Introduction

Greening Philosophy and Democratizing Ecology
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Greek Ideas and Green Ideals

Western philosophy begins as a meditation on nature in an attempt to discern the order of things and to speculate on its meaning, direction, and purpose. The first Greek philosophers, reflecting not simply upon the human psyche but directed themselves foremost toward the yawning heavens, the turnings and reversals of fire, the rhythm and play of water, and the outcroppings of rock and earth—more broadly, the four elements. In their search for a hidden arche, an underlying logos, or a guiding telos, they looked as well to the growth, movement, and relations of plants and animals. Science at this point was virtually indistinguishable from philosophy. Though moving away from the speculative insights of the Presocratics, Aristotle and his student Theophrastus can be seen as early forerunners of ecological thought—the Greek fathers of animal and plant ecology, respectively. To a remarkable extent, they integrated scientific observation of nature with philosophic justification and explanation.¹

It is only later in history that such "theories of nature" are given over almost completely to "theories of mind" and to narrowed notions of nature, denatured conceptions of reason, and radically subjective perspectives on cosmology, aesthetics, and ethics.² It is the generous sensitivity, broad inclusiveness, and ontologically egalitarian orientation of this early Greek thought, rather than its scientific accuracy or correctness, which remains important because of its embeddedness and groundedness in a realm beyond the solely human.³ One way to "green" or "ecologize" philosophy and to deepen and democratize ecology, then, would be to explore the first bold footsteps of the
Greek philosophers, observing their transitions from the interpretive framework of an intelligible, rational, and beautiful kosmos to their movement away from myths and stories about the nonhuman, gradual severance from the natural world, and finally, attempts to transcend this world altogether. One could inquire how they understood change, the elements, form and matter, and being and causality in relation to the natural and social realms, situating their thought in the context of social and political changes such as deforestation or domestication of plants and animals. These changes have helped us to alter ecological and philosophical notions and allowed the process of dominating and controlling nature to become more complete.

Another approach to theorizing the relations of philosophy to ecology and, by extension, of society to nature, is to begin with contemporary aporias, problems, and debates and to understand them in relation to qualitative changes in philosophy, culture, and political economy over time. In this regard, the present collection of essays—many of which appeared in the journal Capitalism, Nature, Socialism—Attempts to Draw Out, Clarify, Critique, and Extend the Insights of Some of the Most Important Philosophers, Writers, and Thinkers on Nature and Polity in This Century, as well as several who anticipated and influenced major twentieth-century figures. Each of the subjects of these essays has contributed deeply and significantly to contemporary discussion and to the historical understanding of political, epistemological, or social issues related to nature. With two exceptions, Hobbes and Heidegger, they stimulated constructive dialogue within progressive, democratic, and leftist circles. In various ways, they have helped to challenge the notion that conservation is inherently politically conservative or that our oikos (home) must be rendered uniformly economic where ecology (i.e., the household of nature) is concerned. In so doing, they have enabled us to rethink the possibility of creating a more democratic and ecological society.

One guiding thread through the thinking of many (though not all) of the figures considered in these essays is a certain commitment to or relation with critical social theory. Such theory can be characterized very loosely as a critical perspective on technology, power, science, and instrumental reason along with an opposition to exploitative capitalist social relations and a willingness to engage and reenvision the social and political world by examining the relationship between nature and society. In this sense, many of the philosophers and thinkers in this collection have relevance for understanding or critiquing emerging schools of thought and social movements such as social ecology, ecological feminism, bioregionalism, socialist ecology, and, perhaps, critical postmodern ecology (even if these perspectives do not always directly rely on or acknowledge critical social theory).

Important issues and ideas are at stake, many of which are debated in the following essays. These include (1) the respective claims and merits of anthropocentric, biocentric, and ecocentric positions; (2) the possibilities or pitfalls of modernity and, to a lesser extent, postmodernity and premodernity; (3) the nature, scope, and types of rationality and their relation to technology, language, social change, and forms of embodied knowledges; and (4) the conceptualizations of constructs of nature and how they tell us about our vision of society. To these we can add (5) the degree to which existing political traditions or tendencies (socialist, anarchist, feminist, and liberal) are compatible or antagonistic toward a new ecological sensibility, and (6) the sources for analyzing and location of a viable ecological and political tradition (e.g., North American, European, Far Eastern, or Native American). Of central concern as well are (7) the specific and primary diagnostic critiques of the roots, forms, and manifestations of ecological and social problems. These range in starting point from capital formation, overpopulation, environmental pollution, and autonomous technology to social domination and hierarchy, repressive and instrumental rationality, the Judaic and Christian religious traditions, and historical forgetting of Being. Finally, at issue are (8) the proposals toward solutions, whether individualistic or collectivist, conflictual or consensual, libertarian or authoritarian, interventionist or “letting be.”

In discussions of ecological philosophy and the mastery of nature, a common point of departure and historical foil has been either the empiricism of Francis Bacon or the rationalism of René Descartes, two Renaissance thinkers who developed radically new methods for guiding scientific research and who characterized the natural world in terms of its use-value for or distinctness from humans. Marx himself, in fact, remarked, “That Descartes, like Bacon, anticipates an alteration in the form of production, and the practical subjugation of Nature by Man, as a result of the altered methods of thought, is plain from his ‘Discours de la Méthode’: “—For Bacon, to know nature means to disturb and array it (natura transata) through artisanship and technology so that it will disclose its secrets. With Descartes, the understanding of nature and realization of certainty are achieved first by separation from the natural world, then by precise measurement. In both instances knowledge is premised upon detachment and a thoroughgoing control over the environment and experimental conditions. Coupled with this control is a privileging of the “how” over the “why,” which evenuates in a utilitarian criterion of truth, a tendency to transform science into technique, and a reduction of the “object” of knowledge to an instrumental relation of quantifiable value.

