

The Age of Monitory Democracy and the Greening of Politics

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Abstract

The unprecedented greening of democracy during the past half-century runs far beyond spreading public talk of sustainability and climate justice and is more consequential than disputes about species extinction and the details of carbon pricing and emissions trading schemes, Keane argues. Proposing a new way of understanding the relationship among bio-environments, energy regimes, and democracy, he asks why people with green sympathies might be expected in our times to embrace democracy for more than tactical reasons, whether democracy (an anthropocentric norm that has always supposed self-governing humans are masters and possessors of “nature”) and democratic principles can be “greened,” and what that redefinition might imply for the way people imagine to be the “essence” or “spirit” of popular self-government in the age of monitory democracy.

Keywords: Bio-regional assemblies, democracy, energy regimes, green politics, Heidegger, monitory democracy, representation, representative democracy.

Use your head, can't you, use your head,
you're on Earth, there's no cure for that!

—Samuel Beckett, *Endgame* (1957)

As the human despoliation of our planet gathers pace, the subject of green politics presses ever harder on corporations, governments, mainstream media platforms, elected representatives, and citizens. The challenges and changes, and the arguments and antagonisms, are not confined to the democratic world, but they are striking, and without precedent in the history of modern societies. The greening of democracy runs far beyond spreading public talk of sustainability and climate justice and more consequential than disputes about

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the price of carbon and emissions trading schemes. In less than a generation, green-minded intellectuals, civic initiatives, movements, and political parties have managed to reshape public agendas; in consequence, matters such as nuclear power, chemical pollutants, carbon emissions, climate change, and species destruction are now firmly on the policy agendas of democratic politics. Public awareness that humans are the only biological species ever to have occupied the entire planet, with potentially catastrophic consequences, is growing (as the controversies surrounding a new geological era called the Anthropocene suggest¹). Green politics has helped popularize new philosophical perspectives (such as critical animal studies, feminist care ethics, neo-Marxism, capability approaches, and talk of environmental justice). It has championed precautionary attitudes toward “progress” and its blind embrace; green politics might even be described as a contribution to a new type of “slow democracy” aimed at arresting the pace of decision making that has wrecking effects. Green politics also has tabled important tactical questions. Vital strategic matters now absorb considerable amounts of political energy: for instance, whether priority should be given to civic initiatives, civil disobedience, and networked social movements, or to the formation of alliances with mainstream parties, how green political parties can best be kept open to their members and supporters, and whether their political success requires broadening their agendas to include topics such as immigration, sexual orientation, health care, pensions, and a “Green New Deal.”

Much less scholarly effort has been devoted to clarifying the long-term democratic significance of the achievements of green politics. The profoundly radical implications of green politics for the way people imagine and live democracy are still poorly understood. It is true there are activists, probably a dwindling minority, for whom the priority is to give up on democratic politics and to live simply, in “harmony with nature,” as if wilderness is medicinal for lives “bound by clocks, almanacs...and dust and din.”² Much more striking is the way levels of support for democratic principles run high within green circles, as confirmed by the discomfort triggered by earlier statements by William Ophuls and James Lovelock’s widely reported suggestion that it “may be necessary to put democracy on hold for a while.”³ Greens’ commitment to

¹ Christophe Bonneuil and Jean-Baptiste Fressoz, *The Shock of the Anthropocene: The Earth, History and Us* (London: Verso, 2016).

² John Muir, co-founder, Sierra Club, *The Wilderness World of John Muir* (New York: Mariner Books, 2001), 139.

³ Ophuls maintained, “Because of the tragedy of the commons, environmental problems cannot be solved through cooperation...and the rationale for government with major coercive powers is overwhelming.” See William Ophuls, “Leviathan or Oblivion?” in *Toward a Steady-State Economy*, ed. Herman E. Daly (San Francisco: W. H. Freeman, 1973), 228. See also James Lovelock’s interview with Leo Hickman in *The Guardian*, <https://www.theguardian.com/environment/blog/2010/mar/29/james-lovelock> (accessed January 6, 2019). During the interview, Lovelock asserted, “We need a more authoritative world. We’ve become a sort of

such democratic principles as equality, openness, and respect for diversity and one person—one vote seems unwavering. “I’d rather perish democratically than put up with a dictatorship that enforces sustainability,” says (rather typically) the prominent German futurologist Stephan Rammler.⁴ Yet, why people with green sympathies should embrace democracy for more than tactical reasons, whether democracy (an anthropocentric norm that has always supposed humans are masters and possessors of “nature”) and democratic principles can be “greened,” and what that redefinition might imply for the way people imagine to be the “essence” or “spirit” of democracy are matters that remain rather obscure within green circles and beyond—or so this essay suggests.

