

# Environmental Philosophy

## Anthropocentrism, Intrinsic Value, and Worldview Clash

ENVIRONMENTAL PHILOSOPHY HAS CHALLENGED THE DOMINANT WESTERN CULTURE'S CONCEPTION OF human nature through critiques of anthropocentrism (human chauvinism). It has annoyed the mainstream with critiques of instrumental rationality and its plea on behalf of the intrinsic value of nature. It has irritated nonenvironmentalists and even some environmentalists with its criticism of mechanism or the reductionist scientific worldview and has argued in favor of some form of ecological worldview. The *critique of anthropocentrism*, the *intrinsic value of nature*, and the *ecological worldview* are central topics for environmental philosophers, appearing across a wide range of environmentalist writing, from environmental ethics and policy to political ecology, ecocriticism, and metaphysics. As I understand them, these topics have characterized environmental philosophy since its inception in the 1970s.

In the widespread environmental imaginary of a few decades ago, perhaps *the* central term of engagement for environmental philosophers and ethicists was the concept of anthropocentrism. Anthropocentrism—whose core meaning is human-centric evaluation—was also considered by many to be one of the central causes of the environmental crisis. Identifying its historical and conceptual sources and pulling them out by the roots formed a large part of

the environmentalist response.<sup>1</sup> By the early 1990s, the Australian environmental philosopher Warwick Fox could write that “virtually every paper and book that ecophilosophers have written either implicitly or explicitly develops some kind of answer to [the] question ‘what’s wrong with being anthropocentric?’”<sup>2</sup> It effectively encapsulates a number of issues that have attracted critical attention: the Modern western dualistic opposition between humans and non-human nature; the notion of human chauvinism or human-centric evaluation; and the concept of nature as mere resource passively awaiting instrumentalist exploitation. Current debates around the concept of the Anthropocene suggest that renewed attention to this topic is warranted.

In addition to the critique of anthropocentrism, a “new ethics” was called for by many environmental philosophers. Are traditional ethical categories and theories so fundamentally anthropocentric that a completely new ethics is required? Adopting a nonanthropocentric perspective would mean accepting the propositions that nonhumans have moral worth, and that they must be taken seriously in human decisions about environmental issues. In a nonanthropocentric ethics, this also means that in cases of conflict their interests may often carry greater weight than those of humans. Environmental ethics might have to be “new” if traditional theories cannot accommodate these points.<sup>3</sup> After briefly entertaining the possibility of using the existing concepts of “rights” or “standing” for nonhumans in the 1970s, environmental ethics came more and more to be identified with arguments for the intrinsic value of nature. A trickle of references to the intrinsic value of nature in the 1970s gradually became a steady stream in the late 1980s, and the high-water mark was reached in the debate in the 1990s.<sup>4</sup> Finding the appropriate epistemological, ontological, and normative arguments to secure the concept became a major preoccupation. J. Baird Callicott explicitly declared that the distinctive feature of environmental ethics would be its claim that nature possesses intrinsic value.<sup>5</sup> He claimed that “the most important philosophical task for environmental ethics is the development of a non-anthropocentric value theory,” and he defined the difference between anthropocentric and nonanthropocentric ethics in terms of intrinsic value.

An anthropocentric value theory (or axiology), by common consensus, confers intrinsic value on human beings and regards all other things, including other forms of life, as being only instrumentally valuable, i.e., valuable only to the extent that they are means or instruments which may

serve human beings. A non-anthropocentric value theory (or axiology), on the other hand, would confer intrinsic value on some non-human beings.<sup>6</sup>

Reflecting on the concept itself, some writers noted that this very specific quest for the establishment of the intrinsic value of nonhuman nature was motivated by the need to identify some transcultural anchor of environmental value against the backdrop of value relativism. It is only if some value “independent of and overrid[ing] individual human judgment and . . . relative and evolving cultural ideals” could be found that environmental value would be safe from provincial nature-exploitative interests.<sup>7</sup> Although it was and remains a fundamental part of the discourse of environmental ethics, I will provide some reasons to doubt the efficacy of this approach to value theory in part two of the book.