From Realism to Utopia: Hobbes and Fourier

The present collection of essays commences alternatively with an assessment of Thomas Hobbes (1588–1679), who was influenced by the Baconian equation of knowledge and power and likewise espoused a new epistemology,
but who also built a political philosophy on his methodology and assumptions. That philosophy continues to exert a haunting philosophical and social influence. In contrast to Aristotle, whose model science is biology, and Marx, who proceeds by turning to history, Hobbes relies upon a mechanical physics that explains motion without recourse to the formal and final causes of Aristotelian science. And in contrast to Aristotle's conception of the political community as a natural association or Marx's depiction of it as an historical form, Hobbes conceives of community (which collapses into a commonwealth and all-powerful sovereign) as an assemblage of atomistic, self-interested individuals who band together out of fear of death (the summum malum) rather than desire for public freedom.10

Thus, for Hobbes the end of politics is simply self-preservation and security against a state of "slaughter, solitude, and the want of all things" rather than the good life of the community (Aristotle) or the attainment of species-being (Marx). Knowledge does not serve to attain arete (virtue or excellence) as in Aristotle or to overcome alienation as in Marx, but rather to construct a "commonwealth" or Civitas (artificial man) built upon a mechanistic psychology and physics. The contrast is vivid between Hobbes' artificial and mechanical political order, based upon techne, and established through a social contract, and the much earlier but still influential view of Aristotle that the polis (city or civic community), hence politics, is natural, in part because it is an extension of earlier organic forms. The significance of these comparisons becomes clear when one considers the new role of nature and its relation to society, a subject explored by Frank Coleman in the first essay.

Hobbes throws into perspective a great divide separating the modern or postmodern age from antiquity, where nature was endowed with and permeated by mind or intelligence and where the nature-society relation was organic. Current characterizations of and proposed solutions to ecological and social problems are often cloaked in Hobbesian language. If due to the gravity of environmental problems, the choice consists in near-absolute authority or ecological annihilation—in the words of William Ophuls, "Leviathan or oblivion"—this amounts to both a choice for Hobbes and a Hobson's choice (i.e., no choice at all). It leads Ophuls, for example, to hark back as well to Plato in proposing a class of "ecological guardians" to govern a steady-state society because "the only solution is a sufficient measure of coercion."11

Hobbesian assumptions also guide the thought of therist William Carston and ecologist Garrett Hardin, where they culminate similarly in analysis marked by scientific reductionism, neo-Malthusianism, and a lack of social critique.12 In influential essays like "The Tragedy of the Commons" and "Living on a Lifeboat," Hardin grounds his egocentric ethic on the presupposition that humans are competitive by nature, that the commons functions like a marketplace, and that capitalism, in turn, is a completely natural form of association and exchange. It is no surprise, then, when he argues for the necessity of coercion and rule by a "strong and farsighted sovereign" (à la Hobbes), triage, and refusing aid to countries with incorrigible population problems.13

Put differently, some Cassandras of ecological doom may be offering us a false dilemma which conceals a very conservative or reactionary political agenda, notably some right-wing "ecological" parties in Europe and certain writers and political currents in the United States advocating, for example, the lifeboat ethic and survivalist, authoritarian, even ecofascistic solutions. It is vital to realize, then, that an image of nature offers us as well an image of society. In Lukács's terms, "nature is a social category," that is, "socially conditioned," or as Adorno writes, "In every perception of nature there is actually present the whole of society."14 It makes great political and philosophical sense to examine representations of Earth, the environment, nature, and the wild for they may tell us as much as and often more about ourselves than about the nonhuman world around us. Historically significant characterizations can be found, for example, in Tennyson's image of nature as "red in tooth and claw"; Spinoza's conjunction of Deus with Natura and his identification of both with subst unct; the tendency in the West to gender matter, the Earth, and nature as feminine; Galileo's "mathematization of nature"; Emerson's transcendental spiritualization of nature; Nietzsche's injection of "dehumanize nature" and "naturalize humanity"; and Rousseau's valorization of presocial "natural man." This kind of critical reading also throws light on issues related to teleology and evolution, cyclicality and progress, artifice and technique, and mechanism, organism, and informationalism.

With Hobbes, the question of religion also arises, as Frank Coleman argues in exploring themes related to the "prosthetic God" and the location of the British philosopher at a busy historical intersection of liberalism, capitalism, and modern science. In Coleman's view, Hobbes derives his conception of "man" as artificial (Homo faber) from the Bible, where the infamous Leviathan is introduced in the Book of Job; consequently, he views nature as an artifex—either human or divine, but always and only an artifex. Thus, there are few to no limits placed on our capacities to transgress, destroy, or remake the natural world. The role of Judaism and Christianity in the ecological crisis has been the subject of some debate since Lynn White's 1967 essay on the subject, and Coleman's discussion is in part an extension and deepening of that debate.

Bearing upon it, too, is the emergence from the desert landscape of a disembodied, omnipotent, and unknowable God, whose absolute transcendence and lack of concrete, phenomenal form can appear as empty and brightened as a lonely night beneath a starless Saharan sky. Among others, Paul Shepard, George Steiner, and David Miller have explored the relationship between the symbol of the desert and the idea of monotheism, and correspondingly, of monotheism to society. Their work suggests that monotheism tends to promote a sense of abstract disconnectedness; a penchant toward authoritarianism, asceticism, and masochism; and a failure to appreciate fully the
particularities of landscape and place. They surmise that the heightened experience of social and metaphysical alienation can result in periodic attacks upon those believed to have originated monotheism. In contrast, like thinking itself, ecology is arguably a kind of polytheism (and pluralism); in the words of James Hillman, "both show interpenetrating and interlimiting patterns of at times thronous powers, each power a qualitative splendor, a presence that is the unique example and universal genus at once."16

Charles Fourier's (1772-1837) utopianism throws Hobbes's harsh realism into relief. Nature, which in Hobbes was relegated to a realm of chaos, disorder, and fear, reemerges as a sphere of potential freedom, pleasure, and spontaneity in human society. Further, human nature is no longer a dark constraint upon community. Unlike Hobbes's reductionism and mechanism, Fourier's psychology is complex, differentiated, pluralistic, and ecological in the sense of its emphasis on wholeness. Because of Fourier's ecological vision of both nature and society, Murray Bookchin has written that "Fourier is in many ways the earliest social ecologist to surface in radical thought."17

