



REIMAGINING THE HUMAN- ENVIRONMENT RELATIONSHIP

Environmental Ethics and Policy

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This paper forms part of the volume *Reimagining the Human-Environment Relationship* for Stockholm+50. This curated collection of ideas captures, interrogates, and elevates alternative paradigms of the human-nature relationship – existing and new, and from various disciplines and societies – creating a space to recast our relationship with the environment and inform future policymaking.

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Introduction

Although Western philosophers have contributed to the philosophy of nature since ancient times, environmental philosophy and ethics emerged as distinct fields of study in the 1970s. At the outset, “environmental philosophy in the West was narrowly conceived as environmental ethics.”¹ The two subjects were wrongly considered to be one and the same partly because of the continental-analytic split in Western philosophy.

Philosophers do not agree on the exact origin of the analytic-continental divide and the differences between the two. Some said it was John Stuart Mill who started it in the 19th century. Others are of the opinion that it is a 20th century phenomenon. The term “analytic philosophy” was used for the first time in the 1930s.² It is evident that in the 20th and 21st centuries, there has always been a conflict between the two philosophical traditions.

Analytic philosophy focuses on analysing the complex terms of our language. It emphasizes the principles of logical rigour, conceptual clarity, empirical soundness, and scientific validity of arguments. Analytic philosophers valorize science and logic, and consider continental philosophers as illogical, sloppy, and incoherent. So, for some of them, continental philosophy is not philosophy. Most analytic philosophers are from English speaking countries (UK, US, Canada, and Australia) and include outstanding figures such as Russell, Moore, Carnap, Hempel, Quine, Kripke, Davidson, and so on. Logical positivism, empiricism, naturalism, and correspondence theories of truth are considered to be the basic positions of analytic philosophy.

Phenomenology is the intellectual starting point of continental philosophy. Continental philosophy focuses on the description of personal experience rather than logical analysis of collective experience, and the examination of metaphysics and other deeper cultural issues. For continental philosophers, imagination rather than logical inference is useful to expand our horizons. Continental philosophers are believed to have used idioms, metaphors, and more ornate language. Continental philosophy is dominant in continental Europe (Germany, France, Italy, and Spain). Although they are different in many ways, some use the term “continental philosophy” to refer to German idealism, Marxism, deconstructionism, critical theory, phenomenology, philosophical hermeneutics, existentialism, poststructuralism, postmodernism, and so on. Husserl, Heidegger, Hegel, Sartre, Merleau-Ponty, Derrida, Foucault, Marx, and the like are considered as the major figures in this tradition.

It should be noted, however, that the two traditions are not mutually incommensurable. Analytic and continental philosophers have been influencing each other and working together in different parts of the world. Some philosophers from both sides of the divide have changed their stance or have ended up opting for the opposite tradition. Certain philosophers have suggested that they should step out of their shells and engage in mutual dialogue to address the basic issues common to both traditions.³ A pluralistic synthesis of the two 20th century traditions is possible.

The main difference between environmental ethics and environmental philosophy is that environmental ethics is a branch of applied ethics that deals with the ethical relationship between human beings and the natural environment while environmental philosophy covers a wide range of areas including environmental ethics, environmental metaphysics, environmental epistemology, environmental political theory, environmental aesthetics, environmental humanism, religious humanism, theology, the philosophy of science, the philosophy of technology, social justice,

environmental justice, ecofeminism, etc. There are some areas of interest in environmental philosophy that have no ethical dimensions, though they may have ethical implications.

The first generation of environmental ethicists who embarked on the project of developing environmental ethics was predominantly, but not entirely, from the tradition of Anglo-American philosophy or analytic philosophy. It drew on Western ethical theories, including utilitarianism, deontology, and natural rights-based theory, and applied them to environmental issues. Continental philosophers were late to engage with environmental concerns. They have used continental philosophy, particularly phenomenology, the critical theory of the Frankfurt School, and Heidegger's study of how technology reveals natural things as resources⁴ as their theoretical foundation. Analytic and continental philosophers founded the International Society for Environmental Ethics (ISEE) in 1990 and the International Association for Environmental Philosophy (IAEP) in 1997 respectively. Although the different philosophical traditions in which they are located remain distinct, the two groups (ISEE and IAEP) have cordial relationships, collaborate on different issues, and participate in joint annual conferences.

The aim of this paper is to examine the nature of environmental ethics and its impact on environmental policy. It first gives a brief overview of Western environmental ethics and its main trends and will then contrast this tradition with African environmental philosophy. The paper then turns to the role of environmental philosophy in environmental policymaking. The final section of this paper will summarize the main points and suggest ways to positively impact scientists, intellectuals, and future citizens.

The Origins of Western Environmental Ethics

Despite the dominance of anthropocentrism in Western religious and philosophical traditions, some contemporary Western environmental philosophers maintain that Western environmental ethics has a rich and complex history that can help reconceptualize human-nature relationships.