Finally, by the 1980s it became conventional among environmental philosophers to contrast an “ecological worldview” with “the Modern scientific worldview”—where the latter is taken to be an expression of Cartesian dualism, atomism, mechanism, and reductionist materialism—and to indict it as one of the central causes of the ecological crisis. The theoretical and technological transformations characterizing the Scientific Revolution, along with its supporting Judeo-Christian tradition, were seen as chief contributors to the highly anthropocentric, exploitative relationship of humankind to nature in western culture. From Arne Naess’s contrast between thing- and field-ontology (1972), to Carolyn Merchant’s case against Modern science and her plea for a return to a holistic, organismic conception of nature (1980), to Charles Birch and John Cobb Jr.’s mechanistic and ecological models of the living (1981), to J. Baird Callicott’s “metaphysical implications of ecology” (1986), and, ultimately, to the elaboration of these alternative conceptions by other writers during the 1990s, including Warwick Fox (1990, 1995), Bryan Norton (1991), Murray Bookchin (1996), and Arran Gare (1996), this contrast became a defining feature of environmental philosophy. Since “worldview” talk is also central to the post-Kantian tradition, the Continentalists among environmentalists seamlessly extended the general antipathy to the sciences in the dominant strains of Continental philosophy into environmentalism, and works like Neil Evernden’s (1985) and David Abram’s (1995) also traded on a series of oppositions central to the grand contrast between mechanist and ecological worldviews. Even today, there are calls for “worldview remediation” and proposals to explicitly use the worldview concept as a tool in sustainable development debates.<sup>8</sup>

Although the figures and approaches listed are often conceived as antagonistic to one another (e.g., deep ecology is often not compatible with pragmatism, nor is ecophenomenology compatible with social ecology), they share the preoccupation with distinguishing a minority environmentalist “ecological worldview” from a hegemonic “mechanistic worldview.” I will call this the “worldview clash” model for thinking about science-environmentalism relations.

This book is organized around these three major topics. Used in the sense of “central issues” or “places” (topoi) of contention and thought, topics are “clear enough and serious enough to engage a mind to whom they are new, and also abrasive enough to strike sparks off those who have been thinking about these things for years.”<sup>9</sup> This book directly engages with the fundamental assumptions, categories, concepts, and value priorities that characterize large parts of environmentalist thinking, and considers the conditions under which environmentalists and others generally think about the nature of humankind (philosophical anthropology), how they think about the value of nonhuman nature (metaethics and value theory), and how they understand more-than-human nature generally (ontology and epistemology).<sup>10</sup> The three parts of the book deal with these three broad topics. I have organized the book in terms of them not because I think they embody timeless philosophical questions, but because initially I found it helpful to organize the wide array of literature that falls under the heading of environmental philosophy in this way, and hopefully it will be for others. For introducing environmental philosophy to those unfamiliar with it, they also serve a heuristic function, like a ladder to be pulled up and carefully dismantled once one reaches the desired height.

I consider environmental philosophy to be an informed examination of the concepts, categories, assumptions, and priorities in historically and culturally diverse human interaction with the human and nonhuman natural world, along with the implications of their mostly tacit operation. Philosophers have long recognized that much human activity is caused and conditioned in large part—but never exclusively—by linguistic and conceptual categories, value priorities, and unspoken assumptions that remain mostly invisible to those who think and act with them. Philosophers are particularly good at thinking about such conditions, and if they have shown that these conditions motivate anti-environmental activity in significant ways, finding the flaws in these frameworks and correcting them ought to play a role in generating the kind of social change environmentalists desire. This definition of environmental philosophy already implies that the scope of such philosophical work is far broader than most people usually think. Contrary to popular belief, philosophy is not

merely about policing argumentation by day and soul-searching by night. The scope of environmental philosophy encompasses the most fundamental questions of human experience. What is “nature”? Who are “we,” and what is the place of human beings in nature? What is the good life for the individual, and for the human and more-than-human community? Environmental philosophy has never been exclusively philosophy about the environment because the questions it raises cover most major philosophical disciplines, including epistemology, ontology, ethics, aesthetics, and political philosophy. How do communities know they have environmental problems? How do they divide and categorize the social and natural worlds when they frame environmental problems? Do ecosystems and the land have a value, integrity, or beauty that ought to be preserved? If communities can agree that valuing nonhuman nature in certain ways is important, how do they negotiate and institute the necessary social changes? What kinds of social institutions are essential for creating sustainable societies?