One might question the apparent paradox of the place of utopian thought in political theory and, especially, in ecological philosophy. In other words, what has placeless and often groundless "idealism" or chiliasm to do with an ecological philosophy that is presumably inhabited, historical, and emplaced? It's helpful to recall that Thomas More, who coined the term utopia in 1516 for his novel of the same name, distinguished between eu-topia as "good place" and kata-topia as "no place." In the former sense, a utopia can serve as a kind of critical ethical and political guide toward the good and the good life rather than as a utopian blueprint that all too frequently reincribes or extends the realities of the present. The best utopian thought follows strong insights and tendencies to their logical conclusions; provides imaginative possibilities for association, communication, and organization; and is implicitly critical of existing conditions. In this sense, it is real insofar as it is a realizable ideal.

Following Lewis Mumford, one can distinguish between utopias of escape and utopias of reconstruction, where the latter (such as Fourier's) aim at new values, creative relationships, and liberaing institutions by blending idealism with practicality. Mumford's characterization of utopian thought illuminates as well the implicitly ecological dimensions to such thought. "Utopian thinking, as I came to regard it, then, was the opposite of one-sidedness, partisanship, partiality, provinciality, specialization. He [and she] who practiced the utopian method must view life synoptically and see it as an interrelated whole; not as a random mixture, but as an organic and increasingly organized union of parts, whose balance it was important to maintain—as in any living organism."22

Many "utopias," of course, have been authoritarian models of rational planning gone awry, including Bacon's New Atlantis, Saint-Simon's industrial utopia, B. F. Skinner's Walden Two, and Plato's Republic. Their stress on centralized, hierarchical, or absolute authority is in this regard unecological and antidemocratic in the extreme. Indeed, the twentieth century is witness to the dangers of utopian thought turned dystopian, where monsters have been born and bred from nightmarish dreams of reason, community, and harmony. This phenomenon has contributed (understandably) to its decline, as empiricism has supplanted speculative inquiry and Realpolitik has circumscribed imagination.

However, in the writings of William Morris, Ebenzer Howard, Paul Goodman, Gustav Landauer, Peter Kropotkin, Ernst Bloch, Herbert Marcuse, Theodore Roszak, and Murray Bookchin, utopian thinking (broadly defined) has also offered more fertile ecological and democratic visions. As Bookchin has observed insightfully:

What marked the great utopians was not their lack of realism but their sensuousness, their passion for the concrete, their adoration of desire and pleasure. Their utopias were often exemplars of a qualitative "social science" written in seductive prose, a new kind of socialism that defied abstract intellectual conventions with its pedantry and icy practicality. Perhaps even more importantly, they defied the image that human beings were, in the last analysis, machines... Their message of fecundity and reproduction that rescued the image of humanity as an embodiment of the organic that had its place in the richly tinted world of nature, not in the shopworn and the factory.23

These perspectives have fostered a kind of eco-communism predicated on such principles as mutual aid, simplicity, direct action, usofruct, respect for nature, decentralization, and appropriate technology. To this degree, they belong to an emerging ecotopian tradition which has found direct expression in cooperatives, collectives, and communes throughout the United States and elsewhere.24

As part of this tradition, Fourier offers both utopian ideas and practical proposals.25 He envisions a world based on the phalanx, a balanced community where the passions are allowed full play and human inclinations are set free. In Joan Roelof's view, Fourier preforges by more than a century the present red-green discussion in his critique of the nuclear family as perpetuating excess consumption, his early feminism, stress on sexual freedom, reorientation of work, and sensitivity to community, collective living, and the natural world.

The tension between "idealism" and "realism," between utopian sympathy and anti-utopian suspicion, is admittedly perennial. It has surfaced within the ecology movement itself, for example, between the more principled Funds and the more pragmatic Realos in Germany and between radical ecologists and more mainstream environmentalists in the United States. Hence the value of critiques and visions like those of Fourier, which strive to overcome these oppositions and creatively to interface play with work, freedom with necessity, and eventually society with nature.
The Ecology of Phenomenology: Heidegger and Merleau-Ponty

For critical and political ecology, the transition from Fourier to the Frankfurt School and phenomenology in the twentieth century entails a long, complex journey through Hegel, Marx, and Kropotkin, thinkers who are not represented in the present collection but who are integral to understanding it. Each has had a great influence on contemporary discussion.

Hegel (with Fichte and Schelling) restored organicism and teleology to nature, affirming with Aristotle (and contra Kant and Plato) that the “things themselves” can be known and that they possess realizas (though not veristas) and nises, a striving to become definite. However, for Hegel, nature is developing into mind and in this sense is not complete. It is a phase in a process, the immediate, self-determined reflection of the Idea. 26

Marx, who inverted and transformed Hegel so that nature or matter grounds consciousness, has been more directly adopted, adapted, and attacked by various schools of ecological thought. Support has been found in his work for positions ranging from a prefiguration of the science of ecology, an implicitly ecological critique of capitalism, and the inspiration for ecological socialism, on one end of the spectrum, to justification for the mastery of nature and an extension of productionism, technocratic thought, and Promethean ideals on the other end. 27

Finally, Peter Kropotkin challenged the emphasis in evolutionary theory on notions of struggle and competition, calling attention to mutative, cooperative, and spontaneous aspects of animal and human societies. His works, such as Mutual Aid and Fields, Factories and Workshops, have influenced the development of social ecology, utopian criticism and eco-anarchism in the writings of Mumford, Martin Barber, and Bookchin, among others. 28

Here, we turn to examine the work of Martin Heidegger (1889–1976) and Maurice Merleau-Ponty (1908–1961), two of this century’s most profound philosophers and important phenomenologists. In the first instance, Michael Zimmerman reflects not only on Heidegger’s contribution to ecological philosophy and deep ecology in particular, but also on his own sustained and influential efforts to introduce Heidegger to ecologically minded philosophers and activists. While still finding much of value in Heidegger’s vast opus for ecological theory, Zimmerman warns of dangers and dead ends in his thought which are related to his antihumanism, re-creation of the question of being, peculiar understanding of physis (nature), and political naïveté.