Energy Regimes

Finding our bearings requires seeing that green politics has triggered what physicists call a moment of dark energy: the universe of meaning of democracy is undergoing a dramatic expansion, in defiance of the cosmic gravity of worldly events. The changes are not cosmetic, but transformative, at least as radical as the semantic and institutional shift toward “representative democracy” that took place at the end of the eighteenth century.⁵ Green politics and “green democracy” are not simply neologisms that enrich the language of democracy, say, in the way novel phrases such as “social democracy,” “Christian democracy,” and “liberal democracy” altered the vocabulary of representative democracy following the invention of that phrase during the last years of the eighteenth century. Green politics is not just a new lexicon. It cuts deeper and runs wider, and it therefore demands fresh political thinking, guided by a strong sense of its own historicity and future strategic and normative potential.

cheeky, egalitarian world where everyone can have their say. It’s all very well, but there are certain circumstances—a war is a typical example—where you can’t do that. You’ve got to have a few people with authority who you trust who are running it. And they should be very accountable too, of course. But it can’t happen in a modern democracy. This is one of the problems. What’s the alternative to democracy? There isn’t one. But even the best democracies agree that when a major war approaches, democracy must be put on hold for the time being. I have a feeling that climate change may be an issue as severe as a war. It may be necessary to put democracy on hold for a while.”

⁴ Stephan Rammler, „Lieber Klimawandel als Freiheitsverlust“ [Better climate change than loss of freedom], *Internationale Politik und Gesellschaft* (April 18, 2019): 5.

⁵ See my earlier accounts of the origins, long-term transformative effects, and dysfunctions of representative democracy in *The Life and Death of Democracy* (London: Simon and Schuster, 2009), part two; with Sonia Alonso and Wolfgang Merkel, *The Future of Representative Democracy* (Cambridge, UK: Cambridge University Press 2011); *Power and Humility: The Future of Monitory Democracy* (Cambridge, UK: Cambridge University Press, 2018); and *Breve historia del futuro de las elecciones* [A short history of the future of elections] (Mexico City: INE, 2018).

There are few directional signposts, let alone meaningful precedents, but one way of grasping the novel greening of democracy and its long-term significance is to draw upon the spirit of Montesquieu's path-breaking exploration of the link between political institutions and their geographic environment⁶ by asking questions about the relationship between different historical forms of democracy and the environmental milieu in which they are embedded. Think of things this way: every human society is defined by its particular energy regime, the sum total of arrangements whereby energy is extracted from human or animal muscle power or harvested (say) from running water, sun, tides, wind, coal, or uranium atoms, then applied, stored, bought and sold, used to fuel machines, or wasted, and eventually dissipated.⁷ Environmental historians remind us that human energy regimes are variable, that their form and content undergo changes in space and through time, yet, in each and every case, energy regimes are defined by clusters of techniques, institutions, and methods of producing and distributing energy for defined purposes. Energy regimes are more than just technical arrangements or tools that can be picked up and put down at will, for any particular purpose. Energy regimes produce path dependencies and have power effects; embedded within social and political institutions and carriers of definite mentalities, they co-determine in every matter which people get how much, when, and how. That is to say, energy regimes typically operate from within and through the various institutions of any given political order, and it is in this sense that their impact is pervasive. They not only enable certain individuals and groups to get things done and to determine the fates of other people. Energy regimes also sink into the skins of people, structuring the way they think and interact. Even the metaphors through which they speak are affected, for instance, when they use words and phrases such as "electrifying," "switched on," "bright spark," and "carbon footprint." Energy regimes also have wider environmental consequences: the habitats within which humans dwell are transformed by the energy modes they employ. In extreme cases, energy regimes interfere with local biomes that in turn trigger adverse dynamics that have catastrophic consequences for human inhabitants.⁸

All known basic historical types of democracy—in assembly, representative, and monitory form—have been embedded within and materially shaped by energy regimes. Consider the case of the assembly democracies

⁶ Montesquieu's theory of the influence of geographic environment on political forms is presented in *The Spirit of the Laws*, in which the temperate climate of middle Europe is seen to be optimal for the cultivation of political liberty, in contrast to warm countries, where peoples are rendered "too hot-tempered," and more northern climes, whose peoples are "icy" and "stiff."

⁷ John Robert McNeill, *Something New Under the Sun: An Environmental History of the Twentieth-Century World* (New York: W. W. Norton, 2000).