Even if examining tacit assumptions is important work, and if the scope of environmental philosophy is wider than believed, why should anyone who cares about the environment care about this kind of work? Won't thoughtful policymakers and their scientific consultants eventually arrive at the best scientific and democratic solutions to our environmental problems? Unfortunately, this is not very likely. This is because without serious thought given to the traditional models and frameworks used to characterize problems in the first place, their “solutions” will continue to perpetuate (with only minor modifications) the same harmful conceptual frameworks that have led to the current situation. Reflective environmentalists should care about this work because the explanations that philosophers and environmentalists have given of the causes of the crisis—whether these lie deep in “human nature,” mechanistic science, industrialization, capitalism, human supremacist religions, and so forth—have been at least partially right. But these explanations are so little known and remain so contrary to current lifeways of the world's economically and politically dominant societies that they cannot penetrate mainstream thinking. Worse, the environmentalist or philosophical explanations themselves often entail assumptions that prevent them from achieving the kind of environmentalist social change they hope to accomplish. They may even create obstacles to it. In light of this, one of the primary tasks of this book is to review those explanations, assess their strengths and weaknesses, and improve on them so that environmentalist social change seems feasible and imaginable, rather than remaining impossible and unimaginable.

The position taken in this book agrees with that of the late ecofeminist philosopher Val Plumwood in its claim that each of the three problems sketched above is rooted in the dominant dualist conceptual framework of western philosophy, what has been called the “logic of domination.” Since I will explain the operation of this dualist logic more extensively in the first chapter, I only summarize it here. Plumwood herself examined dualistic thinking as it relates to feminist theory, environmentalism, colonialism, and many other areas of philosophical debate. Some of the dualistically conceived categories she discussed include culture (mind, reason) and nature, mind and body, male and female, form and matter, reason and emotion, freedom and necessity, human and (nonhuman) nature, production and reproduction, mental and manual, public and private, civilized and primitive, subject and object, and self and other. She noted that various liberation struggles have had to engage with these implicit or explicit dualisms of western culture: feminism with masculine and feminine, racism and anti-colonialism with civilized and primitive, classism with mental and manual, and environmentalism with human (mind, reason, culture) and nature. In all of these forms of oppressive dualizing she identified a logical pattern of “hegemonic centrism” that conditions thought and has five characteristics. Firstly, the terms of the dualism are “hyperseparated,” or treated as radically exclusive disjuncts. Not only are the two poles taken to be different in kind, but the “different” is conceived as inferior from the point of view of the “center.” This applies to each pair of terms in the examples listed above, where the first is conventionally construed as superior and the second inferior. Secondly, hyperseparation works in tandem with “homogenization” of the terms, where every member of the class is (usually wrongly) considered to possess all of the characteristics of every other member. “Man” is opposed to “animal,” as if there were no relevant intragroup differences in either class. Thirdly, the second term is always “backgrounded,” or its value (as that on which the superior term depends) is actively denied and taken for granted by the first, and considered to be inessential. For instance, women’s domestic labor is invisible, undervalued, and taken for granted in most economic calculations. Fourthly, the second term is “assimilated” to the first, in that it is defined negatively in relation to it. For example, if humans are rational then nonhumans are nonrational, rather than positively defined in their own terms. Finally, given all of the above, the second term is normally considered

to be a means to the ends of the superior term, it is treated as “instrumentally valuable” only, without any intrinsic worth or ends of its own. Plumwood argued that anthropocentrism, instrumentalism, and mechanism have to be seen as expressions of this widespread western dualizing logic of domination that reaches back to Greek philosophy.<sup>11</sup> They are comprehensive problems that require a comprehensive systematic response.