Heidegger was once rather awkwardly called the “metaphysician of ecology” by George Steiner, and there is some truth to this claim. As Zimmerman has made clear, he seems to offer a kind of environmental ethos (as opposed to ethics). He speaks of “saving” the earth (meaning to free it into its own essence), stresses the primacy of dwelling, criticizes modern technology and science (as stripping nature of its significance), and presents humans as shepherds or stewards of the earth.

Nevertheless, Heidegger’s thought is not without its share of problems. First, a residual or latent unexamined anthropocentrism and antihumanism are often present in his work. Second, Dasein, his unique term for existent being, is not understood strictly as human although, in fact, it comes to mean no one and nothing other than the human. Third, there is a glaring lack of the mit-Sein (being-with) and intersubjectivity in his writing. Finally, he denies anima’s and the capacity for language and establishes a sharp earth/world opposition which is usually described as a competitive battle or striving rather than as cooperative or symbiotic.

Heidegger grappled with the loss, forgetting, and regression of ground as Boden (soil), Heimat (home), and Ort (place), on the one hand, and, on the other, with the problem of grounding as in philosophical Grund (ground), Grundung (foundation), Ur-grund (primal ground), or Ab-grund (abyss). In both An Introduction to Metaphysics and his most important work, Being and Time, he is concerned with the most basic or fundamental question (Grundfrage), which deals with the nature and ground of Being. He repeatedly seeks to uncover and recover that which lies in depth or at the source and, in attempting to bring this darkness to light, feels compelled to unearth and pile before us a mountain of words sharing the same root, in particular Grund. For example, “This question with its Why does not move on one level or surface only but penetrates the underlying realms to their ultimate reaches, to the limits; it is opposed to all surfaces and all shallowness and strives for the depth; as the widest question it is also of all deep questions the deepest.” 29

Heidegger’s appeal to a radical solution (i.e., one that goes to its roots) is, of course, not immune to problems, in particular the charge of nostalgia and a privileging or mythologizing of origins, apparent in both the ontological and existential dimensions of Being and Time. He repeatedly instructs us to return, to go back, and to go home again in order to uncover the primordial Ursprunghilich “meaning of Being” which has been concealed by the tradition. He hopes to dismantle and destroy. However, in counseling a going under (zu tief in this way, he implies that some unmediated, pure, and authentic experiences and meanings in fact exist or at one time existed, a position which has been put into question effectively by Jacques Derrida, Theodor Adorno, and Jürgen Habermas. 30

To his credit, Heidegger seeks to avoid Ursprunghilosophie in his later thought, and it is here perhaps that an ecophilosophical connection can be made more fully. His notion of Geviert, as One with fourfold polyvalence (earth, sky, divinities, and mortals), avoids grounding, explanation, and causality in any traditional sense. In other words, the world is not based on a ground external to it, and no single “element” of the four can provide such a founda-
not substance. To designate it, we should need the old term 'element' in the sense it was used to speak of water, air, earth, and fire.”31 Later he writes: “What we are calling flesh, this intensely worked over mass, has no name in any philosophy. As the formative medium of the object and subject, it is not the atom of being, the hard in itself. We must think of it, as we said, as an element, as the concrete emblem of a general manner of being.”32

Merleau-Ponty’s presentation of flesh in elemental terms is understandable, for he seeks a medium between the body and the world and the visible and the invisible, hoping to express “our living bond with nature,” as he puts it in his later lectures at the Collège de France. Connected closely with Merleau-Ponty’s idea of the flesh are his interpretation of the earth (especially via Husserl’s later writings) and his lectures on the “The Concept of Nature.” For example, he writes of the “forgetfulness of the earth” just as Heidegger had explored the forgetting of being (Seinsvergessenheit), and claims that the earth serves as the “ground [soil] of experience” and “the root of our spatiality, our common homeland.”33

Neu-Aristotelians and Nature: Arendt, Bloch, and Jonas

In my essay, I use Hannah Arendt (1906-1975) as a starting point to examine the phenomenon of earth alienation, meaning our attempts to transcend or escape our given home and what Arendt calls the “human condition,” a term that stands in contrast to an essentializing notion of human nature. Philosophers have arguably been tempted to flee this-world ever since early thinkers like Anaximenes (who described air as originary and divine matter) contemplated the heavens and later ones like Kant placed stress on the transcendental dimensions of universal knowledge. With the advent of space technology and the subsequent planetary orbits by Soviet cosmonaut Yuri Gagarin and German Titov, we have succeeded literally in leaving the earth. Such speculations, strivings, and successes have transformed us in the process (as have our flights into the self, the subatomic, and the psychological), altering our conceptions of nature and the cosmos and our image of humanity. In this sense we are, in the words of Werner Heisenberg, like the “astrophysicists [who] ... must reckon with ... the possibility that their outer world is only our inner world turned inside out.”36 Or, as Arendt puts it in interpreting a passage of Plato’s Theaetetus: “As the rainbow connecting the sky with the earth brings its message to men, so thinking or philosophy, responding in wonder to the daughter of the Wonderer, connects the earth with the sky.”37

Representing a minority tradition in philosophy, Arendt-like Nietzsche—despite the latter’s status as a poet and philosopher of air, height, verticality, levity, lightness, and the sublime—joins us to “remain faithful to the earth.”38
In this regard, ecological philosophy counsels an attentiveness to lived place (rather than abstract space), body and matter (not only spirit and mind), changing appearances and phenomena (not simply static essences and noumena), and immanence (along with possible transcendence). It seeks to guide the flight of thought and the thought of flight gently back down to earth without constricting it unconditionally.