Ethical concerns for non-human animals are not new in the West. There is ample historical evidence from the patristic and medieval periods that shows a concern for the animal world, at the normative level, in the West.⁵ Saint Francis of Assisi befriended grasshoppers and "admired the wonderful works of the Creator." According to Bruce Foltz, the medieval experience of nature that manifests divine energies through the beauty of creation influenced "much of modern environmentalism, from European romanticism to American transcendentalism to the work of nature writers such as John Muir and Annie Dillard."⁶

J. Baird Callicott and his co-authors stress that pre-Socratic philosophers tried to understand the nature of the physical world in a comprehensive way. They were interested in understanding the underlying principles of nature and the unity and oneness of the world. Pythagoreans held that it would be immoral to kill animals or plants, as well as to eat food that required killing an organism. They believed in the kinship of all creatures with the same soul, and the migration of souls from one body to another until they are finally liberated or purified. The Pythagoreans and Empedocles of Acragas accorded moral standing to non-human beings.⁷ Plato also criticized humans for destroying forests.⁸ Additionally, although he had an anthropocentric attitude toward animals, some of Aristotle's biological writings seem less anthropocentric with respect to the natural world

than are his ethical and political works seen in the fact that he, for example, explained biological relationships and territoriality among mammals and birds.

Contemporary environmental philosophy has further developed what the pre-Socratic philosophers began in ancient Greece. So, for contemporary philosophers such as Callicott, environmental philosophy is not completely different, nor “a newfangled” philosophical subdiscipline. They “argue that environmental philosophy is, in fact, the oldest form of philosophy, going back to Greek natural philosophy—including that of Plato and Aristotle.”⁹

However, humanity’s interest in the ethical underpinnings of the human-nature relationship declined after the rise of scientific materialism. Subsequently, nature was no longer the source of normative principles for some 18th and 19th century ethical theories.

The following all contributed to Western environmental thought and laid the foundation of Western environmental ethics: Henry David Thoreau (1817-1862), an American naturalist and philosopher; Arthur Schopenhauer (1788-1860), a German philosopher; John Muir (1838-1914), a Scottish-American naturalist; Gifford Pinchot (1865-1946), an American forester and politician; Aldo Leopold (1887-1948), an American conservationist, forester, and wildlife ecologist; Rachel Carson (1907-1964), an American marine biologist and conservationist; Lynn White Jr. (1907-1987), an American historian; Christopher D. Stone (1937-2021), an American legal scholar, among others. Above all, Leopold’s influential environmental proposals, such as his “holistic” environmental ethics, “The Land Ethic,” documented in *A Sand County Almanac*, has inspired deep ecologists and other thinkers.¹⁰ Rather than dominating and exploiting the natural world, Leopold believed that humans should see themselves as “plain members and citizens” of the biotic community. Leopold’s general environmental rule of thumb is: “[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 Similarly, Carson was motivated by emerging environmental crises. Her work drew attention to the negative impact of agricultural pesticides like DDT on animals, plants, ecosystems, and human health.¹² In short, modern philosophers were not the first to initiate reflections on environmental ethics, although they have certainly made notable contributions.

It was the new environmental crises of the 20th century that sparked renewed interest among Western philosophers. In the 1970s, philosophers began to recognize that some environmental problems were new and unprecedented and exceeded the parameters of all past ethical theories to comprehend them.

Technology optimists believe that scientific and technological progress is the saviour of mankind and the world. However, modern technology brings a variety of problems, resulting in pollution, massive extinctions of species, degradation of land, biodiversity loss, climate change, and many other intractable problems. It is true that human beings did face environmental problems, such as soil erosion, deforestation, desertification, and so on in the pre-industrial era where there was no scientific and technological progress. But what I want to stress is that as technology dominates society, environmental problems are becoming more rampant. However, new eco-friendly technologies can have a positive impact on the environment. For example, renewable energy generation can help humanity to reduce greenhouse gas emissions and create a cleaner world.

Environmental philosophers stress the need to study people's attitudes towards the environment, as science and technology alone cannot solve all environmental problems. They analysed the cultural attitudes and values responsible for environmental crises and formulated cogent alternative attitudes and views that would promote a harmonious and sustainable relationship between human beings and the natural environment.¹³ These and other Western environmental ethicists have shown that natural and anthropogenic factors have contributed to environmental problems. Above all, the anthropocentric worldview is one of the major causes of the widespread destruction of the environment, as it encourages humanity to dominate nature. The mainstream Western anthropocentric philosophy claims that only human beings are intrinsically valuable.

John Passmore, an Australian philosopher, however, refutes the need to inject non-anthropocentric principles into the ethical discussion of human-nature relations because he claims that the Judeo-Christian ethical tradition already contained resources that could deal adequately with the environmental crisis.¹⁴ However, other philosophers who aimed to find a plausible and defensible theory of intrinsic value located in nature rejected Passmore's anthropocentric approach.

Accordingly, environmental ethics became an independent field of study during the early 1970s. *Inter alia*, it examines the moral grounds for protecting the welfare of non-human animals and protection of endangered species, the ethical basis for environmental preservation and protection, the integrity of the entire ecosystems, pollution, environmental (in)justice, intergenerational justice, social justice, the relationship between the North and the South, sustainable development, the growth of the human population, environmental aesthetics, the environmental implications of technology and progress, environmental theology, climate change, environmental policy, etc. Environmental ethics is both theoretical and an applied subject as it formulates ethical theories and applies them to environmental problems.

