

Environmental ethics

Philosophy, ecology and other species

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Pressure on the environment has increased in step with economic growth and the mass consumption that fueled unequally distributed benefits and wealth throughout the twentieth century (UNDP 2020; see Chapter 17). Both growth and ecological crises have attained a global reach, challenging our established notions of cause and effect, and our framing of problems and solutions. Accordingly, global environmental politics has witnessed major changes and significant “rescaling” in its “locus, agency and scope” (Andonova and Mitchell 2010: 257; see Chapter 2). Both dimensions of global environmental politics – politics and governance, and the ecological problems that are the subject matter of global environmental politics – are being reinterpreted due to increasing complexity, interconnectedness and interdependence. Accordingly, the range of actors and disciplines that inform global environmental politics and contribute to framing global environmental problems is widening, in an acknowledgment of inescapable pluralism (see the chapters in Part IV of this volume).

This chapter builds on this ontological and epistemological change in the nature of the problems studied in global environmental politics and of the worldviews through which environmental problems are perceived and analyzed. We focus on the (still) dominant Western frames while acknowledging a welcome rise of alternative voices – often captured by the expression of “indigenous and local knowledge” (Díaz et al. 2015) – which will hopefully enrich the depth and breadth of our pathways into the future (see, e.g., Kothari et al. 2019)

This chapter takes its cue from the recognition that the cumulative effects of human behaviors linked to dominant socio-economic systems are both cause and consequence of the complexity of environmental problems (Bina and Vaz 2011). From the now inescapable stage of the “Anthropocene” (Biermann and Lövbrand 2019; see Chapter 15), we explore the strengths, limits and recent developments in Western environmental philosophy and ethics, in informing and shaping global environmental politics. There has been a virtual absence of metaphysical questions in environmental politics, especially since the late 1970s when influential thinkers like Schumacher (1974) sought development models compatible with nature (for an overview of the “classics,” see Vaz 2012). This absence helps explain why environmental problems have been framed primarily in scientific, technological and economic terms (see Chapters 18 and 19). If, on the one hand, scientific progress since the 1970s has led to more accurate and comprehensive understanding of the ecosphere, on the other

hand, it has impoverished the epistemology underpinning global environmental politics by avoiding engaging with metaphysics, thereby narrowing the way problems and solutions are identified, debated and implemented (for a reflection on the nature and implications of such impoverishment in society and economics, see Neiman 2009; Sandel 2012; Haraway 2015).

Global environmental politics and environmental ethics

It is the very nature and language of the subject matter of global environmental politics – “environmental problems” – which we wish to problematize in this chapter, suggesting that the *problem* is not so much *environmental* but rather the dominant understanding of the nature of the connection and dependence between humans and nature. By separating environment from its context and from all the causes and effects that interact with it, we reinforce a narrow perception of reality. Metaphysics, and in particular environmental philosophy and ethics, help us clarify the fundamental notions and theoretical principles by which we understand the world, the values that shape the relationship between humans and nature, and the dynamics of cause and effect. The exposure to ethical scrutiny of themes in global environmental politics, such as biodiversity (see Chapter 41), climate change (see Chapter 32) and genetically modified organisms (see Chapter 44), can be uncomfortable because it questions how our societies are evolving, what progress is for, and which values are structuring the relationship between humankind and the natural world (see, for example, the policy implications in IPBES 2019). But failure to do so condemns global environmental politics to narrowly defined problems, and to solutions that achieve little more than postponing an irreversible ecological crisis.

Environmental ethics and its internal debates and tensions can provide precious insights to global environmental politics. Put simply, environmental ethics seeks to determine what is the wrong or right action in relation to the environment and why; that is, it identifies the foundations that best describe and prescribe the moral relationship of human beings to the environment (see Pope and Lomborg 2005). Environmental ethics originates in the recognition that environmental issues, as framed in the West, need an ethical conceptual background. The 1960s and 1970s, with their social movements and public acknowledgment of emerging environmental questions and problems (Carson 1962; Meadows et al. 1972; Schumacher 1974), prompted a series of philosophical debates on environment and development. White (1967), Hardin (1968), Routley (1973) and Næss (1973) published cornerstone papers heralding a philosophical concern for the environmental crisis. The most important question was trying to understand the complexity and the deeper causes of the environmental crisis. The ethical conversation was the most lively and dynamic within environmental philosophy, giving rise to environmental ethics, which became an established discipline.

Environmental ethics can therefore contribute to disciplinary pluralism in global environmental politics by engaging with the philosophical landscape that underpins the meta-narratives that shape our ideas of the human connection and dependence on nature. There are at least three related reasons why this is important. First, global environmental politics aims to set norms, rules and structures to guide behavior with respect to the purpose of sustainable development, and there is a need to re-engage with the ethical dimension of sustainable development to “restructure...our relationship with the Earth and its creatures” (Kothari 1994: 228). Second, we need a radical reconceptualization of humanity’s place in nature beyond ideas of duality and separation, as well as of human beings as the sole locus of value – a presumption that excludes all other living and nonliving beings and things. Third, global environmental politics sees human behavior as a major part of the problem, thus it is essential

that we also turn to the philosophical landscape and the values that shape it. The following sections outline these meta-narratives, chart the evolution of Western environmental ethics, and link it to the political and policymaking dimension of global environmental politics.