Arendt’s concern with home and homelessness, earth and world alienation, and, in The Life of the Mind, appearance, surface, semblance, and the (no)where of thought retains an explicitly ecological dimension. In this final book, she moves to consider the work of Merleau-Ponty and biologist Adolph Portmann in order to evince the close relation between eye and environment and animality and appearance, returning to the approaches and insights of phenomenological investigation and Zu den Sachen selbst (to the things themselves). Her thought, however, also carries with it ideas and insights for a viable ecological politics since it is concerned with communitarian aims, participatory democracy, direct political action, meaningful work, unnecessary consumption and production, and a critique of modern science and technology.

Ernst Bloch (1885-1977), like Arendt and Merleau-Ponty, is not a name immediately familiar to many ecological theorists and activists. However, John Ely (following suggestions from Bookchin) makes a strong case for his relevance by exploring Bloch’s unusual adherence to both Aristotelianism and Marxism as well as his commitments to the communitarian, natural law, and critical utopian traditions. In his interpretation of Feuerbach’s eleventh thesis, Bloch speaks of the “resurrection of nature,” where the goal is not a blind or regressive identification of human nature but rather the recovery of an objective intentionality in the natural world. Nature is on the horizon, at the frontier, as a not-yet (noch nicht), implying the presence of a teleology (dependent ultimately on an ontology), but one more open and flexible than, for instance, in Hegel. “Nature,” he writes in The Principle of Hope, “is not something that can be consigned to the past. Rather it is the construction-site that has not yet been cleared.” Like Arendt and Bookchin, Bloch offers the possibilities of incorporating neo- or left-Aristotelian and civic republican insights into ecological and political thought, expanding and integrating a sense of social place with given ecological niches, limiting and reversing the baleful effects of industrial capitalism and unchecked consumerism, and providing, as Ely argues, not only an embodied democracy but an embodied ethics.

In stark contrast to Bloch’s principle of hope and its utopian promise, Hans Jonas (1903-1993) advocates a sober imperative of responsibility, an ethic of restraint, and a heuristic of fear. Like Arendt and Bloch, Jonas is a neo-Aristotelian but, unlike Bloch and like Arendt, he is skeptical of the Marxist tradition and more elusively in his political leanings. Jonas also develops a philosophy of nature which seeks to bridge the perceived chasm between “is” and “ought,” “objective” and “subjective,” and to bring nature into the realm of human responsibility through an ontology and ethics based “in an objective assignment by the nature of things.” Along with other thinkers in the present collection of essays, Jonas sees that “the raping of nature and the exiling of man go hand in hand” and that “natural science may not tell the whole story about Nature.”

Lawrence Vogel explores Jonas’s response to Heidegger and the abyss of nihilism (which Nietzsche had diagnosed much earlier as the rejection and annihilation of the earth). In Vogel’s view, Jonas attempts to overcome nihilism and to ground an ecological ethic which bypasses the horns of anthropocentrism and biocentrism. This project proceeds through three successive stages: (1) beginning with an existential interpretation of biology and a defense of purposiveness in nature, (2) passing through a metaphysical anchoring of ethical obligation, and (3) culminating in a theology of divine creation that Vogel finds consistent with Jonas’s earlier views, but ultimately an unnecessary undertaking.

In addition to his search for a viable ecological ethic, Jonas was intrigued by a systematic philosophical analysis of modern technology, as did Mumford, Heidegger, and Marcuse in different ways. In looking at genetic engineering, cloning, medical support systems, and cybernetics, he voiced with urgency the Pandorian dangers that press threateningly and without public discussion upon the environment, our image of humanity, species survival, and the dignity of the person. Toward historical clarification, he distinguished between classical technique—essentially premodern, static, possessive, and existing within well-defined and balanced limits—and modern technology, which is dynamic, process-oriented, self-changing, unbounded, and allied with scientific and military interests. As against Baconian methods, Enlightenment ideals, and market forces, Jonas advised limiting certain dangerous quests for knowledge, reigning in unbridled techno-scientific activity, and carefully decelerating modern “progress.”

Critical Theory, Science, and Technology: Marcuse and Mumford

Contemporary ecological philosophy finds origins and expressions in both critical theory proper and the Frankfurt School (founded in 1923) which revised Marxism—with its focus on political economy and exploitation—through a critical encounter with science, technology, popular culture, art, and psychoanalysis. Through the work, in particular, of Theodor Adorno, Max Horkheimer, and Herbert Marcuse (1898-1979), its theorists also advanced a new, reconciliatory understanding of nature and society. Such a reconciliation might be achieved through recovery of an “objective reason” that inheres deeply in the mind and reality as a guiding, value-laden logic, but
which has devolved and been supplanted largely by “instrumental reason,” or a technique to achieve individual, operational, and pragmatic ends. In Dialectic of Enlightenment (1944), Horkheimer and Adorno examined the ways in which the world has been progressively deenchanted, outer nature increasingly dominated, and inner nature repressed as society has adhered blindly to the Enlightenment goals associated with social progress, scientific knowledge, and injusticial rationalization. In Eclipse of Reason (1946), Horkheimer again advocated the reconciliation of spirit and nature, but admonished against equating the two. Adorno, on the other hand, looked in Aesthetic Theory (1973) at the new, discontinuous relation of art to nature, the accompanying eclipse of Naturphilosophie, and the deacceleration and destruction of natural beauty upon which autonomous aesthetics predicates itself. Elsewhere, he sought to “dialectically overcome the usual antithesis of nature and history.”

Through radical revisions of Marx and Freud, Marcuse formulated the first steps toward a new emancipatory science and technology, speaking at the same time of the “liberation of nature”—where external nature is treated as a subject and inner nature freed from psychic repression—and stressing the need for an aesthetic and erotic revolutionary praxis in order to create a new society. In Counterrevolution and Revolt, for example, he writes:

In the established society, nature itself, ever more effectively controlled, has in turn become another dimension for the control of man: the extended arm of society and its power. Commercialized nature, polluted nature, militarized nature cut down the life environment of man, not only in an ecological but also in a very existential sense. It blocks the cosmic catharsis (and transformation) of his environment; it deprives man from finding himself in nature, beyond and this side of alienation; it also prevents him from recognizing nature as a subject in its own right—a subject with which to live in a common universe.