The point of highlighting this dualist logic is to claim that the way the classical problems of environmental philosophy are framed depends directly on it, and this means that the supposed solutions to them usually depend directly on it as well. Instead of identifying the logic and undermining it as a whole, many responses simply react to certain limited aspects of it, and this seriously dampens the efficacy of their engagement with the environmental crisis. While I criticize some of these earlier responses in what follows, in the interest of space I spend less time on this and more time on articulating a positive position. The positive position developed throughout this book is articulated in response to various forms of this classical dualism. The task is to generate a critical environmental philosophy that unmasks the function of this logic in the domains of anthropology, value theory, and ontology, and engages in multiple intersecting strategies of responding to these dualisms. While still attending to the different features of the logic Plumwood identified, I will emphasize the feature of dependence denial and backgrounding, and will encapsulate the response to this logic in terms of a “principle of dependence.” In plain terms, it states that the asymmetrical dependence of human on more-than-human nature has always been at the heart of environmentalist concern. Human dependence on nonhuman nature is the most chronic, indispensable, and palpable experience of more-than-human nature—we literally live and breathe it. However, acknowledging human dependence on nonhuman processes or systems demands a more fundamental rethinking of categories than traditional approaches engage in, since it challenges more deeply the dualistic conceptual framework in terms of which the problems are framed. If the historically dominant anthropocentric view has been to regard human beings as independent of nature, for instance, then an environmental philosophy is a philosophy that asserts the asymmetrical dependence of human life in its physical, biological, psychological, and cultural registers on the living and nonliving environment, rather than its independence from it. Dependence, in addition, should be regarded as in itself plural, since it has multiple meanings in the contexts of anthropology, value theory, and ontology. Making the

category of dependence a guiding thread for the treatment of the three core topics of environmental philosophy will help to correct deficient statements of the problems, and in theory reorient environmentalist social engagement.

Let me briefly point out some of the ways in which dualisms are manifest in the traditional statements of the three problems introduced above. In terms of anthropocentrism critique, the stereotypical Western conception of the environmental crisis (i.e., the Western “ecological imaginary”) involves a basic dualism in which Humans on one side square off against nonhuman Nature on the other, and Humans do something terrible to Nature. The use of capital letters here reflects the traditionally homogenizing and universalizing features of dualistic thinking. This dualism is reflected in early responses to the crisis by environmentalists (and some philosophers). The fifth tenet of the popular deep ecology platform is a prime example: “Present human interference with the nonhuman world is excessive, and the situation is rapidly worsening.”<sup>12</sup> Far from dismantling the dualism between humans and nature that undergirded anthropocentrism, early responses often reinforced it. Given the social location of many early theorists, the ecological imaginary especially foregrounded the value of forests, mountains, wildlife, and wilderness untouched by humans—that is, what was considered maximally nonhuman—in contrast with the human.<sup>13</sup> The conceptual polarity of human and nature thus merged with a specifically North American (and Australian) political geography that separated “wild,” nonhuman nature and “civilization” in space as well as in thought. On this model, cows and cornfields were no more nature than were oil fields and coal mines.<sup>14</sup> Given this particular environmental imaginary, only certain problems appear to count as environmental, and certain aspects of the world as natural. This dualism was also reinforced in another way. For wilderness environmentalism, to be against anthropocentrism and for the environment meant avoiding all arguments regarding the value of nature that traced the origins of environmental value back to the human in any way. This meant that social ecologists and ecofeminists, who view practices of valuing or devaluing nature as direct reflections of human social relations, did not quite count as environmentalists. However, their work is indispensable for more comprehensive thinking about the environmental crisis as a social crisis with social conditions, and it undermines the analytical segregation of ethics from culture and social institutions. It is now more widely recognized that questions about human evaluations of nature must directly confront the social institutional and natural conditions of moral agency and social engagement, as well as conceptions of the natural world in which human agents are



embedded. Empirically oriented social scientific political ecologists have also argued that speculative conceptions of human nature play very little role in the crisis, and that what is needed is more attention to power-infused social relations in concrete bioregional, natural-cultural places.<sup>15</sup> This is an important point, but it does not put an end to the need to think philosophically and conceptually about environmentalism and anthropocentrism since the conceptual frameworks widely employed to address environmental issues are also often left uninterrogated by these authors.