Meta-narratives on the relationship between humankind and nature

Environmental ethics has been investing in identifying and understanding the values that have shaped the relationship humans have with nature, and the roots that determined different types of relationships, including connection and dependence. The way humans understand nature has practical implications. Depending on the value and rights attributed to nature, human actions toward it may or may not be legitimized. Whether humans feel connected and a part of nature, and whether they value this highly, determines how they plan, execute and judge their own ways of life. The humans–nature relationship is characterized by ideas of separation, power relations, domination and exploitation, and by notions of unity, respect, humility and caution. Investigation of different cultures, philosophies and religions helps us understand the meta-narratives of *separation* and *unity*, as we call them throughout this chapter (see Collingwood 1945; Marshall 1992; Pepper 1996; Jamieson 2001).

Most of the ideas and discussions in global environmental politics have, until recently, been framed largely through Western worldviews (the focus of this chapter), but this is only one side of the story, one that is rapidly changing. The major transformations in science and society that occurred during the sixteenth and seventeenth centuries marked the beginning of a new era in which the relationship between humans and nature changed, largely thanks to the shift “from Copernicus to Newton, from Renaissance natural magic to the mechanical worldview, and from the breakup of feudalism to the rise of mercantile capitalism and the nation-state” (Merchant 2006: 517; see Chapters 7 and 18). Galileo distinguished between what could be measured and what could not, establishing ways of knowing what was objective and pertaining to (early modern) science, and what was subjective and thus not pertaining to science (see Chapter 18). This planted the seed for the separation and dualism that came to dominate modern worldviews, interpreted as a rupture in the humans–nature relationship (see Pepper 1996; Merchant 2006).

Descartes reinforced Galileo’s idea of the unreality of what is not measurable, and arguably what became known as Cartesian dualism between mind (*Res cogitans*) and matter (*Res extensa*) has marked humankind’s relationship with nature to this day. The presumed superiority of the mind and of thought gave human a privileged position toward nature (Pepper 1996), justifying nature’s use and eventually abuse by humans, thus failing to heed Schumacher’s (1974: 89) warning that humankind “was given ‘dominion’, not the right to tyrannize, to ruin and exterminate. It is no use talking about the dignity of **man** without accepting that noblesse oblige.” By the eighteenth century the scientific revolution had all but displaced medieval cosmology. By challenging both medieval theology and science, it opened the way to modernity. This was when the idea of progress became identified with control, domination, manipulation and, thus, loss of respect for nature. Nature existed to serve humankind. Utilitarian and material objectives justified this relation, conceived through empiricist and rationalist perspectives based on assumptions of ontological reductionism. It became natural to think of nature as “something” that is there just for our benefit. We lost fear, then we lost respect, and in recent decades we lost the desire and capacity to connect with nature. Nevertheless, Hansson (2012: 2) notes that, “in our age of globalization and large-scale anthropogenic environmental degradation, the ecological limitations of reductionism are becoming increasingly apparent to both the academic and the global community.” For these reasons,

humans

the discourse of global environmental politics would benefit from moving away from the vague, and possibly misleading, language of “environmental problems” to one that focuses on the connection and dependence between humans and nature that the narrative of separation has influenced so deeply (exemplified in Pope and Lomborg 2005).

Not everyone had lost the capacity to be fascinated by nature, and thus the narrative of separation was counterposed to one of unity, led by scientists and philosophers who sought and conceived of a positive relationship with nature, respecting, worshipping, loving and admiring it. Hansson explores the early contribution of philosopher Baruch Spinoza (1632–1677) who sought to counter the reductionism promoted by Descartes and Bacon, conceiving of nature as an entity that “subsumes our less inclusive modern-day conception of ‘the environment’” (Hansson 2012: 4). Spinoza recognized the contextual interrelation of parts and wholes as key “to properly understand the functional organization of the world,” effectively anticipating today’s systems thinking (Hansson 2012: 4). Carolus Linnaeus (1707–1778), Friedrich von Humboldt (1769–1859), Charles Darwin (1809–1882) and Ernst Haeckel (1834–1919) are among the scientists who understood the importance of a unified and holistic perspective, one that viewed nature as complex systems, emphasizing the interdependence of all species. Thus the eighteenth and nineteenth centuries witnessed the laying down of modern ecology’s foundations and of another view of nature that has yet to permeate Western theory and practice in global environmental politics (see Chapters 3 and 4).

We can therefore see two partially conflicting meta-narratives of separation and unity. In one, science provides an understanding of nature that exposes its holism, complexity and the interdependency and evolution of species (see Chapter 18), which prompts attitudes of respect and admiration. In the other it enhances the dualism between humans and nature as a consequence of the scientific revolution, prompting attitudes of domination and exploitation whose consequences (industrialization, capitalism, progress and technology) are object of analysis in global environmental politics (see Chapters 13, 18, 19 and 24). Environmental ethics was inspired by the first meta-narrative, which is addressed in the following section.

The rise of environmental ethics

Initially, the challenge of environmental ethics was to extend the realm of ethics to future people and to all living beings, ecosystems, nature. Lately, it has been concentrating on applied ethics, such as climate change ethics, sustainable consumption ethics, biodiversity ethics. We will start by presenting the historical debut of environmental ethics, evolving then to the new trends of environmental philosophers worried in dealing with the most pressing environmental questions and even new geographies.

It makes sense to start with Routley (1973), who was exploring the extension of ethics, by asking if we need a new type ethics? He developed the thought experiment of “the last man”: “if the last dying man, who barely survived a collapse of the world system, eliminated every living thing, animal or plant – would that be right?” The struggle of environmental ethics to understand the underlying causes of environmental problems pointed to the anthropocentric tradition of the separation meta-narrative explored earlier, enhanced by the power of science and technology, and by an attitude of arrogance toward nature (Carson 1962; see Chapters 18 and 19). A new, non-anthropocentric, ethics was deemed necessary, one that would answer Routley’s question negatively, not just for the hypothetical “last man,” but also for humanity today. The rationale for a negative answer is that living things have value in themselves, independently of humans. This is why the thought experiment of the “last man” is so important:

if it is not right to destroy all living things even if there are no humans, it must be because living things have intrinsic value.