As the field matures, it continues to encompass multiple areas, including climate ethics, climate justice, and more. Environmental philosophers have been slow to recognize the dangers of climate change, and few of them believe that nations should do what they can to address climate change, the greatest moral challenge facing humanity today.¹⁵ Climate change is conceived as "a perfect moral storm."¹⁶ It exacerbates the unfair distribution of benefits and costs. Poor people who have contributed the least to climate change have become the biggest victims of climate change. Climate justice requires that developed countries that have emitted greenhouse gasses beyond their share compensate the poor people who are being affected by climate change. Although few environmental philosophers have contributed to the debate on climate justice, they have an important role to play in the years to come.

Analysing the Range of Environmental Ethics

There are wide ranges of philosophical theories about human-nature relationships. Two broad approaches are identified in environmental ethics, one approach called anthropocentric and the other non-anthropocentric, otherwise known as resource-based (instrumental) and natural (intrinsic) value-based. There are different strands of thought within these two approaches. The adherents of these approaches disagree on whether there is value beyond human well-being and interests. Instrumental value refers to the use of something as a means to an end, whereas intrinsic value relates to valuing something for its own sake rather than its use.

Most anthropocentrists argue that only humans are morally relevant. While some environmental ethicists call for the abolition of anthropocentrism, others think that weak anthropocentrism is inevitable and can be used to address environmental crises. On this view, human survival and health can generate moral concern for ecosystems and further their protection. However, this is not always the case because some actions can be useful for humans and harmful for other non-human beings.

Non-anthropocentric environmental ethics has individualistic and holistic perspectives. Individualistic environmental ethics can emerge from extending the traditional Western ethical theory to non-human beings. Jeremy Bentham, John Stuart Mill, Henry S. Salt, and others argued that sentient beings including non-human animals are morally considerable because of their capacity to experience pleasure and pain.¹⁷ Peter Singer defended the moral standing of animals on utilitarian grounds,¹⁸ while Tom Regan developed a rights-based defence of animals.¹⁹ On such accounts, lower animals, plants, rivers, rocks, lakes, mountains, and other parts of nature are not morally equal beings. Both Singer and Regan advocate animal welfare, with Singer advising humans to reduce animal suffering by paying attention to animal health and the environments in which they live, both rural and wild; and Regan arguing that when animals are appropriately respected, people themselves become better.²⁰

Although animal welfare and rights advocates challenged human chauvinism, some environmental ethicists, such as individualistic biocentrists, questioned the higher moral status of animals based on their psychological capacities and the exclusion of all other beings. Individualistic biocentrists extend value to all life forms, even non-rational subjects – they have intrinsic value and the right to exist. For instance, Paul Taylor holds that all living organisms are centres of inherent worth that warrant respect.²¹ Taylor and his followers call for radical bioegalitarianism, although at the same time support that in self-defence, humans can sacrifice the basic interests of wildlife. They hold that all living creatures have equal moral significance.

A British philosopher, Robin Attfield, is opposed to biocentric egalitarianism and defends biocentric consequentialism. He claims that the ability to flourish and to exercise the basic capacities of a species makes an organism morally relevant. Accordingly, all living beings have a good of their own that has to do with the fulfilment of their natures. They are intrinsically valuable and thus ought to be the object of our moral concern. The interests of conscious beings, particularly conscious beings who can reflect on their lives, will generally (though not invariably) take precedence, other things being equal, over the interests of non-sentient beings. But when the fundamental interests of non-sentient beings are threatened, the trivial interests of sentient creatures can be overridden. Attfield holds that the vital interests of creatures should be respected where possible, but that the vital interests of sentient creatures outweigh those of non-sentient creatures, and that the vital interests of creatures capable of self-consciousness outweigh those of creatures not capable of self-consciousness.²² Non-anthropocentric holists focus on wholes or collectives rather than individual organisms. They criticize individualism or sentientism for failing to offer direct reasons for the moral consideration of ecosystems, wilderness, and endangered species. This view comprises both subjectivist and objectivist positions, as well as the view that natural values are intrinsic and extrinsic. Some argue that although nature has a place in human values, there can be no value outside human evaluators.²³ Others argue that intrinsic values in nature are objective properties of the world.²⁴ According to Holmes Rolston, nature itself is a value creator, it began to generate intrinsic value independently of humans long before human evolution, and it continues to do so.

But Rolston does not think that there is only one kind of intrinsic value. For him, there can be more and less, degrees, and types of intrinsic value. For instance, a monkey has more intrinsic value than an ant because of its more advanced capabilities and evolutionary development.

Eugene C. Hargrove has articulated a pluralistic conception of intrinsic value.²⁵ He recognizes the existence of subjective and objective intrinsic value. Objective intrinsic value can be ascribed to animals and plants because they are ends that use the environment as a means. Subjective evaluation of plants and animals is also possible, as they are intrinsically valuable. Hargrove's view is related to Norton's weak anthropocentric value, although Norton rejects intrinsic value. His view is similar to Callicott's subjectivist non-anthropocentric intrinsic value and Rolston's objectivist intrinsic value.