What is already evident in light of the dualist logic, however, is the universalizing tendency in the critique of anthropocentrism itself. *Humanity, humankind, man, Homo sapiens, the human species, and the human enterprise* all seem to denote a homogenous class with homogeneous interests. It is as if there is just one place for humans in the cosmos, and the anthropocentrism of nature exploiters implies that the privileged species is one and homogeneous. Social ecologists, ecofeminists, environmental justice theorists, and social scientific political ecologists have amply demonstrated that such a universal environmentalism artificially homogenizes a heterogeneous collection of human genders, classes, races, cultures, and communities, thereby rendering invisible the differential actions of particular groups of humans and their differential environmental impacts in particular bioregional locations around the globe. According to a historical materialist critique of early philosophical environmental theory, for example, it is really only some small part of humanity that is to be blamed for the environmental crisis, namely, the rich and powerful steering the capitalist juggernaut, rather than humans in general.<sup>16</sup> Many universalizing environmentalists (including some philosophers), have employed anthropocentrism critique in the undifferentiated, homogenizing sense, leading to sweeping claims about how humans in general are destroying the planet, supported by a species-concept of the human, when, in fact, it is specific human groups facilitated by powerful global institutions that have wreaked most of the destruction. The influential essay by historian Lynn White Jr. notes that “the impact of our race upon the environment has so increased in force that it has changed in essence,” and echoes of this kind of universalism are evident in recent Anthropocene discourse.<sup>17</sup> While we should preserve anthropocentrism critique because of the conceptual issues it opens up, a critical environmental philosophy must “dehomogenize” within the class *humanity* in order to emphasize social, political, and environmental differences. The class *animal* or *nonhuman* must be symmetrically dehomogenized. The impulse to universalize, while perhaps well intentioned, is a response framed by the

dualist conceptual framework that operates tacitly in most environmentalist and nonenvironmentalist thinking and practice.

Dualisms framing the topic of intrinsic value are just as obvious and just as detrimental to the development of environmental value theory. In light of Modern epistemology and ontology, values are considered subjective, relative, changeable features of human perception or judgment about the world, or at best features of cultural worldviews, and the world or nature is understood as originally a valueless domain of material in motion. Against this backdrop of the Modern constitution, the burden of proof seems to fall on environmental ethicists to show that objective intrinsic value exists and is possessed by nonhumans. This compels many writers to continue to sharply distinguish between the objective and subjective domains, rationality and emotion, and to engage in the quest for an objective, invariable, morally relevant universal property in the hopes of settling disputes between individually and culturally relative conceptions of nature's value. On the dualistic view, culture is coded *subjective* and *relative*, while a properly objective value would be *acultural* or *transcultural* and *transhistorical*. The anthropology implicit in such a conception stems from the eighteenth century, where universal reason reveals the truly timeless and objective truth of things. The metaethical problem concerning the existence of intrinsic value becomes central to the discourse. I believe that there is an experience of moral conflict over more-than-human nature's value expressed in the problem of relativism to which this debate implicitly and explicitly refers, but that experience is falsified when it is placed into the straightjacket of the Modern dualism opposing the objectivity and subjectivity of value, and its dualistically conceived intrinsic or instrumental character.