⁸ Jared Diamond, *Collapse: How Societies Choose to Fail or Succeed* (New York: Penguin Books, 2005).

of the ancient Greek world. These were direct or participatory democracies based on the principle of the self-government of adult male citizens gathered within small public assembly settings. Assembly democracies were a labor-intensive form of democracy. While cleverly harnessing sail power for long-distance shipping and animal energy (oxen, donkeys, mules, and horses), these early Greek democracies were founded primarily on muscle power: human labor for such activities as rowing triremes, farming, construction, mining, and manufacturing. As the best-known case of Athens shows, much of this labor was supplied by chattel slaves. Citizens themselves pitched in. While rich citizens enjoyed lives of *skhole* (“leisure”), most nonelite Athenians either labored alone or alongside their own slaves. The heavy dependence upon labor power was expressed through the vernacular language of democracy. Male citizens often called themselves “the laboring men”; and members of the lowest class were named *hoi thetes*, literally “the hired laborers” (the common word for the lower-class as “the poor,” *hoi penētes* [plural], comes from the verb *penomai*, meaning “to labor”).⁹

The environmental impact of the assembly democracies of the ancient Greek world remains much disputed. Nineteenth-century European Romantics tended to portray classical Greece as an Arcadian land of noble forests and crystal fountains, but more recent archaeological evidence suggests that the Greek democracies substantially affected their local environments, sometimes negatively. Aristotle’s *Meteorologica* (Book 1, chapter 14) notes the transformation of Mycenae into a “dry and barren” landscape; and there are plenty of other recorded cases where soil erosion followed reckless over-cultivation of fields, or the over-exploitation of forests. Yet, the commitment to self-sufficiency (*autárkeia*), limited scale, and popular belief in deities combined to limit environmental destruction. Hunting of animals took place for prestige (rather than pecuniary) reasons; livestock husbandry involved small flocks associated with arable agriculture, which was geared to satisfying needs by cultivating small fields using crop rotation and multiple cultures. Widespread belief in deities served as an additional brake upon misuse of the environment. The assembly democracy of the ancient Greeks flourished in an enchanted garden governed by deities, in whom citizens invested great hopes. They feared them as well. The public trial and execution of the philosopher Socrates in 399 BCE for importing fake gods into the city of Athens, and for impiously corrupting its youth, confirmed that those who snubbed the deities would suffer harsh punishment. Within the Greek democracies, priests and old men were in the habit of reminding citizens (the story was taken originally from Homer) that at the entrance of the home of Zeus, the god of freedom, stood two large barrels, from which he dispensed ill to some newcomers, good

⁹ Further details are provided in David Pritchard, *Sport, Democracy and War in Classical Athens* (Cambridge, UK: Cambridge University Press, 2012), and Keane, *The Life and Death of Democracy*, especially part one.

to others, and to the rest a few ladles of good from one barrel and, from the other, a bit of ill. Tales like that put early assembly democracies on edge. Many citizens thought of themselves as members of a community of worshippers who believed that deities such as Zeus would punish them collectively if they or their leaders behaved unjustly; he and other deities were thought to enjoy the power to ruin democracy, for instance, by causing bad weather or failed harvests, or the death of oak trees, or the disappearance of fish from the seas.

Blocking the Sun

When we turn to the energy regime that prevailed during the era of modern representative democracy, we see the continuing importance of human labor power as a key energy source. Yet, there is a striking difference with the assembly democracies of the ancient world: modern forms of representative democracy were born and grew to maturity in exactly the same time period as the transition to carbon-fueled energy regimes. The historic tipping point happened toward the end of the eighteenth century, and it is surely among the strangest coincidences in the history of democracy: an energy revolution of epochal importance was unleashed on peoples struggling politically to redefine and build forms of self-government based on the principle of periodic election of representatives by citizens living within bounded, large-scale, territorial state settings.

The coincidence barely has been noted by environmental historians and political thinkers.¹⁰ What we find instead within the literature on representative democracy and its material environment are compelling but separate accounts: environmental historians note the switch to carbon-based energy regimes, while political thinkers focus on the invention of representative democracy.¹¹ The effect of keeping apart the two entangled histories is unfortunate, if only because of the undeniable importance of the profoundly transformative effects of the industrial revolutions that gripped various societies in the Atlantic region during the last decades of the eighteenth century. These revolutions were initially propelled by animal and human muscle power and water-driven textile mills. Beginning around 1820, however, the dominant energy regime gradually became carbonated, in two overlapping stages.

¹⁰ An example is Mark Fiege's *The Republic of Nature: An Environmental History of the United States* (Seattle: University of Washington Press, 2012), a thought-provoking example of environmental history that attempts to narrate the rise of the American republic in terms of its interdependence with material nature, unfortunately by concentrating mainly on the many ways the republic fed upon broad (Jeffersonian) conceptions of an orderly universe and a strong public sense of entitlement to riches wrested from the earth by human ingenuity.

¹¹ See, for example, Nadia Urbinati, *Representative Democracy: Principles and Genealogy* (Chicago: University of Chicago Press, 2006).