As Hargrove notes: "anthropocentric intrinsic value judgments, rather than being in competition with non-anthropocentric intrinsic values, are absolutely essential if humans are to muster any environmental concern about non-human living centres of purpose (as well as many other natural entities) objectively existing out in the world."²⁶ Humans find the Congo rainforest or *Tis Abay* (the Blue Nile Falls on the Blue Nile River in Ethiopia) beautiful (as ants and birds do not). Such human experiences are very important in producing human desires for conserving such places.

Besides the more mainstream environmental ethics approaches, there are also other components of environmental ethics including environmental virtue ethics, deep ecology, social ecology, ecofeminism, environmental pragmatism, postmodern environmental philosophy, and indigenous environmental ethics and philosophy.

Indigenous Perspectives

Several indigenous people in the world see themselves as part of the natural world, not as subjects detached from it. Some traditions that include environmental concerns include various indigenous traditions around the world such as Jainism, Confucianism, Buddhism, Hinduism, Taoism, Shintoism, and the like.²⁷

Until recently, philosophers have ignored African philosophical thought because of a narrow conception of what counts as valuable philosophical thought: some philosophers hold the view that philosophy did not exist in Western civilization (or anywhere else in the world) until the advent of analytic philosophy in the 20th century. On this somewhat extreme point of view, the study of Plato, Aristotle, Kant, etc. is the study of intellectual history, not philosophy. Another less extreme, but still narrow view, holds that only Western philosophy going back to the Greeks is philosophy and non-Western traditions are not philosophy. Therefore, certain contemporary Anglo-American analytic philosophers are reluctant to consider environmental ethics or phenomenology as philosophy.

If one views philosophy as something quite broad – a reflection on ontological and epistemological issues – then there is no doubt that philosophy occurs in purely oral contexts as well. Oral narrative can be philosophically analysed. Independent thinkers can also be found in non-literate societies. It is in this sense that I have applied philosophical analysis to oral and written African environmental narratives and worldviews. I think that there are many very different African worldviews, and different African scholars have tried to distil environmental philosophy from the worldviews of

their respective ethnic groups. However, the term “African philosophy” is used here to refer to the common environmental worldviews and value systems shared by the majority of Africans.

With notable exceptions, most Western environmental philosophers have ignored African environmental ethics. Those who have studied the African worldview rely entirely on secondary sources and come to the wrong conclusions. They claim that Africa lacks an authentic indigenous environmental ethic because it has developed an anthropocentric worldview.²⁸ On this view, Africans consider that human beings are at the centre of the universe and the only beings that have moral standing. However, many who have carefully studied African peoples’ attitudes towards the environment reject this view.

Many cultural groups in Africa have recognized that human beings and the more-than-human world are not separate entities. Rather, they are intrinsically interconnected and inextricably part of *one* interdependent and intricate web of being with humans, with their cultural diversity being a part of the natural world. Some Western environmental philosophers have also endorsed this view. To give but one example, Freya Mathews, an Australian philosopher, defends a metaphysics of interdependence based on the fundamental ecological intuition that humans are in some sense “one with” nature and that everything is connected to everything else, rejecting the dominant atomic metaphysics implicit in Western philosophy.²⁹

Ubuntu and other African indigenous philosophies teach that all things are interconnected and interdependent with each other.³⁰ Generally, *ubuntu* is defined as humanness. It expresses that a person is a person through other persons. According to *ubuntu* philosophy, human beings have a responsibility to care for fellow human beings, non-human beings, and the physical nature.³¹ Human responsibility extends to non-human beings and ecosystems. Non-human animals have their own value, role, and place in the larger community of life on Earth. In this sense, African environmental philosophy recognizes the worth and dignity of non-human nature over purely economic and instrumental purposes.

To give one more example, the Oromo of Ethiopia, the country’s largest ethnic group, believe that *Waaqa* (God), Mother Earth, and human beings are interrelated.³² In the Oromo worldview, the concept of *saffuu* or *ceeraa fokko*, the ethical code, advances the ethics of respect, interpersonal and species relationships, distance, and good conduct. The person is part and parcel of the natural environment. Africans do not worship their ancestors, but they respect them. In Africa, the community embodies the living, the living dead, and future generations. African environmental philosophy teaches that the current generation should leave an environment that is not poor in resources for future generations of both human and non-human beings. In African culture, human beings are required to be stewards or caretakers of the land rather than its “private owners.”

The African worldview embodies anthropocentric and non-anthropocentric attitudes and a sense of connection to the natural environment. Part of the reason people protect the environment is due to its instrumental value. They also believe in the intrinsic value of the environment because it was created by God. Indigenous peoples in Africa contribute to the conservation of biodiversity by selecting, cultivating, improving, and exploiting diverse plant and animal species.³³ Biodiversity conservation has promoted sustainability rather than biological homogenization. Indigenous peoples develop a positive relationship with, rather than violent domination of the natural environment, and a survival attitude toward non-human species. Various cultural groups in Africa have therefore developed an

intimate understanding of and interaction with the natural environment and its elements, and eco-friendly lifestyles and value systems. They have also learned from non-human creatures how to survive and respond to environmental challenges including climate change, and how the natural world works. They thus extend moral consideration beyond human beings.