Finally, among the chief problems with the clash of worldviews model is the fact that even contemporary ecological science is often uncritically identified with an eighteenth-century Modernist conception of mechanistic science. This keeps many traditional dualized terms—such as life and matter, whole and part, mind and body—firmly in place while simply inverting their Modernist hierarchical relation. This also leaves the science of ecology in the rather peculiar position of being treated sometimes as one more extension of mechanism—and as thus useless or even harmful for environmentalism—and at other times as somehow fundamentally different from every other science—and so as ally and even justification for environmentalism. A similar point was made by philosopher of science Kristin Schrader-Frechette and taken up by later authors who call out environmentalists for not adequately recognizing the difference between “hard” or “scientific” ecology, and “soft”

or “Romantic-political-metaphysical” ecology.<sup>18</sup> An important advantage of her distinction is that contemporary scientific ecology and metaphysical ecology (or “ecological worldview”) may be treated separately, and it puts into question the ready identification of scientific ecology with eighteenth-century metaphysical mechanism. This simple shift toward considering different varieties of ecology already deflates the often-exaggerated dualistic framing of the clash of worldviews, and creates an opening into which more nuanced understandings of ecology and environmentalism may be inserted. For these more nuanced approaches, there is a struggle within the sciences (as well as without) for more politically sensitive, socially engaged sciences, in contrast to positivist, “value-neutral” science that has often easily ended up as legitimation for capitalist exploitation of more-than-human (and human) nature. From this standpoint, the problem is not so much “mechanism”—although the ontological and epistemological principles involved in it are worth examining—but an epistemology that prevents the recognition of the value-saturated interests driving the production of knowledge, as well as recognition of the many other social factors conditioning knowledge making in complex societies. This book adopts what I will call a “metascientific stance” that aims to see practicing scientists as socially engaged knowledge-producing agents embedded in their social contexts, and brings the tools of the history, philosophy, and social studies of science to bear in their analyses. By *metascientific stance* I mean the tacit assumptions about the nature, practices, goals, and place of the sciences in society. The relation between a metascientific stance and an articulated philosophy of science is analogous to the relation between a set of metaethical assumptions and an articulated normative ethical theory. By calling it a *stance* I acknowledge its irreducibly evaluative nature. It is unlikely that anyone would claim that a distinct philosophy of science belongs to environmental philosophy, but this does not mean that it does not often have very definite ideas about the nature and goals of the sciences. Thus, I will claim that the “clash of worldviews” model is a metascientific stance that often accuses capital-S “Science” of mechanism, instrumentalization, and domination of nature. This stance, unfortunately, throws the baby out with the bathwater. Unless one is willing to sacrifice the cognitive authority of the climate sciences in claims about global climate disruption, for example, or the authority of ecology in claims about biodiversity loss, a perspective on the sciences that does not consider scientific knowledge (merely) a worldview is absolutely essential for environmentalists. Critical environmental philosophy should engage with recent philosophy and social studies of the sciences in order to

develop a more sophisticated metascientific stance toward the environmental sciences and the role of scientists and other environmental professionals in society. It should not fall prey to the naïve “science wars” opposition between classical scientific realism versus postmodern relativism, which is so clearly one of the most decadent expressions of traditional dualism. This means that the rational-social dualism in studies of knowledge making has to be overcome for critical environmentalism just as much as does the mind-body or human-nature dualism.

An environmental philosophy is “critical” if it explicitly takes into account and dismantles the dualistic conditions under which these problems are framed. I call the comprehensive response to the dualistic construal of these problems *critical environmental philosophy* or, in line with the definition that follows, *political ecology*. While the term *political ecology* has been used in many ways (discussed further in chapter 5), here I employ it to indicate three things. Anthropologically, it entails an embodied and embedded conception of the human, or ecological materialism. It takes human ontogeny (or developmental life span and its processes) seriously, and rejects dualistic and reductionist conceptions of humankind that often ignore it. While materialism or naturalism has always recognized the asymmetrical dependence of humankind on the physical world, this book adopts a nonreductive naturalism about human being. In terms of value theory, political ecology means recognizing the embeddedness of ethical relations within a larger context of social relations and institutions, often backgrounded by philosophers. The dependence denial that is a large component of the environmental crisis is not just an ethical problem, it is a social problem. Denial of social dependencies is itself a symptom of this deeper problem. Inspired by Murray Bookchin, John P. Clark, Plumwood and other ecofeminists, Joel Kovel and the ecosocialists, critical environmental philosophers have to be able to situate environmental ethics within in a larger social world. This includes better understanding the nature of values, the role of social ethos in value prioritization, and the role of ideologies and institutions in stabilizing this ethos. Finally, in relation to ecological worldview, the political ecology espoused here is informed by ecologist and social theorist Peter J. Taylor, social science political ecology, and categorical ontology, and develops a metascientific stance that recognizes structural ontological dependencies in the real world and dissolves the rational-social dualism in accounts of scientific knowledge production about environmental problems. The title of the book, *A World Not Made for Us*, is meant to provoke reflection not only on what *world* or nature means in environmentalist