Early environmental ethics concentrated on attributing an intrinsic value to nature, above and beyond the instrumental one that had dominated the previous few centuries. To be able to extend ethics to other beings, intrinsic value of nature had to be the foundation for this new type of ethics. This led to very complex, sometimes cumbersome, discussions around what would be the value-conferring property uniting humans and nonhumans (De-Shalit 2000; Ball 2001; Light 2002). Different theories claimed different properties for nature, such as interests (Goodpaster 1978), sentience (Singer 1975) or just a good of its own (*a teloi*) that made it a teleological center of life (Taylor 1986). Environmental philosophers developing these ethical theories believed that the intrinsic value of nature would support a different approach to environmental political decision-making. Environmental ethicists viewed non-anthropocentric ethics as fundamental to a proper re-evaluation of the human–nature relationship and as the main added value for a different and wider view of the environmental crisis (Jamieson 2001). Anthropocentrism was therefore rejected as a possible frame for environmental ethics. As Light (2002: 429) put it, “regardless of the early debates over the terminology, the assumption that axiologically anthropocentric views are anti-ethical to the agenda of environmentalists, and to the development of environmental ethics, was largely assumed to be the natural starting point for any environmental ethics.”

Discussions on different ways of grounding the intrinsic value of nature dominated environmental ethics for decades, giving rise to different currents, including animal liberation, deep ecologism, biocentrism, land ethics and ecofeminism. These currents evolved during the second half of the twentieth century and had different preoccupations. In addition to the broad theme of “beyond us,” scholars sought to deconstruct the separation between humans and nature, between men and women (with whom nature is often identified), and between reason and emotion as artificially opposed ways of solving “environmental problems.” They also complemented existing moral rules concerned with the place of individuals in society with a “land ethic,” while some actually sought to move beyond moral rules.

Some of the most prominent representatives of these non-anthropocentric schools of thought include Peter Singer’s (1975) *Animal Liberation*, which was a seminal work inspiring the movement of animal rights and liberation. There is no moral justification for the mistreatment of animals, as Singer believes in the principle of equal consideration of interests, not only for all human beings but also for nonhuman animals. Sentience, the capacity to suffer or to feel pleasure, which is shared by humans and animals, is used by Singer to justify the equal consideration of interests. This principle of equality also gives ground for Singer to reject and condemn speciesism (nonhuman species are not valued and have no rights). For Singer, it is speciesism that gives the ethical space and justification for causing pain to or killing of animals, disrespecting their existence.

A second non-anthropocentric current, espoused by John Baird Callicott, is land ethics, inspired by the writings of Aldo Leopold (1887–1948), namely, *A Sand County Almanac* (1949, see Callicott in Vaz 2012). This takes the reader through a sequence of concepts that became fundamental for environmental ethics: the extension of ethics; the concept of belonging to an interdependent community; an ecological consciousness that influences what we emphasize intellectually, our loyalties, affections and convictions; the conscience of what it means to use economic and utility arguments to justify the conservation of nature; and the concept of the land pyramid, which makes us understand “the land” not only as soil, but as a fountain of energy flowing through a circuit of soils, plants and animals. Leopold proposes that we should give value to land, not in an economic sense, but in a philosophical sense, anticipating

the intrinsic value of nature. Callicott's work (1987, 1989, 1999) sought to develop a philosophical dimension to land ethics, demanded more from humans, than Leopold. He demands an ontological change of the *self*, constructing the thesis of the continuity between human beings and nature, as a whole, as a new being.

A third current in environmental ethics is deep ecology, initially proposed by Arne Næss (1973), who distinguished two different approaches to environment, the shallow ecology and the deep ecology movement the latter characterized by seven *normative* points that provide one unified framework for ecosophical systems. The deeper questioning of the environmental crisis led to a deeper questioning of the self, demanding an ontological effort to understand it. Næss (1973) proposed "ecosophy," believing it should be a broad concept, and later he developed the idea that "ecosophies" should be personal: each person should develop his/her own ecosophy, understood as a philosophy of life oriented to an ecological harmony (Næss 1987, 1989). Næss's own ecosophy is based on the notion of *self-realization*. The self-hood he proposes is based on an active identification with wider and wider circles of being. Self-realization is achieved when this circle of identification is the widest possible. It implies a transition from ego to social self to metaphysical self to ecological self. The upshot is that our self-interest becomes the interest of the rest of life. Næss believed it might also promote a more meaningful life. What makes deep ecology different is its emphasis on ontology, in a realization of a certain status of the self, expanding it as much as possible.

A fourth non-anthropocentric current is ecofeminism, which is divided into two categories: (1) accepting differences between men and women, but seeking to re-evaluate the female characteristics that are undervalued in Western/patriarchal societies; and (2) the idea that masculinity and femininity should both be rejected and we should develop an alternative culture. Dobson (1995) dubs this as "the difference" and the "deconstructive" models. The "difference" model is based on exploring and criticizing the dualisms of human/nature and men/women, basing the discussion on an essentialist argument for a feminine essence that should be universal and common to all women (Mathews 2017). Val Plumwood (1993, 2002) is the main promoter of the "deconstructive" model, believing that dualisms hinder true developments in ecofeminism. Both men and women should challenge the "dualised conception of human identity and develop an alternative culture which fully recognises *human* identity as continuous with, not alien from, nature" (Plumwood 1993: 36). Even though there are many discussions within ecofeminism, the important thing is that it promotes the idea that new ways of thinking in a nonpatriarchal context are needed, and this involves a reconceptualization of knowledge, reality and ethics. Both the value of connections between particular individuals and the value of nature or environment conceived as both material entities and abstractions need to be recognized (Davion 2001). Above all, this approach makes us rethink the relationship of the human being with him/herself and with the world.