Put simply, we could say that the first phase of the energy regime upheaval led to the coronation of King Coal. For nearly a century, he reigned over urban concentrations of heavy industry in smokestack cities connected by railways, steamships, newspapers, letters, and the telegraph. These “coketowns” (as Charles Dickens called them in *Hard Times*) profoundly transformed many people’s lives and their habitats. King Coal’s reign was marked by multiple paradoxes. To mention just a few: the worship of coal-fired electrification did more than anything else to banish the fear of ghosts from people’s night-time lives. Soot-stained skies blocked the rays of the sun, but coal hastened the abolition of darkness by gas lamp-lit streets, electrified signs, and even human attempts to simulate sunrises and sunsets. Coal-fired railways comprising wooden boxcars, cross-ties, and sleepers gobbled up forests and triggered the growth of conservation movements and national park initiatives (an example was Theodore Roosevelt’s support for a national forest service to limit the use of America’s remaining forests). Carbon-based energy generated employment, but soiled natural landscapes. It also enabled struggles for representative democracy, including fiercely fought political efforts to widen the franchise and to reshape governments into welfare states. It is easy to see in retrospect that fossil fuels were the underwriter of representative democracy. Consider the way electrified capitalist economies, connected by coal-fired trains, printing presses, and postal and telegraph systems, were instrumental in enabling the growth of civil societies, independent public spheres, co-operatives, friendly societies, trade unions, social democratic working-class parties, and votes for women. Little wonder that most democrats during this period regarded “nature” as an unlimited resource, to be fully exploited by the new energy regime, for the use and enjoyment of “the people.” Alexis de Tocqueville’s letters from America, written in the year 1831, are chock-full of such sentiments. “All is hustle and bustle. And money is the universal divinity,” he wrote. The young American “democracy devoid of limits or measures” was marked by a feverish will to conquer forests, land, and water. “Here the earth itself wears a new face every day,” he continued. Citizens “wage war against the forest in a thousand different ways.” They are “unhappy if they aren’t plowing new soil, tearing up roots, cutting down trees, fighting wild beasts and Indians: therein lies their pleasure for other men in making money hand over fist and living within four walls.”¹²

Now consider phase two of the carbon revolution, which began in earnest during the 1920s, when leading national economies began to supplement their dependence upon coal with a growing allegiance to the Sultan of Oil. The United States, soon to become the richest and most powerful democracy, took the lead.¹³ Its domestic oil and gas industry, spurred on by the first big gusher

¹² Alexis de Tocqueville, *Letters from America* (New Haven: Yale University Press, 2010), 33, 68, 103, 243-244.

¹³ Daniel Yergin, *The Prize: The Epic Quest for Oil, Money and Power* (New York: Free Press, 1991), 82-86.

(in 1901, at the Spindletop well, East Texas) and feeding hungrily upon liquids exhumed from ancient forests, soon became a powerful driver of assembly-line manufacturing of aircraft and automobiles, fertilizers, petrochemicals, and plastics. The new black gold loyalty spawned spectacular inventions, such as gasoline-powered chainsaws, which resembled giant forest-eating invaders from another planet, capable of snipping trees at their base, up to a thousand times quicker than men wielding sharp axes. There were tools like lawnmowers, tractors and trucks, bulldozers, motorcycles, and automobiles, whose irresistible popularity stemmed from the convenience of mobility, social status, affordability, and the jobs they created. Oil and gas came to shape “where we live, how we live, how we commute to work, how we travel—even where we conduct our courtships.”¹⁴

Amid wild scenes of jubilation, huge fortunes often were made overnight by the discovery and marketing of oil and gas, which seeped into the structures and dynamics of every representative democracy, making them profoundly dependent upon local configurations of carbon-fueled energy systems. The transformation had deeply felt and long-term consequences whose effects persist until today, so that a large majority of democratic states claiming to be based on “free and fair” elections remain deeply reliant on carbon-based energy supplies.¹⁵ Fossil fuels and representative government based on periodic elections remain twins, to the point where (thinking counterfactually) without fossil-fueled electricity political parties, campaign advertising, election rallies, and newspaper, radio, and television coverage of elections would be impossible. Television debates, radio interviews, and party-political announcements would be unthinkable; ballot papers could not be printed or delivered in sufficient quantities. Voter turnouts, especially among citizens attached to their automobiles or frail and old with limited mobility, would be reduced, due to lack of transport, inclement weather, or fear of the light. Electronic voting and the counting of ballot papers would be impossible, and the razzamatazz of announced results would be no more.

Monitory Democracy

Historical comparisons show that we are living in times of unprecedented restiveness about carbon-fueled growth and its destructive impact upon the

¹⁴ Ibid., 14.