Another aspect of indigenous African environmental philosophy is the non-adversarial nature of African justice. For many social groups in Africa, justice is applicable to human beings, non-human species, and Mother Earth. Like human beings, non-human species have a right to exist, and it is wrong to exterminate other creatures. African environmental justice dictates that humans should make peace with the natural world. Many African communities also practice restorative justice to maintain peace and stability in the community. Unlike a highly punitive and exclusionary retributive justice, restorative justice provides opportunities for dialogue among the parties involved that facilitate reconciliation and forgiveness. It is inherently reintegrative, as it aims to drive out the estrangement between erstwhile enemies, restore broken social relationships, deter wrongdoers from reoffending, and end cycles of vengeance.

However, African environmental knowledge also has some weaknesses that need to be addressed. In many places, there is gender discrimination in decision-making processes and cultural practices. Certain beliefs and practices that have had negative impacts on the natural environment and development need to be abandoned with the consent of their holders. Women are barred from participating in some indigenous traditions, such as entering sacred forests, because they are erroneously believed to be impure. This belief needs to be changed. Discrimination against some occupations, including blacksmithing, carpentry, tanning, and other crafts, has had a negative impact on local development and should be eliminated, and independent innovation should be encouraged. Another example of such a weakness has been exposed by the debate concerning the allowance of ritual animal slaughter due to “necessary” religious reasons where the animals are slaughtered in a way for them to suffer in order to summon the ancestors. This is usually not considered a wrong action within *ubuntu* and other indigenous traditions as it is promoting a cultural action. Consultation with the people can pave the way for phasing out harmful practices and introducing other alternatives.

The Role of Environmental Ethics in Environmental Policymaking: Direct and Indirect Impact of Environmental Ethics

Environmental ethics is influential, but its influence often works through the slow shifting of public opinion. This means that it is difficult to cite clear cases where environmental ethics has directly impacted environmental policymaking. Although the direct impacts of environmental ethics on the policymaking process have not been clearly visible nor as impactful as one would hope, there have been some positive outcomes in environmental policymaking that are reflective of the influence of environmental ethics. Among others, conservation biology, the United Nations Convention on Biological Diversity, the Earth Charter, and the constitutions of Ecuador and Chile appear to have been influenced by the views of environmental ethicists and recognized the intrinsic value of species.

Environmental ethics directly influenced the authors of the Earth Charter, as Steven Clark Rockefeller and others who contributed to the Earth Charter consulted environmental philosophers

about the intrinsic value of species. The first paragraph of the Earth Charter articulates the intrinsic value of species, although it does not use the phrase.

Humanity is part of a vast evolving universe. Earth, our home, is alive with a unique community of life. The forces of nature make existence a demanding and uncertain adventure, but Earth has provided the conditions essential to life's evolution. The resilience of the community of life and the well-being of humanity depend upon preserving a healthy biosphere with all its ecological systems, a rich variety of plants and animals, fertile soils, pure waters, and clean air. The global environment with its finite resources is a common concern of all peoples. The protection of Earth's vitality, diversity, and beauty is a sacred trust.³⁴

The Ecuadorian Constitution of 2008 recognized the enforceable rights of nature. Ecuador was the first country to officially recognize the constitutional rights of nature. There is no clear indication that the Ecuadorian constitutional declaration of the rights of nature was directly influenced by environmental ethics. Maria Akchurin states that the idea to protect the environment was influenced by indigenous organizations, indigenous beliefs, rituals, and values related to the environment.³⁵ However, the absence of a reference to a work of environmental ethics does not exclude the possibility of direct or indirect influence. What should be noted is that certain environmental philosophers have generated ideas or concepts that begin to circulate in our conceptual reservoir and are often embodied in language anonymously and independently of their creators.

Another positive development includes the conventions of global institutions and how the environmental policies of certain countries have in principle accepted the recommendations of environmental philosophers. The constitutions of more than 150 countries in the world have adopted a human right to a clean, healthy, and sustainable environment. The United Nations Human Rights Council also adopted the right to a healthy environment on 8 October 2021. It considered environmental degradation and climate change as human rights crises. Although we can argue that the idea of a human right to a healthy environment needs philosophical justification, it would be ethical to suggest that national governments have the obligation to honour their citizens' right to a healthy environment and ensure its implementation, address past injustices against the custodians of rich indigenous knowledge, and promote stewardship of local ecosystems because national governments are required to provide the conditions in which future generations can satisfy their own needs. Certain policies help achieve these goals, such as sustainability policies that include sustainable agriculture, sustainable forestry, sustainable fisheries, etc., and the preservation of species and habitats.

Ethics can also play an important role in climate litigation, which has been increasing rapidly around the world in recent years.³⁶ Ethics can inform judicial and legal reasoning by emphasizing responsibility, and doing what is right and legal.