These non-anthropocentric arguments are commonly gathered under the umbrella of "ecocentrism," a concept that captures their most relevant themes and promotes rethinking requiring that we proceed with greater caution and humility in our interventions in ecosystems (Eckersley 1992).

There are also anthropocentric strands of environmental ethics, and even if initially despised, they managed to impose themselves in environmental ethics landscape as they also provide support for radical reconsideration of the themes of connection and dependence between humans and nature. These currents are connected with social, political and moral questions, and are represented mainly by environmental virtue ethics and by environmental pragmatism.

Environmental virtue ethics considers the rising importance of wellbeing within development discourses, linking these to the role of virtue in character building, behavior and lifestyles and embracing a perspective of cultivating human character traits that enhance a healthy and harmonious relationship and interaction with nature. It also focuses on protecting future generations and the importance of virtue ethics language in policy responses to the ecological crisis. Van Wensveen (1999) notices that virtue language is present in one way or another in the work of almost all environmental philosophers. Sandler (2005: 7) adds: “virtue language is not only everywhere in the discourse, it is indispensable to the discourse.” Hill (1983) realized that there are actions that are not immoral, yet raise some sort of discomfort. So, instead of the traditional question of what is the right or wrong action, Hill (1983) asks “What sort of person would do such a thing?”

Environmental virtue ethics emphasizes the need for thinking about character and behavior of people within environmental ethics, while traditional environmental ethics is more worried about the intrinsic value of nature. People have traits of character, attitudes, habits and dispositions, and it is people who make laws, promote policies and act toward nature (Sandler 2005). Therefore, it makes sense to identify the potential attitudes that constitute environmental virtues, and the role of character in environmental ethics. Furthermore, the rediscovery of the themes of wellbeing and happiness in economic, development and sustainability literature are leading to a growing concern with human flourishing, with what promotes it and what contributes to it (Jackson 2009; see Chapter 16). The idea that nature, living with nature and understanding it are sources of joy, peace, self-knowledge and a feeling of renewal leads one to acknowledge that promoting this openness and sensitivity to nature might be part of a process of one’s own flourishing (Bina and Vaz 2011; Vaz 2012). Promoting lifestyles that enhance a balanced and harmonious relationship with nature has been a perennial objective of environmental ethics. Acknowledging the role of virtues to promote this type of lifestyle has been the specific added value of environmental virtue ethics.

Furthermore, as Van Wensveen (1999) observes, ecological virtue discourse, as a distinctive, diverse, dialectical, dynamic and visionary moral language, carries the promise of moral creativity. Such creativity is fundamental for the many problems and dilemmas that environmental ethics is confronted with. For example, questions of the rights of trees, animals or plants might be answered by looking through new moral lenses and by adopting different perspectives. As Van Wensveen (1999) argues, virtue language has pre-modern roots, which is an advantage given that modernity is considered partly responsible for the ecological crisis. We need a new moral language that is independent of such a worldview.

Environmental pragmatism (Light and Katz 1996) contributes with ideas aimed at bridging the gap between the world of ethics and of policymaking, partly appealing to the problem of future generations. Most environmental problems make it clear that future generations are vulnerable to how we develop our policies and therefore it is an inescapable theme for both environmental ethics and environmental policy. Light (2002: 443) argues that environmental ethicists should focus on how best to help the environmental community “to make better ethical arguments in support of the policies on which our views already largely converge.” He contends that it is possible to keep the lively philosophical debates and yet be more politically proactive, developing a more public philosophy focused on arguments “that resonate with the moral intuitions that most people carry around with them on an everyday basis” (Light 2002: 444). Obligations to future generations are a powerful intuitive reason that most people easily understand and so might act as a platform of understanding between philosophy and politics.

New trends in environmental ethics

These discussions on the importance of the intrinsic value of nature, of future generations, of anthropocentric versus non-anthropocentric views of ethics have been the building blocks of environmental ethics, but many philosophers have also been exploring new frameworks for answering unavoidable and urgent environmental questions that rose at global, regional and local levels. Anthropocene burst (more or less controversially) into the conversation and even Callicott (2018), recognizing the need for an overhaul of environmental ethics, claimed that Anthropocentric environmental ethics should be **anthropocentric** “because the looming environmental crisis we face is existential,” adding that it is basically climate change ethics. In fact, even if issues such as biodiversity loss, restoration, sustainable consumption have been in the radar of many philosophers, it is mainly climate change that has been dominating environmental ethics thinking in the last decade. Gardiner’s (2011) description of climate change as “moral storm” hit an accurate key, opening the way for a plethora of papers and books.

anthropocenic

These scholars look at climate change from several perspectives, such as that climate change is testing the limits of our current moral systems (Lowe 2019) or that a “complexity ethics” (Lyon 2018) is needed to cope with it, or that there is a need for innovative ethical framings (Palmer 2014) that avoid “post-political” framings (Wetts 2020). They have enriched the conversation and provided a much-needed questioning on our lives, lifestyles, social, political and economic systems. Climate change is a complex issue, in need of finding coherence between the diversity of moral agents (individuals, non-state and state), the diversity of actions at their disposal (mitigation, adaptation, loss and damage), and the diversity of moral settings for finding the best (morally right) responses, knowing that there is no Plan B to deal with it (Pierrehumbert 2019). Some authors have concentrated on supporting moral agents with consequentialism (Nordhaus 2008; Dietz and Asheim 2012), deontology (Milko-reit 2015) or virtue ethics (Sandler 2010; Knights 2019) to deal with climate change. Others have focused on their actions, namely, finding an agenda for ethics and justice in adaptation (Byskov et al. 2019) or in compensation (Jensen and Flanagan 2013) or loss and damage (Mace and Verheyen 2016; Mechler et al. 2019).