discourse, but also on the “us” for whom the world or nature ostensibly serves as resource, succor, essential life condition, or dumping ground. In the anthropocentric humanist tradition, “we” are “civilized,” European, masculine, Christian, and (mostly) capitalist rational moral agents superior to all else on Earth. If, as environmentalists argue, the world is not made for this “us,” but is the supporting and fecund home for all life on Earth, we have to find new ways of shaping and establishing a nonanthropocentric, nondualistic, non-dominating human and nonhuman collective yet to come.

#### STRUCTURE OF THE BOOK

This brief review of the way that the three classical topics of environmental philosophy have been articulated reveals some important points. First, although environmental philosophers are generally unanimous in claiming that the traditional western view has been damagingly anthropocentric, there has been little unanimity about the conception of the human being that ought to inform a genuinely nonanthropocentric philosophy. This state of affairs calls for a review of the existing options, and for an assessment that is guided by the core principle of dependence and the rejection of dualist logic. Secondly, while many environmentalists have decried the instrumentalization, exploitation, or human domination of nonhuman nature, there is still little agreement over how nonexploitative environmental values are to be conceived. The once central debates over intrinsic value have moved to the periphery, and many other options are now on the table, including weak anthropocentric, pragmatic, ecofeminist, and virtue ethical value theories. All of these positions metaethically imply a certain conception of the valuing agent. A value theory guided by the insight into complex dependencies will be explored that is expressly nonsubjectivist, since the subjectivism of value in ethics, economics, and other fields is itself a key feature of the Modern dualistic constitution of anthropocentrism. Finally, while the critique of the mechanistic worldview has also been a frequent touchstone for environmentalists, here too responses to it have been, not surprisingly, diverse. The views taken on this topic adopt metascientific stances which situate the sciences relative to society and social environmental engagement in specific ways. In light of the principle of dependence and the rejection of dualism, I assess the mostly implicit metascientific options that have been offered by environmentalist philosophers as well as, to a lesser extent, the ontological frameworks for social and natural life employed by them. A pluralist, stratified ontology is presented as a response to

dualism that enables clear articulation of human asymmetrical dependence on nonhuman nature, one that supports a more sophisticated metascientific stance for environmentalists beyond the clash of worldviews and science-driven environmentalism.

The three parts of the book deal with the three topics of anthropocentrism, intrinsic value, and ecological worldview. In part 1, the problem of anthropocentrism is further characterized in light of the dualistic framework, and Plumwood's critique of this logic is presented in greater detail. A quick review of typical environmentalist (rationalist and naturalistic) anthropologies follows, and it is argued that the categorial frameworks through which they are articulated fail to overcome dualism and adhere to the principle of dependence. In chapter two, a more coherent nonreductive, nondualistic "ecological materialist" conception of humankind as persons embodied and embedded in natural and social environments is presented in order to motivate better responses to dualism, and to provide a metaethics that anchors value perception in the naturalistic anthropological principles of plastic and surplus impulses, affective embodied cognition, and the structure of human action. Drawing on a variety of philosophical and empirical resources—from the classical German tradition of philosophical anthropology to feminism and contemporary developmental and cultural psychology—it outlines an ecological materialist anthropology that fully acknowledges human dependence on nonhuman nature in epistemic, ethical, and ontological registers.<sup>19</sup>