Furthermore, certain individual environmental philosophers have influenced the environmental policies of their governments and international organizations including the Society for Conservation Biology, World Conservation Union (IUCN), Intergovernmental Panel on Climate Change (IPCC), United Nations Educational, Scientific and Cultural Organization (UNESCO), and the like. These environmental philosophers have played a prominent role in articulating the value of a healthy planet, biodiversity conservation, the humane treatment of animals, the conservation of endangered species, environmental justice, climate justice, technology ethics, etc. One example

of the role of environmental philosophers in environmental policymaking includes the US Congress' Office of Technology Assessment appointment of Holmes Rolston to an Advisory Board for a Study of Biodiversity and Legislation. He has served as a consultant with over two dozen conservation and policy groups, including the US Congress and a Presidential Commission.³⁷ Numerous environmental philosophers have also served on UNESCO's World Commission on the Ethics of Scientific Knowledge and Technology (COMEST), (I am one of them), and the International Bioethics Committee (IBC) of UNESCO. Among others, the following environmental philosophers have participated in the COMEST: Johan Hattingh (South Africa), Ruben Apresyan (Russian Federation), Rainier A. Ibana (Philippines), Marie-Hélène Parizeau (Canada) and Kwami Christophe (Togo). Additionally, two of the authors of the IPCC's *Fifth Assessment Report* were moral philosophers, John Broome and Lukas H. Meyer, resulting in the report's coverage of ethical concepts and methods, such as justice and value. The last example includes Andrew Light who has joined the current Biden Administration as the Assistant Secretary for International Affairs in the US Department of Energy.

Challenges to Environmental Ethics

In spite of the above-mentioned positive achievements, environmental ethics has not significantly influenced environmental policymaking in both developed and developing nations. There are many different factors that can account for the limited impacts of environmental ethics on environmental policy in such settings.

Hargrove, founder and editor of the journal *Environmental Ethics* for the past four decades, lamented that environmental ethics seems to be a deeply ingrained theory.³⁸ There were opposing views about the papers that came to be published, especially in the 1970s and 1980s. Philosophers claimed that these papers were too applied or practical to have any professional value. Then, people in environmental affairs have claimed that these papers were too theoretical to be translated into practice. Hargrove states that at present, environmental professionals have "an abysmal knowledge of philosophy,"³⁹ but they are required to know enough about rights theory and value theory to influence professionals who deal with such issues. "They will need to become comfortable with the idea of dealing with values as part of environmental policy and decision-making and to start defending those values as part of objective (or, for sticklers, quasi-objective or intersubjective) policy debate."⁴⁰ He stressed that without such a commitment, the fusion of theory and practical application cannot be achieved.

According to Alastair Gunn, as currently practised, environmental ethics is too obscure and incapable of saving the world, as it does not seem to be accessible to environmental professionals. He suggests that it should be reconfigured to address environmental problems.⁴¹

Environmental pragmatists Andrew Light and Bryan G. Norton maintain that to have an opportunity to address practical environmental problems, environmental philosophers should minimize preoccupation with theory, particularly describing the non-anthropocentric value of nature, and try to find "applications" of abstract theories.⁴² Norton argues that environmental ethicists have failed to influence policymakers because they continue to focus on the dogmas of non-anthropocentrism. For him, the non-anthropocentric worldview is conceptually flawed and pragmatically unnecessary.⁴³ He thinks that weak anthropocentrism can be the basis of environmentally friendly policies. Norton laments that environmental ethicists have ignored concrete empirical issues and focused on the

metaphysical basis of environmental values. He suggests that they should become more pragmatic and focus on the epistemological aspects of environmental science and decision-making.⁴⁴ On the other hand, J. Baird Callicott is of the opinion that we need to focus on the metaphysical foundations of environmental values in order to address the problem of global climate change.

For his part, Donald A. Brown identified two reasons for the failure of environmental ethics to penetrate the walls of policy. The first is that environmental policy is influenced by scientific, economic, and legal (and not ethical) discourses, which hide numerous controversial ethical issues. Policymakers have focused on rational choice and cost-benefit analyses and have ignored ethics.⁴⁵ Brown's observation clearly shows how facts have been given priority over values in environmental policy processes in different parts of the world. Public administration departments and business schools have followed economics and talked about facts without paying attention to human values. The continuing predominance of economics in the 20th century has hindered attempts to introduce environmental ethics into the sustainability debate. Economics relies on cost-benefit analysis to measure the value of things, but the cost-benefit analysis is incapable of assigning value to non-market things, as different people have different preferences. Conventional economic calculations do not include certain intangible values (including aesthetic, cultural, and ecological ones). It ignores the value of clean air and water, species diversity, social and generational equity, the well-being of animals, and human cultural goods, such as monuments, etc.

The second reason is that most of the environmental ethics literature is either too abstract to engage real environmental decision-making or irrelevant to practical problems. Brown insists that very often, environmental ethicists have not focused on the specific scientific, economic, or legal issues that will affect the outcomes of public policy. According to Brown, uncovering the ethical assumptions hidden in prescriptions based on science and economics should be a concern for environmental ethicists. To influence public policy, environmental ethicists should examine the specific rationale for environmental decisions.