Climate change has been dominating much of the agenda (see Chapter 32), but the conceptual strand still kicks with philosophers such as Mathews (2018) and Callicott (2018) who are focusing on suggesting a path capable of reaching beyond the powerful yet narrow frames of rational thought. Plumwood (2002) already had a critical view of our inherited Kantian moral framework of distance from emotion and closeness to reason, criticizing those who ground the need for protecting nature on a rational, cognitive way. Plumwood resented that emotions and care one feels toward nature did not seem to be considered universal, or rational enough, to ground an extended moral theory.

Callicott (2018), turning to the past, namely to David Hume’s moral sentiments, follows his intuition that the wellspring of ethics is not reason but feelings. According to Hume, these moral sentiments were informed by reason enabling them to be rightly oriented and engaged. It is this Humean marriage between reason and emotions that inspires Callicott to propose a holistic and affective moral philosophy uniting his new love of an anthropocentric focus on climate stabilization and ecosystem services with his old passion for non-anthropocentric land ethics together with love for self, kith, and kin, still prominent values in any ethical theory.

Mathews’s (2018) paper, “We’ve had Forty Years of Environmental Ethics – and the World’s Getting Worse,” asks why so many philosophers have failed to influence events, concluded that it is clear that pure reason or argument alone does not mobilize change, neither do blueprints for an ecological society or not even science. What we need, Mathews believes,

is social thinking about how value transitions occur and new worldviews arise. Mathews (2018) proposes for the future more than philosophy, more than religion, more than policy: she suggests a cosmology explaining that the future can be both scientific and “mythopoeitic.” Cosmology, derived from the Greek *kosmos*, means order and therefore is normative. Mathews (2018) says it implies that the physical universe does not merely hang together contingently but is self-conforming to some kind of inner principle of integrity or goodness. Mathews suggests an ecological cosmology based on Earth-based cosmologies of **Aboriginal Australia organized around an immanent, normative axis of ecological Law.**

AU: Can this term be capitalized throughout for consistency?

This openness to other cultures is denting the dominance of a certain strand of Western thought, suggesting that much more is likely to be achieved through a respectful confrontation and engagement of a plurality of epistemologies and ontologies. We therefore end this section with two illustrations of shifting paradigms, starting with the emergence of African Environmental Ethics.

African environmental philosophy has a considerable number of authors dialoguing directly with diverse philosophical strands, but is mostly focusing on a critical reflection of how could African thought, African traditions and African reality contribute to the body of environmental philosophical and ethical knowledge. Tangwa (2004) alludes to the “live and let-live” attitude that is paradigmatic of African thought and lifestyle, and that justifies many philosophical African theories of a respectful and natural coexistence with nature. Ogungbemi (1997) proposes “*ethics of nature-relatedness*,” Tangwa (2004) investigates “*eco-bio-communitarianism*,” Behrens (2014) develops “*environmental relational theory*,” while Metz (2017) contends that certain traditional values justify animal rights, because all entities form a “chain of being” and those relationships are central to becoming a good person. Ifeakor (2019) based on the African interconnectedness of all beings, considers that African ontology is based on holism. Ibanga (2018) wrote a review paper discussing ten traditional and contemporary methodological paradigms of African environmental ethics showing its richness but the most important thing to have in mind is enriching the field with the synergies in both Western and African environmental ethics like Osuji (2018) did by acknowledging that Pope Francis encyclical *Laudate si* echoes traditional African environmental ethics, namely with the cosmic common good, cosmic harmony and respect for Earth.

Another paradigm is the “Conceptual Framework” of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES 2019), which is intended to contribute directly to global environmental politics by supporting policymakers and different stakeholders in their assessment of complex interactions between the natural world and human societies. One of the main goals of this framework is to strengthen plurality by bringing systematically together different knowledge systems, including Indigenous and Local Knowledge (ILK), and their representations of humans–nature relations, to bear on policy framings (Díaz et al. 2015). Thus, for instance, “Nature” includes both its meaning in Western science (concerning categories such as biodiversity, ecosystems, the biosphere and living natural resources), and in other systems – mainly of indigenous peoples from South American Andes – and their understanding of “Mother Earth” and systems of life. While still facing major challenges, this framework is a bold step in a much-needed direction (Pereira and Bina 2020).

Conclusion

In recent decades global environmental politics has embraced notions of complexity, interconnectedness, interdependencies and, although still tentatively, pluralism, both in terms of the actors in the realm of politics and in terms of disciplines and epistemology.

However, despite clear shortcomings of narrow disciplinary approaches, environmental philosophy and ethics remain marginal in most global environmental politics discourses and literature. Not by chance, the separation between “environmental problems,” discussed here as “nature,” and development issues, which this chapter treats as humankind and society, continues to be understood through the lenses of dichotomy and reductionism. There is still some way to go before we can discuss global environmental politics themes through a holistic and unified lens, as Baruch Spinoza challenged us to do in the seventeenth century, and as both non-dominant Western and other traditions continue to remind us.