¹⁵ According to the International Energy Agency’s report, *Key World Energy Statistics 2018*, the carbon-dependence ratios range from India (87.2 percent), Australia (85.5 percent), the United States (85.3 percent) and Indonesia (84.1 percent), to the United Kingdom (72.1 percent), Germany (71 percent), Spain (61.9 percent), and Denmark (39.5 percent). The only electoral democracies that have fully severed their dependence on fossil fuels are Iceland and Uruguay. See International Energy Agency, *Key World Energy Statistics 2018*, Paris (2018), <https://webstore.iea.org/key-world-energy-statistics-2018> (accessed May 5, 2019).

biosphere in which we humans dwell. The troubles, and the opportunities they pose, are intimately connected to the rise of a new historical form of democracy that elsewhere I have called monitory democracy.¹⁶

The advent of monitory democracy is often ignored by scholars, especially those living and working in the United States. When defining democracy, they typically fall back on a version of the old Schumpeterian understanding of democracy as a system of self-government centered on “competitive elections,” “full adult suffrage,” the “broad protection of civil liberties, including freedom of speech, press, and public association,” and the “absence of nonelected ‘tutelary’ authorities (e.g., militaries, monarchies, or religious bodies) that limit elected officials’ power to govern.”¹⁷ This orthodox election-centered definition of “liberal democracy” suffers a number of weaknesses, including its historical innocence and its failure to spot the advent, since the late 1940s, of a wide range of power-monitoring and power-restraining mechanisms, such as anticorruption agencies, human rights networks, activist courts, media gatewatching platforms, peer review panels, and other watchdog and barking dog institutions. During our lifetime, these monitory institutions have radically altered the ecology of representation and the global meaning and dynamics of democracy. Democracy’s spirit, language, and institutional dynamics have changed; a third historical phase of democracy is upon us. In theory and practice, democracy has come to mean nothing less than full adult suffrage in free, fair, and competitive elections, but also something qualitatively more: the unending quest, in the name of equality, to humble the powerful, to prevent their abuse of power by means of various platforms to render publicly accountable not only elected governments but also state institutions, corporations, and other organizations, even in cross-border settings. The age of monitory democracy features the birth of many scores of watchdog organizations that never existed before in the history of democracy, including integrity bodies, citizens’ juries, truth and reconciliation commissions, participatory budgeting schemes, intergenerational panels, citizen science networks, and bio-regional assemblies.

The public questioning and refusal of carbon-based energy systems would not have been possible without the growth of monitory democracy in this sense. Public resistance to carbon energy regimes admittedly has deeper taproots. It

¹⁶ The history, theory, and institutional dynamics of monitory democracy are more fully elaborated in Keane, *The Life and Death of Democracy: Power and Humility*; and *Breva historia del futuro de las elecciones*.

¹⁷ Steven Levitsky and Lucan A. Way, *Competitive Authoritarianism: Hybrid Regimes after the Cold War* (New York: Cambridge University Press, 2012), 5-6. Levitsky and Way’s preferred understanding of democracy depends heavily on Robert Dahl, *Polyarchy: Participation and Opposition* (New Haven, CT: Yale University Press, 1971); Samuel P. Huntington, *The Third Wave: Democratization in the Late Twentieth Century* (Norman: University of Oklahoma Press, 1991); and Adam Przeworski et al., *Democracy and Development: Political Institutions and Well-Being in the World, 1950–1990* (New York: Cambridge University Press, 2000).

is traceable to the historic switch from sun-powered energy that took place at the end of the eighteenth century. Think of early modern rustic poetry and literature, the protests of Romanticism, the birth of the co-operative and labor movements, rural anarchism, and variants of nature-tinged nationalism: all these initiatives and more played a part in stimulating and keeping alive the common sense that something was not quite right in the shift toward carbon-intensive energy regimes. The late nineteenth-century conservation movement, which gave birth to public zoos and to the first conservation groups, was part of the same pattern of resistance to blind dependence on carbon-based energy systems. So, too, were loud protests against the recklessness of the oil industry, for instance the American novelist Upton Sinclair's best-selling *Oil!* (1927), which features a character named Vernon Roscoe, a greedy business tycoon who helps bribe the government to acquire land to drill oil in a place called Teapot Dome, along the way doing all in his might to crush the trade unions that oppose him, doing so by bribing the government authorities to throw its members into jail.