He try Blanke’s essay explores themes related to utopia and domination in Marcuse’s work and especially their relevance for ecological thought, finding in Marcuse a strong critique of technological domination, an illumination of the modes of nonrepressive reason, and a prefiguration of the insights of ecological feminism.

“All thinking worthy of the name must now be ecological,” Lewis Mumford (1895–1990) remarked in The Myth of the Machine. Toward this end, his own thought moves with vision, force, and suggestiveness, anticipating by decades many of the issues and problems with which we are now confronted. In the 1930s, for example, he spoke presciently of the need for the “restoration of the balance between man and nature,” including “conservation and restoration of soils, the re-growth wherever this is expedient and possible, of the forest cover to provide shelter for wild life and to maintain man’s primitive background as a source of recreation . . . reliance upon kinetic energy—sun, falling water, and wind . . . [land] conservation of minerals and metals.” This balance in the natural environment was to be accompanied by an equilibrium in population, industry, and agriculture, which would have the effect of undercutting much of the basis for capitalism.

Mumford advocated a science and technology based on “an earth-centered, organic, and human model” and advanced an original historical understanding and critique of technology which began with neolithic developments and extended into the rise of what he termed the megamachine age. He distinguished between a tradition of authoritarian megalotechnics and one of democratic polyechnics; the former emphasizes large-scale, centralized, and hierarchical systems while the latter stresses autonomy; arts and crafts, the human scale, and direct governance by the people. His proposed solutions and suggestions do not imply pessimism, neo-Luddism, or a romantic “return to nature,” as they have sometimes been characterized, but rather seek to infuse the democratic and ecological practices of the past into the present, to inform mechanical and technological developments with the organic and biological, and to integrate the cities with the landscape and countryside, and the social with the natural world.

Mumford is arguably as much an ecological anarchist as an ecological socialist, a characterization proffered by Ramachandra Guha in his critical resuscitation of the neglected polymath, whose stature as an American ecological thinker, he believes, should be equal to that of Aldo Leopold and John Muir. Mumford’s emphasis on the small scale, decentralization, radical democracy, regionalism, and anti-commercialism—in combination with his ties to Peter Kropotkin, William Morris, and Henry David Thoreau, among others—places him in the anarchist tradition, at least peripherally. Moreover, his work has been taken up by eco-anarchists like Bookchin, Roszak, and Kirkpatrick Sale. Bookchin, in particular, has developed and expanded many of Mumford’s insights on technics, “second nature,” decentralization, and cities in a more radical direction, addressing in his own social ecology what Guha calls that “curious silence” in Mumford’s work regarding social movements.

Mumford’s advocacy of regionalism, too, has found a second life in the movement for bioregionalism, which seeks to model human communities on the native biota, land, watersheds, soil, and climate of particular places, which will be “rehabilitated.” In terms of both human values and natural entities, Mumford described regional planning in the twenties and thirties as a “New Conservation.” The civic objective of this “organic planning,” as he also termed it, is captured in the concept of the garden city (which Mumford borrowed from Ebenezer Howard), where regions have a basis not in “artificial boundaries, drawn on the map with the aid of the ruler” but instead coexist with a respect for the climate, soil, and vegetation as well as the needs of culture and industry.
Pesticides, Pollution, and Population: Carson, Commoner, and Ehrlich

If Mumford is a forgotten but important ecological philosopher, Rachel Carson (1907–1964) was an extremely influential but unlikely environmental reformer whose work, *Silent Spring*, helped to generate and define discussion about pesticides, pollution, and environmental degradation during the 1960s and the past two decades. Yaakov Gibr reexamines her work, finding in it both a deep challenge to and compromising extension of earlier perspectives on nature and the environment, and contrasting it with Bookchin’s neglected but more politically astute and radical work, *Our Synthetic Environment*, which appeared a half-year earlier than Carson’s landmark text. Carson’s contribution as a female scientist and writer also raises issues related to ecological feminism, a movement to which she lends inspiration even if there is, as in Azar’s writing, an absent or unarticulated ‘woman question.’

The feminist contribution to ecology and the frequent association of nature with women were not to be identified and examined fully until the mid-to-late seventies and the early eighties with the appearance of works by Carolyn Merchant, Susan Griffin, Ynestra King, Karen Warren, and others. In *The Death of Nature*, for example, Merchant detailed the way in which the representation of an organic cosmos with a living, female earth at its center was replaced in the sixteenth and seventeenth centuries by a mechanistic perspective in which nature was depicted as unformed, inert matter to be controlled in a “formed” by male society. She proceeded to explore the manner in which nature and women have been interwoven historically in the male mind and how this conjunction has worked to the detriment of both. In Latin and Romance languages, as in Greek, “nature” is a feminine noun, thus presented in a female term. Similarly in Platonic and Neoplatonic thought, nature and matter (which are essentially passive) are feminine while the Ideas (more perfect and pure) are masculine. Though the image of nature and earth as nurturing mother has often established an ethical relationship to these realms (for example, limiting mining and deforestation during the Renaissance), the opposing image of nature as wild, disorderly, and uncontrollable has also established a pretext for “reigning her in.”

In a more recent work, *Ecological Revolutions*, Merchant extends this project to look at ecological transformations, accompanied by shifts in gender relations and representations of nature, that have occurred in New England as a result of changes and contradictions in the modes of production and reproduction. Theoretical efforts of this kind by ecofeminists increasingly find corresponding, concrete expressions of resistance and reconstruction by women throughout the world: protest by Native American women against the threats of uranium mining on their reservations, encampments at Greenham Common in England, opposition to the lumber industry in India, reforestation of areas in Kenya to halt desertification, work in the formation of the German Greens, and numerous other projects and actions.