Today’s recognition that “ecologically more complex problems” (Andonova and Mitchell 2010: 270) are caused by the combination of various human behaviors requires a more holistic and systemic interpretation. The IPBES (2019) report’s pointing to unprecedented losses in biodiversity stands as an emblematic illustration of what is at stake if we persist in viewing the world through narrow frames. Deep ecologists, ecofeminists, biocentrists, land ethicists, defenders of animal rights, environmental pragmatists and environmental-virtue ethicists have different ontological and epistemological perspectives on the environmental crisis. Such diversity is still largely untapped, and to this we must now add the vastly rich and diverse range of perspectives beyond the Western ones. The core preoccupation persists to this day: that the absence on metaphysical questions in environmental politics leads to narrow solutions within global environmental governance. To understand that there is a philosophical landscape behind the way we establish norms, rules, laws and structures that guide our behaviors helps us in the conversation about why we live on one planet as if we had two or three (see Chapters 10 and 17), why we ignore the question of limits, and why we are devoted to such a reductionist understanding of economics (see Chapter 24).

The environmental crisis is linked to the identity crisis of advanced “Western societies,” how we relate to ourselves and others near or distant in time and space, and to nature. Environmental philosophy and environmental ethics, in particular, thus have an important role in guiding us to a better relationship between “the other” and ourselves. The currents of environmental ethics have been providing different perspectives aimed at understanding the root causes of the environmental crisis. Both anthropocentric and non-anthropocentric strands defend a need for a radical reconception of humanity’s place in nature because there should be no reason to believe that humans are necessarily the most important beings and the sole locus of value in the world. This is an enormous challenge. Global environmental politics cannot overlook the metaphysical questions that are so intrinsic to the place that humanity has in the world.

Sustainable development is a problem-solving strategy shaping much of global environmental politics and related governance norms and structures. Different conceptions of sustainability (see Chapter 16) still reflect the two meta-narratives of separation and unity discussed above. Thus divided, they continue to undermine solutions in political and governance terms (see Pope and Lomborg 2005). The relevant question is which dimensions are constitutive of sustainability. We highlighted the potential of the ethical component of sustainability, in line with Kothari’s (1994) appeal for a paradigm shift in sustainability policies, toward an ethical imperative and away from technical fixes (see Chapters 16 and 19). This entails discussing sustainability not only in normative terms but also in terms of purpose, thereby allowing the framing of environmental problems at a metaphysical level – as a set of moral arguments that can justify political action and institutional dynamics.

References

- Andonova, L.B. and Mitchell, R.B. 2010. The Rescaling of Global Environmental Politics. *Annual Review of Environment and Resources* 35: 255–282.
- Ball, T. 2001. New Ethics for Old? Or, How (Not) to Think about Future Generations. *Environmental Politics* 10(1): 89–110.
- Behrens, K.G. 2014. Towards an African Relational Environmentalism. In Imafidon, E., Ayotunde, J. and Bewaji, I. (eds) *Ontologized Ethics: New Essays in African Meta-Ethics*. Lexington Books, pp 55–72
- Biermann, F. and Löwbrand, E. (eds.) 2019. *Anthropocene Encounters: New Directions in Green Political Thinking*. Cambridge, UK: Cambridge University Press.
- Bina, O. and Vaz, S.G. 2011. Humans, Environment and Economies: From Vicious Relationships to Virtuous responsibility. *Ecological Economics* 72: 170–178. DOI: 10.1016/j.ecolecon.2011.09.029.
- Byskov, M.F., Hyams, K., Satyal, P., Anguelovski, I., Benjamin, L., Blackburn, S., Borie, M., Caney, S., Chu, E., Edwards, G., Fourie, K., Fraser, A., Heyward, C., Jeans, H., McQuistan, C., Paavola, J., Page, E., Pelling, M., Priest, S., Swiderska, K., Tarazona, M., Thornton, T., Twigg, J. and Venn, A. 2019. An Agenda for Ethics and Justice in Adaptation to Climate Change. *Journal of Climate and Development*, DOI: 10.1080/17565529.2019.1700774
- Callicott, J.B. (ed.) 1987. *Companion to a Sand County Almanac: Interpretive and Critical Essays*. Madison: University of Wisconsin.
- Callicott, J.B. 1989. *In Defense of the Land Ethic: Essays in Environmental Philosophy*. Albany: SUNY Press.
- Callicott, J.B. 1999. *Beyond the Land Ethic: More Essays in Environmental Philosophy*. Albany: SUNY Press.
- Callicott, J.B. 2018. Environmental Ethics in the Anthropocene. *Transtext(e)s Transcultures 跨文本跨文化 Journal of Cultural Studies* 13. DOI : <https://doi.org/10.4000/transtexts.1064>
- Carson, R. 1962. *Silent Spring*. Harmondsworth: Penguin Books, 1971.
- Collingwood, R.G. 1945. *The Idea of Nature*. Oxford: Oxford University Press, 1978.
- Davion, V. 2001. Ecofeminism. In Jamieson, D. (ed.) *A Companion to Environmental Philosophy*. Malden, MA: Blackwell Publishing.
- De-Shalit, A. 2000. *The Environment. Between Theory and Practice*. Oxford: Oxford University Press.
- Díaz, S., Demissew, S., Carabias, J., Joly, C., Lonsdale, M., Ash, N., Larigauderie, A., Adhikari, J. R., Arico, S. and Báldi, A. 2015. The IPBES Conceptual Framework—Connecting Nature and People. *Current Opinion in Environmental Sustainability* 14: 1–16.
- Dietz, S. and Asheim, G.B. 2012. Climate Policy Under Sustainable Discounted Utilitarianism. *Journal of Environmental Economics and Management* 63: 321–335 doi:10.1016/j.jeem.2012.01.003
- Dobson, A. 1995. *Green Political Thought*. 2nd edition. London: Routledge. First edition published in 1990.
- Eckersley, R. 1992. *Environmentalism and Political Theory. Toward an Ecocentric Approach*. London: UCL (University College London) Press.
- Gardiner, S.M. 2011. *A Perfect Moral Storm: The Ethical Tragedy of Climate Change*. New York: Oxford University Press.
- Goodpaster, K.E. 1978. On Being Morally Considerable. *Journal of Philosophy* 75: 308–325.
- Hansson, D. 2012. Unpacking Spinoza: Sustainability Education Outside the Cartesian ox. *Journal of Sustainability Education* 3. Available HTTP: <<http://susted.com/index.php?sURL=http://www.jsedimensions.org/wordpress/2012-the-geography-of-sustainability/>>.
- Haraway, D. 2015. Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin. *Environmental Humanities* 6: 159–165.
- Hardin, G. 1968. The Tragedy of the Commons. *Science* 162: 1243–1248.
- Hill, T. 1983. Ideals of Human Excellences and Preserving Natural Environments. Reprinted in Sandler, R. and Cafaro, P. (eds) *Environmental Virtue Ethics*. Boulder, CO: Rowman & Littlefield, 2005.
- Ibanga, D-A. 2018. Concept, Principles and Research Methods of African Environmental Ethics. *Africology: The Journal of Pan African Studies* 11(7).
- Ifeakor, C.S. 2019. An Investigation of Obligatory Anthropoholism as Plausible African Environmental Ethics. *International Journal of Environmental Pollution and Environmental Modelling* 2(3): 169–176
- IPBES. 2019. *Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*. Ed. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo. IPBES Secretariat, Bonn, Germany.