Policy and economics that reject intrinsic value secretly recognize it. Destruction of natural areas in order to use them as a resource is often rejected as a policy because people often reject the practice collectively. Generally, when policymakers want to exploit something that is intrinsically valuable to the people, they try to keep them unaware that decisions are being made to avoid protests until the project is over or it gets too far. Such measures are taken when people are conscious and ready to protest inappropriate decisions and actions.

Another possible reason for the insignificant impact of environmental ethics on environmental policy is that most Western environmental philosophers have been talking principally to each other. Environmental philosophers may have been reluctant to engage environmental professionals in other fields and environmental policymakers.

This is quite common in applied ethics generally. There has been some influence on practice in medical ethics and business ethics, but the problem of theoretical disagreement among philosophers makes it difficult for them to explain why their contributions to policy discussions are important. Light advises his fellow environmental philosophers to change this trend. "If we talk only to each other about value theory, we have failed as environmental professionals."⁴⁶ If environmental philosophers continue to use abstract concepts that cannot be understood by the general public and policymakers, their theories will not have the expected impact on real-life

environmental concerns. Policymakers and ordinary people have no patience to listen to complex and abstract views about intrinsic value.

The vast majority of people in the world are not familiar with the views of environmental ethicists as they do not read their works due to a lack of access. Far worse, many Western environmental philosophers do not seem to be aware of the works of non-Western environmental philosophers. Some of them flatly refute non-Western environmental philosophies as useless. For example, Rolston argues that the East cannot help the West to value nature because they have different traditions.⁴⁷ Many times, the ideas of Western philosophers are not easily transferable to non-Western societies because they are based on conditions in rich countries, where people and governments have more options.

Indigenous environmental ethics and modern environmental ethics complement each other and can learn from one another. Ricardo Rozzi, a Chilean environmental philosopher, maintains that indigenous biocultural conservation can influence public policy, and the incorporation of biocultural diversity would help environmental philosophy to enrich itself. Environmental philosophy can also articulate ecological knowledge and practices developed by indigenous and non-indigenous old-resident communities.⁴⁸

Some environmental ethicists argue that policy should not be the focus of environmental ethicists. For example, Eric Katz argues that the examination of the fundamental meaning and value of the relationship between humans and nature should be the primary concern of environmental philosophy. A deep philosophical analysis of meaning and value rather than a search for policy solutions will save us from engrossing in “a world of technical efficiency and political power that is devoid of the humanistic values and ideals regarding the natural world that we ought to cherish.”⁴⁹

However, there should be a link between value articulation and practice. Facts inform environmental values, so environmental philosophers cannot ignore policy choices. According to anthropologist Clifford Geertz: “[t]he powerfully coercive ‘ought’ is felt to grow out of a comprehensive, factual ‘is’ ... The tendency to synthesize worldview and ethos at some level, if not logically necessary, is at least empirically coercive; if it is not philosophically justified it is at least pragmatically universal.”⁵⁰

The lack of political will to make fundamental changes in the areas of environmental protection and policy is another reason why environmental ethics has failed to influence policymakers. Transnational corporations and the governments of developed nations are not willing to make the required changes. Government leaders around the world have been reluctant to listen to the advice of environmental philosophers and scientists. Vested interest groups have tried to oppose climate science and ethics. To just mention one quite obvious example, the fossil-fuel industry spends immense resources to counter the climate concern by discrediting climate science. It has funded some scientists and groups who have participated in anti-climate change action lobbying and anti-climate science disinformation campaigns. It has also bribed “leaders” to distract their constituents with culture war memes to avoid translating ethics into climate policy.⁵¹ Some politicians lack accountability and are shortsighted, and will tell their constituents what they want to hear, even if it hurts the planet and the ecosystems it supports.

Questions about various environmental challenges have engaged environmental philosophers in the Global North. Unfortunately, these efforts have not yet been effective. But it does show an increased awareness of justice in environmental management and exploitation.

In the Global South, policymakers have not paid sufficient attention to indigenous environmental ethics. They have disregarded indigenous knowledge and relied on the simplistic, monolithic mainstream discourse and practice of development. Generally, African environmental and climate policies have not been guided by the major ethical principles embodied in different African traditions (interdependence and interconnectedness, mutual dependence, intra- and intergenerational justice, environmental justice, communitarianism, generosity, do no harm, reciprocity, promote life and avoid killing, a live and let live attitude, humanness, deep concern for future generations, etc.). Instead, economic interests have been the main driving forces. Donors and expatriate advisors to African environmental policymakers have influenced the formulation of this environmental policy.