In addition to pollution, theorists of the 1970s addressed the population explosion and its effect on the natural world. Two figures, Barry Commoner and Paul Ehrlich, became the most visible advocates for divergent responses to population and pollution control, as Andrew Feenberg details in his essay. The contrast between their two approaches illustrated an old tension between biological and social analysis, and between the claims of science and the use of philosophy and political theory. It presaged as well divisions within the environmental movement over class, capitalism, consumerism, and race, volunteer or state solutions, and individual conscience or governmental coercion. In this respect, the spectre of Hobbes and what Feenberg terms “the politics of survival” resurfaced in an especially telling form. An understanding of this controversy and its vicissitudes will help us undoubtedly move beyond mere survivalism and toward a more ecological, democratic culture.

Revisions of the Frankfurt School: Habermas and Bookchin

Though some important twentieth-century philosophers and thinkers have recognized and responded to the deepening crisis in our relation to the natural world, at least one major thinker on the left, Jürgen Habermas (born 1929), has balked at the notion and distanced himself from theory and action seeking to redress it. As a second generation Frankfurt School theorist who has witnessed attempts to invoke an atavistic conception of nature, Habermas is skeptical toward Naturphilosophie and proposals to “resurrect nature” because of their past and potential reactionary effects. He rejects the objectivism of a natural ontology and advocates instead an instrumental relation to nature under the aegis of preserving the gains of Enlightenment thought. Joel Whitebook’s essay, which appears here with a new introduction, helped to define and generate critique of Habermas’s inability or reluctance to consider the political and social claims of ecology. Whitebook also sketches an alternative, more naturfreundlich avenue Habermas might have taken based on his theoretical commitments to communicative reason, quasi-transcendentalism, and modernity. This approach sees the ecological crisis as having social origins in the pressures of economic expansion and the attendant strains of modern science and technology.

More recently, John Dryzek has argued for an extension of Habermas–ian communicative rationality and communicative ethics to the natural world, drawing upon critical theory, the Gaia hypothesis, and an expanded understanding of agency. Others, like Thomas McCarthy, have suggested different paths to Habermas’s division of reason, his concept of nature-in-itself, and
understanding of technology. Thus, there are a growing number of attempts to revise some of the major tenets and trajectories of Habermas's work despite the fact that he himself still believes that the ecology, antinuclear, and other "new social movements" (with the exception of feminism) are primarily defensive, neomarxist, unrealistic attempts to carve out areas of liberation within the life-world. In contrast to Habermas, whom he believes is misrepresenting the best ideas and ideals of the Frankfurt School and refuting or reducing liberatory concepts, Murray Bookchin (born 1921) has been involved with radical ecological issues and direct political action since the 1940s. By reversing the direction of the theory advanced by Frankfurt School theorists and critiquing their image of nature, he has advanced one of the most developed theories of the historical relation of the idea of dominating nature to the actual domination of humans by one another. He places a new and original focus on hierarchy (as opposed to class), freedom (not simply justice), the contributions of organic cultures, and the anarchist rather than Marxist tradition. Bookchin, too, relies upon the reconstructive and integrative insights of the science of natural ecology to develop his theory of social ecology.

Social ecology stresses the gradated emergence of mind from nature; the specific and complex continuities between first (or biological) and second (or cultural) nature and their transcendent synthesis into a free nature and ecological society; and the strength of the organicism and dialectical tradition in Western thought (especially in Aristotle and Hegel). In short, Bookchin finds in nature an evolving ground for ethics, autonomy, and freedom. In his view, nature, like culture, develops dialectically and with directionality toward ecological complexity, unity in diversity, complementarity, and spontaneity. In their essay, Andrew Light and Alan Rudy praise and appraise Bookchin's efforts, but in defending a socialist as opposed to social ecology, also raise questions regarding his ability to come to terms with social labor and global or Third World problems.

Conclusion

Philosophers, Henri Bergson once observed, "seem to philosophize as if they were sealed in the privacy of their study and did not live on a planet surrounded by the vast organic world of animals, plants, insects and protozoa, with whom their life is linked within a single history." Though generally and historically accurate, the essays in this collection seek to challenge this image, offering instead ideas which emphasize our natural relations to the earth, our social creations, and each other. They explore the possibility and necessity of an ecological critique of capitalism, technology, and the history of ideas, providing a philosophical understanding of the science of ecology and the politics of nature. Perhaps, then, one could add a conditional to Mephisto's famous remark in Goethe's Faust: "I pray... is all theory, green alone life's golden tree." When and if our ideas are "greened," they might help to guide and inspire our interpretations of social, political, and biological life rather than casting a hazy pall of darkness over them. At such a time, we might also move toward both democracy and ecology.

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Notes


2. It must be acknowledged, however, that conceptual hierarchies and oppositions were forged quite early. Max Horkheimer and Theodor Adorno, for example, remark: The categories by which Western philosophy defined its everlasting natural order marked the spots once occupied by Orcus and Persephone, Aesop and Hercules. The pre-Socratic cosmologies preserve the moment of transition. The moist, the indivisible, air, and fire, which they held to be the primal elements of nature, are already rationalizations of the mythic mode of apprehension. Just as the image of generation from water and earth, which came from the Nile to the Greeks, became here the cosmic principles, or elements, so all the equivocal multitude of mythical demons were intellectualized in the form of ontological essences. (Dialectic of Enlightenment, trans. John Cumming [New York: The Seabury Press, 1972], pp. 5-6). This cosmology of Empedocles (ca. 492-432 B.C.), for example, is emblematic. His egalitarian notion of thiasma or "roots of all"—themazet as the four elements—is particularly significant for a philosophy of nature. The thiasma rest in aqueous (auctoritas) and are equal with respect to (1) origin and age, (2) strength and its related concept of honor, and (3) rule, which is carried out cyclically and, in turn, in a manner analogous to the democratic government of the polis by citizens.