- Jackson, T. 2009. *Prosperity without Growth? The Transition to a Sustainable Economy*. Sustainable Development Commission (UK). Available HTTP: <<http://www.sd-commission.org.uk/publications.php?id=914>>.
- Jamieson, D. (ed.) 2001. *A Companion to Environmental Philosophy*. Malden, MA: Blackwell Publishing.
- Jensen, K.K. and Flanagan, T.B. 2013. Climate Change and Compensation. *Public Reason* 5(2): 21–32. Available at: https://curis.ku.dk/ws/files/154519015/Climate_change_and_compensation.pdf
- Knights, P. 2019. Inconsequential Contributions to Global Environmental Problems: A Virtue Ethics Account. *Journal of Agricultural and Environmental Ethics* 32(4): 527–545. 10.1007/s10806-019-09796-x
- Kothari, A., Salleh, A., Escobar, A., Demaria, F. and Acosta, A. (eds.) 2019. *Pluriverse: A Post-Development Dictionary*. New Delhi: Tulika Books.
- Kothari, R. 1994. Environment, Technology, and Ethics. In Gruen, L. and Jamieson, D. (eds) *Reflecting on Nature. Readings in Environmental Philosophy*. Oxford: Oxford University Press.
- Leopold, A. 1981 [1949]. *A Sand County Almanac. And Sketches Here and There*. Oxford: Oxford University Press.
- Light, A. 2002. Contemporary Environmental Ethics. From Metaethics to Public Philosophy. *Metaphilosophy* 33(4), 426–449.
- Light, A. and Katz, E. 1996. (eds) *Environmental Pragmatism*. London: Routledge.
- Lowe, B. S. 2019. Ethics in the Anthropocene: Moral Responses to the Climate Crisis. *Journal of Agricultural and Environmental Ethics* 32: 479–485 <https://doi.org/10.1007/s10806-019-09786-z>
- Lyon, C. 2018. Complexity Ethics and UNFCCC Practices for 1.5° C Climate Change. *Current Opinion in Environmental Sustainability* 31: 38–45. <https://doi.org/10.1016/j.cosust.2017.12.008>
- Mace, M.J. and Verheyen, R. 2016. Loss, Damage and Responsibility after COP21: All Options Open for the Paris Agreement. *RECIEL* 25(2): 197–214 <https://doi.org/10.1111/reel.12172>
- Marshall, P. 1992. *Nature's Web. An Exploration of Ecological Thinking*. London: Simon and Schuster.
- Mathews, F. 2017. The Dilemma of Dualism. In MacGregor, S. (ed) *Routledge International Handbook on Gender and Environment*. New York: Routledge.
- Mathews, F. 2018. We've had Forty Years of Environmental Ethics – and the World's Getting Worse. *ABC Religion and Ethics*, July 2018.
- Meadows, D., Meadows, D., Randers, J. and Behrens, W. III. 1972. *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*. New York: University Books.
- Mechler, R., Bouwer, L.M., Schinko, T., Surminski, S. and Linnerooth-Bayer, J. (eds.). 2019. *Loss and Damage from Climate Change. Concepts, Methods and Policy Options*. Springer. https://doi.org/10.1007/978-3-319-72026-5_2
- Merchant, C. 2006. The Scientific Revolution and the Death of Nature. *Isis* 97: 513–533.
- Metz, T. 2017. How to Ground Animal Rights on African Values: A Constructive Approach. In Chimakonam, J.O. (ed). *African Philosophy and Environmental Conservation*. Earthscan from Routledge, pp. 30–41.
- Milkoreit, M. 2015. Hot Deontology and Cold Consequentialism – An Empirical Exploration of Ethical Reasoning Among Climate Change Negotiators. *Climatic Change* 130: 397–409. <https://doi.org/10.1007/s10584-014-1170-8>
- Næss, A. 1973. The Shallow and the Deep, Long-range Ecology Movement. A Summary. *Inquiry* 16: 95–100.
- Næss, A. 1987. Self-Realization: An Ecological Approach to Being in the World. *The Trumpeter* 4(3): 35–42.
- Næss, A. 1989. *Ecology, Community and Lifestyle*. Cambridge: Cambridge University Press.
- Neiman, S. 2009. *Moral Clarity. A Guide for Grown-Up Idealists*. Revised Edition. Princeton, NJ: Princeton University Press.
- Nordhaus, W.D. 2008. *A Question of Balance: Weighing the Options on Global Warming Policies*. New Haven: Yale University Press.
- Ogunbemi, S. 1997. An African Perspective on the Environmental Crisis. In Pojman, Louis (ed) *Environmental Ethics: Readings in Theory and Application*, 2nd edition. Cengage Learning, Inc: Wadsworth, 330–337.
- Osuji, P. 2018. Laudato Si and Traditional African Environmental Ethics in 2018. In Magill, G. and Potter, J. *Integral Ecology: Protecting Our Common Home*. Newcastle upon Tyne, UK: Cambridge Scholars Publishing.
- Palmer, C. 2014. Contested Frameworks in Environmental Ethics. In Rozzi, R., Pickett, S., Palmer, C., Armesto, J., Callicott, J.B. (eds.) *Linking Ecology and Ethics for a Changing World: Values, Philosophy and Action*. Dordrecht: Springer, 191–206.

