozens of valuable accounts, see Darrell Addison Posey, ed., *Cultural and Spiritual Values of Biodiversity: A Complementary Contribution to the Global Biodiversity Assessment* (London: Intermediate Technology Publications, 1999).

¹³ Unless otherwise specified, by “religion” I mean the dominant institutional or “world” religions: Judaism, Christianity, Islam, Buddhism, Hinduism, and Confucianism – which are defined by numbers of adherents and/or (in the case of Judaism) historical influence.