3. The cosmology of Empedocles (ca. 492-432 B.C.), for example, is emblematic. His egalitarian notion of thiasma or "roots of all"—themazet as the four elements—is particularly significant for a philosophy of nature. The thiasma rest in aqueous (auctoritas) and are equal with respect to (1) origin and age, (2) strength and its related concept of honor, and (3) rule, which is carried out cyclically and, in turn, in a manner analogous to the democratic government of the polis by citizens.

4. Kosmos is related in Greek to the active, transitive verb komeo, which means to arrange or set in order, so that it can be said that the physical world of nature is brought by intelligence and through a mythic cosmology into a harmonious arrangement that is necessarily both cosmetically beautiful and moral. That is, it is actively ordered, created,
or constituted out of a primordial disorder or chaos (at least, this is how it is characterized in Plato's work).
5. In other words, how and in what form might a new “green reason” appear?
8. In The Advancement of Learning (London: Longmans Green, 1870), Bacon argues for a natural philosophy which searches “into the bowels of nature” while at the same “shewing nature as on an anvil.” The Works of Francis Bacon, vol. 4, ed. James Spedding et al., p. 343.
9. See in particular Bacon’s New Organon in Works, vol. 4, and Descartes’s Discourse on Method, trans. Donald A. Cress (Indianapolis, Ind.: Hackett, 1980). Descartes speaks of methods of “knowing the force and actions of fire, water, air, stars, the heavens, and all the other bodies” so as to “use these objects for the purposes for which they are appropriate, and thus make ourselves, as it were, masters and possessors of nature” (p. 33).
18. This account by Steiner and others should not be construed as blaming the Hebrews who “created” monotheism for all its consequences or, naturally, for its loneliness and alienation. Nor should such characterizations of the desert, which often underscore its barrenness and duality, be taken as entirely accurate; desert ecology and literature reveal a world more complex and beautiful than mere wasteland. See, for example, Edward Abbey’s Desert Solitaire (New York: Simon and Schuster, 1968). In his discussion of ascetic ideals, Nietzsche, too, warns “The desert... where the strong, independent spirit withdraws and becomes lonely—oh, how different it looks from the way educated people imagine a desert”—for in some cases they themselves are this desert, these educated people.” On the Genealogy of Morals, trans. Walter Kaufmann (New York: Vintage Books, 1967), p. 109.
25. Marx and Engels criticized the approach of utopian socialists, although they credited Fourier with recognizing class antagonisms and providing a strong critical element which was valuable for working-class enlightenment. See Karl Marx and Frederick Engels, The Communist Manifesto, pt. 3, ed. Samuel Beer (Arlington Heights, Ill.: AMH Publishing Corporation, 1958).
28. Kropotkin argues for the abolition of the distinction between city and country through a creative combination of small-scale industry and agriculture. Kropotkin advocates as well “a synthesis of human activities” which would overcome the division of society into intellectual and manual labor. He stresses the need for integration and balance—for the individual, economy, and society—and underscores the importance of decentralization and regionalism in industry. His definition of economy as a “science devoted to the study of the needs of men and of the means of satisfying them with the least possible waste of energy” is implicitly sensitive to the ecological dimensions of the issue. Kropotkin criticizes neglect and waste of the land and advocates a new, radical agriculture, envisaging farms on a horticultural and garden model which would support more people and be labor-intensive. See Fields, Factories and Workshops, ed. Cols. Ward (New York: Harper and Row, 1974); Kropotkin, Mutual Aid (Boston: Extending Horizons Books, n.d.); and David Macauley, “Evolution and Revolution: The Ecological Anarchism of Kropotkin and Bookchin,” in Anarchism, Nature, and Society: Critical Perspectives on Social Ecology, ed. Andrew Light (New York: Guilford Press, in press).
MACAULEY

34. Ibid., p. 147.
37. Ibid., p. 142.
45. Like Marcuse, in certain respects they seem to have anticipated ecological feminism, pointing out how women "became the embodiment of the biological function, the image of nature, the subjugation of which constituted that civilization's title to fame," and adding that "for millennia men dreamed of acquiring absolute mastery over nature, of converting the cosmos into an immense hunting ground." "Dialectic of Enlightenment," p. 248.
46. For example, Horkheimer writes: "The equating of reason and nature, by which reason is debased and raw nature exalted, is a typical fallacy of the era of nation state. Instrumentalized subjective reason is always eulogized as pure vitality or disparaged as brute force, instead of treating it like a text to be interpreted by philosophy that, if rightly read, will undo a tale of infinite suffering. Without committing the fallacy of equating nature and reason, mankind must try to reconcile the two." Eclipse of Reason (New York: Oxford University Press, 1946), p. 125.

Introduction

47. Theodor Adorno, "The Idea of Natural History," Telos 60 (Summer 1984): 111.
49. Quoted in Anne Chisholm, Philosophers of the Earth: Conversations with Ecologists (London: Sadwick and Jacks-n, 1971), title page. In conversation with Chisholm, Mumford goes on to say, "Ecology has always been part of my thinking.... It hasn't been an independent subject. I think about the entire complex, the whole environment, not in terms of a fragment of it. That is ecologic thinking" (p. 2).
51. This distinction echoes Kruskin's much earlier statement: "Throughout the whole history of civilization, two opposed tendencies have been in conflict; the Roman tradition and the popular tradition; the imperialist tradition and the federalist tradition; the authoritarian and the libertarian." See Peter Kropotkin, Modern Science and Anarchism, in Kropotkin's Revolutionary Pamphlets, ed. Roger Baldwin (New York: Dover Publications, 1970).
53. In The Culture of Cities, Mumford writes, "The human region...is a complex of geographic, economic, and cultural elements. Not found as a finished product in nature, not solely the creation of human will and fantasy, the region, like its corresponding artifact, the city, is a collective work of art" (p. 367). See also The Lewis Mumford Reader, ed. Donald Miller (New York: Pantheon Books, 1986), and Lewis Mumford, The City in History (New York: Harcourt, Brace and World, 1961), especially pp. 51ff.
56. One finds in Spanish, la naturaleza; in German, die Natur; French, la nature; and Italian, la natura.