By the last quarter of the twentieth century, with the help of scores of new types of watchdog initiatives, protests against fossil fuels had grown exponentially stronger. Growing numbers of citizens and elected representatives, environmental networks, and scholars had concluded that democracy does not mix well with coal, gas, and oil, and that an energy regime fueled by these substances damages monitory democratic institutions and undermines their ecological foundations.¹⁸ The critics noted, for instance, that the deep carbon dependence of the United States, Europe, and Japan had spawned a massive oil transport industry. Tankers grew rapidly in size, around thirty-fold between 1945 and 1977. The volume of oil shunted around the globe jumped to staggering levels: by 1970, about five gallons of oil were in transit at any moment on the high seas for every woman, man, and child on planet Earth. Big tankers developed the bad habit of dumping excess oil and flushing out their tanks when at sea, and accidents became routine. These "normal accidents" became infamous media events: the break-up (in 1967) of the *Torrey Canyon* off the Cornwall coast; the offshore blowout (1979) at Tabasco in Mexico, which released an oil slick nearly the size of Connecticut in the direction of Texas; and the 34,000 tons of crude oil splashed along the Alaskan coast in 1989 by the grounded *Exxon Valdez*. By 1990, there were estimates that during the course of the twentieth century ten times more oil had been dumped into our oceans than were released by natural seeps.

Meanwhile, from the 1950s, fossil fuels proved to be the single largest contributor to atmospheric increases of temperature (due to the addition of carbon dioxide to our planet's atmosphere—a thirty-fold increase between

¹⁸ The seminal work is Timothy Mitchell, *Carbon Democracy: Political Power in the Age of Oil* (London: Verso, 2011).

1900 and 2000) and a major cause of the poisoning of the biosphere by toxic petrochemicals and the fueling of machines that ripped like knives into its delicate fabrics. The deep dependence of monitory democracy on carbon energy systems seemed unbreakable. Especially in urban settings, carbon-fueled vehicles, for all the mobility they offered human beings, took their toll. By the end of the twentieth century, around 400,000 people were killed annually in so-called road accidents, many more than in war. Car use and production produced staggering waste: in the automobile manufacturing process in Germany, for instance, by the 1990s, every ton of finished car produced twenty-nine tons of waste, with the production of each car emitting as much air pollution as driving a car for ten years.

On Country Paths

A remarkable feature of the age of monitory democracy is growing discomfort with the negative environmental impacts of carbon energy regimes, and the not-unrelated attempted shifts to carbon-capture and nuclear-power technologies. Their destructiveness is becoming plain for all citizens and representatives to see, if they want. It should be unsurprising that environmental despoliation is triggering intellectual backlashes. Among the earliest and most challenging in the age of monitory democracy was Martin Heidegger's post-1945 critique of the human quest to invade and dominate the biosphere, using techniques based on the rationale of measurement, mechanization, and total control (what he sometimes termed *Machenschaft*). Comprehensive technical control of things and people is the fundamental feature of the modern world, Heidegger argued. "The world now appears as an object open to the attacks of calculative thought, attacks that nothing is believed able any longer to resist. Nature becomes a gigantic gasoline station, an energy source for modern technology and industry."¹⁹ Our encounter with "nature" is no longer conceivable in terms of letting it be, or enabling it to become what it might become, of "bringing forth" its own potential. Modern technology is an all-encompassing apparatus, a whole way of life (*Ge-stell*) geared to the "challenging" and "ordering" and "power-seizing" conquest of our habitats, for specified human purposes. Modern humans imagine themselves to be "lords of the earth." They suffer the illusion that everything is man-made. People lose contact with their earthly habitats. They become homeless, uprooted; the biosphere is "set upon." The "old wooden bridge that joined bank with bank for hundreds of years" and the "old windmill" whose sails were "left entirely to the wind's blowing" are replaced by the human will to power over nature: "The earth now reveals itself as a coal mining district, the soil as a mineral deposit," Heidegger noted.

¹⁹ Martin Heidegger, "Memorial Address" (1955), in id., *Discourse on Thinking* (New York: Harper Torchbooks, 1966), 50.

“Agriculture is now the mechanized food industry. Air is now set upon to yield nitrogen, the earth to yield ore, ore to yield uranium... uranium is set upon to yield atomic energy, which can be released either for destruction or for peaceful use.”²⁰

Heidegger greatly feared the modern will to universal calculation and domination. Synonymous with the self-absorbed hubris of humans hell-bent on mastering nature, a recipe for “homelessness,” “monstrousness,” and “world darkening,” modern technology has become the destiny of the world. So, is resistance to technology possible? Might “meditative reflection” and a new “openness to mystery” combine to whet the appetite of humans for what he called the “releasement toward beings [*Gelassenheit*]”? In other words, could humans cultivate their sense of fruitfully being rooted within a biosphere that must be respected and protected, not dominated? Through a new “rootedness” or “autochthony,” or what he termed *Bodenständigkeit*, could humans come to dwell “poetically on the earth” by acting as shepherds who refuse to lord over other beings and instead (as Heidegger put it) seek to preserve them by enabling their *poiēsis*, or “bringing-forth” (*Her-vor-bringen*), in support of their “destining” (*Geschick*) that “comes out of the open, goes into the open, and brings into the open”?²¹