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AU: Partridge is listed in the reference list but not cited in the text. Please cite in the text, else delete from the list.

- Partridge, E. 2001. *Future Generations*. In Jamieson, D. (ed.) *A Companion to Environmental Philosophy*. Malden, MA: Blackwell Publishing.
- Pepper, D. 1996. *Modern Environmentalism. An Introduction*. New York: Routledge.
- Pereira, L. and Bina, O. 2020. The IPBES Conceptual Framework: Enhancing the Space for Plurality of Knowledge Systems and Paradigms. In Pereira, J.C. and Saramago, A. (eds.) *Non-Human Nature in World Politics: Theory and Practice*. Springer Nature, Switzerland, 311–335.
- Pierrehumbert, R. 2019. There Is No Plan B for Dealing with the Climate Crisis. *Bulletin of the Atomic Scientists* 75(5): 215–221 DOI: 10.1080/00963402.2019.1654255
- Plumwood, V. 1993. *Feminism and the Mastery of Nature*. New York: Routledge.
- Plumwood, V. 2002. *Environmental Culture. The Ecological Crisis of Reason*. New York: Routledge.
- Pope, C. and Lomborg, B. 2005. Debate: The state of nature: *Foreign Policy*. Available HTTP: <http://www.foreignpolicy.com/articles/2005/07/01/debate_the_state_of_nature?page=full>.
- Routley, R. 1973. Is there a Need for a New, an Environmental, Ethic? Reprinted in Zimmerman, M.E., Callicott, J.B., Warren, K.J., Klaver, I.J. and Clark, J. (eds) *Environmental Philosophy. From Animal Rights to Radical Ecology*. 4th edition, 2005, Upper Saddle River, NJ: Pearson Prentice Hall.
- Sandel, M.J. 2012. *What Money Can't Buy: The Moral Limits of Markets*. New York: Farrar, Straus and Giroux.
- Sandler, R. 2005. Introduction. In Sandler, R. and Cafaro, P. (eds) *Environmental Virtue Ethics*. Boulder, CO: Rowman & Littlefield.
- Sandler, R. 2010. Ethical Theory and the Problem of Inconsequentialism: Why Environmental Ethicists Should be Virtue-Oriented Ethicists. *Journal of Agricultural and Environmental Ethics* 23(1): 167–183, DOI: 10.1007/s10806-009-9203-4
- Schumacher, E.F. 1974. *Small is Beautiful – A Study of Economics as if People Mattered*. 2nd edition. London: Abacus.
- Singer, P. 1975. *Animal Liberation: A New Ethics for our Treatment of Animals*. New York: Avon Books.
- Tangwa, G. 2004. Some African Reflections on Biomedical and Environmental Ethics. In Kwasi, W. (ed.) *A Companion to African philosophy*. Oxford: Blackwell Publishers.
- Taylor, P.W. 1986. *Respect for Nature: A Theory of Environmental Ethics*. Princeton, NJ: Princeton University Press.
- UNDP. 2020. Human Development Report 2020. The Next Frontier: Human Development and the Anthropocene, United Nations Development Programme, New York.
- Van Wensveen, L. 1999 The Emergence of Ecological Virtue Language. Reprinted in Sandler, R. and Cafaro, P. (eds) *Environmental Virtue Ethics*. Boulder, CO: Rowman & Littlefield, 2005.
- Vaz, S.G. (ed.) 2012. *Environment: Why Read the Classics?* Sheffield: Greenleaf Publishing.
- Wetts, R. 2020. Models and Morals: Elite-Oriented and Value-Neutral Discourse Dominates American Organizations' Framings of Climate Change. *Social Forces* 98 (3): 1339–1369, <https://doi.org/10.1093/sf/soz027>
- White, L., Jr. 1967. The Historical Roots of Our Ecological Crisis. *Science* 155(3767): 1203–1207.