Individual Action on Environmental Problems

Certain environmental philosophers have doubted that individual actions can make a difference to environmental protection and climate justice. However, it is my view that each person has an obligation to do their own fair share, as that is what will eventually develop the norms needed for social coordination around climate and other environmental problems. Although the futility of addressing climate change through one's personal individualized action moderates the nature of our moral responsibilities, it does not eliminate individual moral responsibility altogether. Setting an example has immense potential to influence others and contribute to positive change. Individual actions as well as philosophy can make a difference, although isolated individual acts are not a sufficient response to environmental crises. However, if each person contributes his/her fair share, the cumulative impacts can be significant. Therefore, the claim that individual actions cannot make a difference is not a defensible view.

John Broome criticizes those denying that personal greenhouse gas emissions can cause harm. He calls them "individual denialists." He persuasively argues that each person has the responsibility to reduce his/her greenhouse gas emissions, as his/her emissions may do harm – that is, personal carbon emissions can be expected to cause harm. So, Broome concludes: "[t]he denialists' claim that they do no harm is not true in general."⁵² As Broome correctly states, each of us individually affects climate change. It does not matter whether or not the effect is measurable.

There is no doubt that we also need coercion by governments. Governments can use regulations and taxes to get people to change their behaviour and reduce greenhouse gas emissions. Callicott and other ethicists have worried about whether the fact that one person's action cannot have a measurable effect undercuts the reasons for thinking any of us, acting as individuals, have a moral responsibility to do things that address environmental problems and combat climate change. Callicott stresses that "political will" is essential to materialize mutual coercion. For Callicott, the only way out of our environmental crises is the political implementation of environmental ethics.⁵³ Regarding the significance of ethical education, the following example is worth mentioning: after conducting an empirical study of the influence of university ethical classes on 1,332 students, Eric Schwitzgebel and his co-authors confirmed that philosophical instruction on meat eating had changed students' behaviour.⁵⁴ This in turn shows that philosophy can make a difference.

People do often take cognizance of the views of philosophers, though it often takes time for the message to reach the public and policymakers. Philosophers should continue to tell the truth and counter misinformation.

Certain African proverbs speak to the significance of unity, cooperation, and incremental change. They reveal how we share our obligations, collectively. "If you think you are too small to make a difference, you have not spent a night with a mosquito." "When webs of a spider join together, they can trap a lion" (Amharic proverb, Ethiopia). "Ants cross the river in cooperation" (Oromo proverb, Ethiopia).

Conclusion

This paper has shown how environmental ethics and environmental philosophy became special fields of philosophical study in the second half of the 20th century and were critical to rethinking human-nature relationships in response to global environmental crises. Environmental philosophers have attempted to address the issues of overpopulation, water and air pollution, maldistribution, melting glaciers, rising sea levels, intensifying and erratic weather patterns, wide-scale extinction of endangered species, environmental injustice, climate change, and the like.

Environmental ethicists and philosophers are by no means united in their theoretical orientations and formulations, and although they proclaim a commitment to the protection of the environment, they do not always agree on the methods to apply in pursuing this goal. Certain environmental ethicists suggest that environmental policy decisions should rely on an anthropocentric framework. For others, a non-anthropocentric framework should be the basis of environmental policy. Another group proclaims that environmental policy should rely on both anthropocentric and non-anthropocentric orientations, as neither of these two can provide an adequate basis for comprehensive environmental protection. Still others think that environmental ethics is irrelevant to environmental policy. However, this paper shows that environmental ethics can play a positive role in the environmental policy process.

Like Western environmental philosophy, African environmental philosophy opposes the instrumentalization and human domination of non-human nature. In African environmental philosophy, Mother Earth does not belong to human beings. Broadly, in both Western and African environmental philosophy, humans are not separate from nor superior to the more-than-human world. They are part of a much larger environment from which they cannot detach themselves.

The most notable finding to emerge from this study is that Western environmental ethics and African environmental ethics are complementary. They have the potential to help humanity to address local and global environmental problems. One single approach or school cannot provide an adequate basis for comprehensive protection of the environment. This paper stresses that the critical appropriation and implementation of indigenous environmental ethics is a *necessary condition* for solving our environmental, social, economic, and political problems. Modern and indigenous environmental ethics should also be complemented with the further development of international environmental law, as the natural environment needs international protection. It is imperative that humanity uses multiple perspectives to deal with the burgeoning local and global environmental challenges. If humanity is not willing to change the nature of the current

growth-oriented and profit-driven modes of living and development, the future of the planet and its inhabitants will be in jeopardy.

This paper suggests that environmental philosophers should try to instill environmental values in communities so as to translate their theories into effective actions. Local communities should be included in the design and implementation of environmental policies. Environmental and development problems cannot be solved without the participation of local communities, and environmental philosophers should engage practitioners by providing them with valuable ethical advice and guidance.

Environmental philosophers should also engage with scientists and policymakers as well as raise awareness about environmental concerns by educating the public to understand and address the unprecedented environmental challenges they are facing. But equally important, they must engage with children. Children should be encouraged to think creatively and critically and taught at an early stage how to think about intrinsic and instrumental values.

The development of critical thinking skills will help children take responsibility for their actions and help them make ethical decisions and act as reflective members of the community. Adults have to be challenged and encouraged to challenge themselves and others to be more deliberative and open to alternatives. Thus, both indigenous and modern environmental ethics education should be given to students at primary and higher levels.



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