The chapters of part 2 begin with the debates over intrinsic value in order to show that the ways in which the problem of environmental value was framed continue to persist and hamper discussions of value and social engagement. Questions of value were usually asked within a rationalist framework that privileged the search for necessary and sufficient conditions for value ascription, rather than in terms of an exploration of the plural values humans experience and the many ways in which they are and may be prioritized. Although the well-intentioned search for proofs of the existence of intrinsic value of nature were meant to give us something that might serve as an obstacle to the instrumentalization of nature, they generally ignored the moral psychology of the agents who would be acting on recognition of intrinsic value in nature. In addition to the questionable assumptions implied in the definitions of instrumental and intrinsic value, early work typically underemphasized the sociocultural embeddedness of moral agents. Some value theories espoused by theorists are reviewed in an attempt to rebuild the framework for considering environmental value beyond dualism and in light of dependence. I introduce

a novel, pluralistic value theory for environmentalism that takes its point of departure from both the social environmentalist writers and the tradition of axiological ethics. It holds that the experience of value is inherently plural, that moral and social life is life in the midst of never-ending conflicts of value, and to resolve them we resort to mostly unconscious patterned prioritization of values in social context. Environmentalism thus requires a value theory that can explain not only how prioritization of values concretely operates for individuals, but also how values are ordered within the social ethos of a given community and how different patterns of prioritizing come into conflict. Reframing environmental conflicts in terms of value priorities also leads more naturally to a social-deliberative, bottom-up rather than top-down model of environmental engagement. It has the potential to fuel an ecocollectivist response to the crisis in place of the oft-proposed social engineering of an elite policy-making class. Thus, making this shift is not only relevant to ethicists, but to anyone considering the values of nature for humans and nonhumans, including policy makers, political ecologists resisting the commodification of nature, anthropologists, and anyone involved in environmentalist knowledge-making and social engagement.

Part 3 of the book advocates adoption of a metascientific stance that differs from both the worldview clash model and positivist science-driven environmentalism. A virtue of political ecology is that it casts knowledge producers in society as socially engaged agents, both intervening in and responding to the “unruly complexity” of the intersecting processes through which knowledge of phenomena such as environmental problems is produced. The ontology implicit in these social studies of the sciences avoids many dualisms, but at the expense of obscuring macroscale relations of dependence. This largely relational framework is contrasted with this book’s stratified one in which the claim that humans are utterly and asymmetrically dependent upon nonhuman nature—ecological materialism—is fully articulated. This section gives more substance to the central message in the book that dependencies of different scales and types have to be recognized at ontological, epistemological, and ethical levels. Anthropologically, we have to acknowledge and theorize the embeddedness of humankind in natural and social structures through an ecological materialism. In terms of value theory, it means recognizing the existence of values and their complex dependencies among one another as well as their dependence on or independence from humankind. Finally, dependence is expressed in the problem of metascientific stance because worldview clash usually obscures dependence by reading it as interdependence, while

science-driven environmentalism systematically obscures the social dependence of knowledge producers. A better metascientific stance allows us to avoid the pitfalls of both of these options and to recognize natural and social dependencies in their multiple forms.

This book is presented as a provocation to environmentalists, philosophers generally, and environmental philosophers in particular. It aims to provoke environmental philosophers to think more deeply about their own conceptions of what environmental ethics and philosophy are and are capable of. Secondly, it aims to provoke philosophers generally to recognize that the field is not restricted to a specific subject matter of concern to just a few scholars in a remote corner of the academic universe. Environmental problems are everyone's problems, and so environmental philosophy is relevant to everyone. Its scope is as wide as philosophy itself, and its content bears on all major areas and problems. Finally, it ought to provoke environmentalists outside of philosophy to become more familiar with the traditional and novel conceptual frameworks and approaches we tacitly rely on in discussing environmental problems, with the hope that they will begin to see the dependence of their own ideas on these frameworks, and will gain the ability to avoid the damaging errors that result from uncritically adopting traditional ones.