Theoretical and practical efforts at greening democracy can learn much from the fraught answers given by Heidegger to these questions. It is important to note that his rightful emphasis on the need for a new human mode of “thinking” and earth-friendly “dwelling” and “building” unfortunately confined the alternative to one mode of “unconcealment of being”: the “bringing-forth” or revealing of beings that occurs through *poēsis*, a type of transformative activity, analogous to the hatching of a butterfly from a cocoon, which combines the technical making and manipulation of things and the lived experience of the aesthetic beauty of the world. Guided by the vision of *poēsis*, Heidegger sometimes sounded melancholy, as when he concluded that the spell of “technology” and its menacing consequences cannot be broken, so that the destiny of humans and their nonhuman environment is the tragic story of failed efforts to defy the will to complete mastery. More cheerful moments can be found in his post-1945 writings, for instance when he suggests that the “saving power” of *poēsis* is inscribed within technology. Humans might after all be rescued by embracing technology, which teaches us to think of another, closely related but more enriching form of *poēsis*, our willingness to open ourselves to the beauty of the world, “brought forth and made present,” as Heidegger says. “The irresistibility of ordering and the restraint of the saving power draw past each other like the paths of two stars in the course of

²⁰ Martin Heidegger, “The Question Concerning Technology” (1953), in id., *Basic Writings* (New York: Harper Collins, 1977), 296.

²¹ Ibid., 306.

the heavens,” he wrote, citing a poem of Hölderlin. “But precisely this, their passing by, is the hidden side of their nearness.”²² This was a vision of people “being-in” or dwelling in the world, feeling at home within its meaningful arrangements. Then there other moments when Heidegger’s thoughts on *poēsis* come wrapped in unintelligible mystery, laced with touches of hope tied with a bow of antipolitical resignation: “the frenziedness of technology may entrench itself everywhere to such an extent that someday, throughout everything technological, the essence of technology may come to presence in the coming-to-pass of truth.”²³

Guided by these tensely related and often opaque formulations, Heidegger’s fixation on manipulation and beautification as two overlapping modes of revealing arguably led him astray, initially by understating the importance of alternative ways of living in the world. His dismissal of democracy was symptomatic, and it resulted from his failure to grasp the way in which the experience of democracy fundamentally challenges the arbitrary power of technical reason. Heidegger thought just the opposite. Once upon a time, during the early 1930s, he had spoken in fascist terms of states as “the way of Being of a people” and “the people” (*das Volk*) their “supporting ground.”²⁴ Following the military defeat of Nazism, he showed no fondness for monitory democracy. “How can a political system accommodate itself to the technological age, and which political system would this be?” he asked in his posthumously published *Der Spiegel* interview. “I have no answer to this question. I am not convinced that it is democracy,” came the reply.²⁵ A key reason offered throughout his works of the post-1945 period is that the norms and institutions of “democracy” are functionally integrated with the prevailing order of power. Representative democracy destroys the lives of local communities and village assemblies (Heidegger rehabilitated the old word *die Weserei*). It is a tool of technical domination. It nurtures the preoccupation with quotidian affairs, or what Heidegger dubbed “ensnarement” (*Verfallensein*). He offered the example of the newspaper industry and its cultivation of unthinking public opinion. Once upon a time, foresters wielding axes walked the forest paths used by their grandfathers. Forestry soon became an “industry that produces commercial woods” and foresters “made subordinate to the orderability of cellulose, which for its part is challenged forth by the need for paper, which is then delivered to newspapers and illustrated magazines.” Those

²² Ibid., 314-315. Heidegger cites two lines from Hölderlin’s “Patmos” (“But where danger is, grows/The saving power also”), in *Friedrich Hölderlin Poems and Fragments*, trans. Michael Hamburger (Ann Arbor: University of Michigan Press, 1966), 462-463.

²³ Ibid., 316-317.

²⁴ Martin Heidegger, *Nature, History, State 1933–1934* (London: Bloomsbury Academic, 2013), 43.

²⁵ „Nur noch ein Gott kann uns retten“ [Only a God can save us now], *Der Spiegel* 30 (May 1976): 193-219.

products consolidate a “dictatorship of the public realm [*die Öffentlichkeit*]” in which the manufactured public opinion “swallows what is printed, so that a set configuration of opinion becomes available on demand.”²⁶

Heidegger’s conviction that representative democracy is a tool of technical domination committed to peoples’ “ensnarement” within the banalities of everyday life was reinforced by a deeper objection to the whole idea of democracy. He pointed out that there were ancient Greeks who thought that the capacity to speak with others was a basic feature of the human condition, and that this capacity for speech enabled human beings to become creatures of calculation, *arithmein*, animals with the ability to reckon, to design, and to redesign things, people, and situations. For Heidegger, there was something inherently misguided about the human will to reduce complex phenomena to questions of number. He liked to cite a line from the Romantic poetry of Friedrich Hölderlin: “Is there a measure on the earth? There is none.” Those who think otherwise, said Heidegger, fall foul of the insight that the world and all that is within it defies the will to measurement. They wrongly suppose that individuals, groups, organizations, and whole societies are the same, or can be made to be so. The democratic principle of one person, one vote is an example of this universal quest for standardization and its hidden political agenda: by defining people and things that are not the same as equivalent, as sufficiently similar that they can be summed, compared, and evaluated, the will to standardization reduces life to calculation, to control, to the forcible elimination of differences. Heidegger’s point was that the political form known as democracy blindly worships numbers. He recalled the old Greek adage that geometry should be taught in oligarchies because it demonstrates the proportions within inequality, whereas in democracies instruction in arithmetic should be promoted because it teaches relations of equality. That was his way of pouring doubt on democracy: its presumption, mobilized in opinion polls and election forecasts, that doubt and uncertainty can be banished from the world is symptomatic of its fetish of quantity, its deep attachment to reckoning, computation, enumeration, and accounting, and—worst of all—the entanglement of democracy in the will to equivalence, mastery, and control which democrats otherwise say they find abhorrent.

Questions of Representation

It is well known that Heidegger was no political angel, and that his rejection of standardization fell into the arms of apolitical disillusionment and, for a time, support for the Nazis, whom he foolishly expected to break the mould of standardization. Heidegger’s conflation of democracy and technology

²⁶ Heidegger, “The Question Concerning Technology,” 299, and id., “Letter on Humanism,” in *Basic Writings* (New York: Harper Collins, 1977), 197.

was not only imprudent but also neither original nor convincing. It belonged squarely to a period peppered with anxious outbursts among intellectuals about the potentially threatening effects of “technology.”²⁷ What Heidegger and his bomb-struck contemporaries failed to recognize was that democracy is a form of politics whose “spirit” practically sharpens people’s understanding of the contingency of the power relations through which they live their lives. It nurtures a shared sense of the time-bounded quality or contingency of power; it enables and encourages them as equals to question and to reject manipulative arbitrary power, to struggle against what Heidegger generally called technology.

The insurgent, disruptive dynamics of democracy are amplified by its embrace of practices of representation. Democracy in representative form was unknown to the ancient world; the ancient Greeks never even had a word for it. The early modern effort to combine democracy and representation, to develop new institutions such as political parties, periodic elections, and parliaments, fundamentally changed the spirit, language, and practical dynamics of democracy. The invention of “government democratical, but representative” (Thomas Jefferson) changed the meaning of both democracy and representation. It sharpened awareness that humans are representing animals: representative democracy (more obviously) equipped citizens with a strong sense that their lives were now shaped by political parties, elections, parliaments, courts, and other representative institutions and (less obviously) triggered awareness that “reality” is not “real,” that human life is sculptured by symbolic representations of the world that are contingent and transformable. The coming of “government democratical” consequently nurtured much more than demands such as “no taxation without representation.” Things went further. “No reality without representation!” was among its hidden effects.²⁸ Public disagreements rooted in the division between the represented and the representative consequently flourished. Representation was not understood as mimesis, mere delegation of powers to another who is supposed to reproduce the opinions and actions of the represented. Political representation was not seen as a process of issuing political mandates. In the new understanding of democracy that took root in the last quarter of the eighteenth century, representatives do not receive direct, minute-by-minute instructions from the many they represent. The job of representatives is to define and interpret the interests of those whom they

²⁷ Examples from this period include Max Bense, *Technische Existenz* [Technological existence] (Stuttgart: Deutsche Verlags-Anstalt, 1950); Friedrich Georg Jünger, *Die Perfektion der Technik* [The perfection of technology] (Frankfurt: Verlag Vittorio Klostermann, 1953); and Günther Anders, *Die Antiquiertheit des Menschen: Über die Seele im Zeitalter der zweiten industriellen Revolution* [The antiquity of man: On the soul in the age of the second industrial revolution] (München: C. H. Beck, 1956).

²⁸ Bruno Latour, *Politics of Nature: How to Bring the Sciences into Democracy* (Cambridge, MA: Harvard University Press, 2004), 127.

represent. Representation is substitution; functionally differentiated from the represented, the representative decides things potentially in opposition to the represented.

This means that representation is a dynamic process usually marked by dashed hopes, conflict, and highly contingent outcomes. Representation is subject to the disappointment principle.²⁹ The choice of representatives, for instance through periodic elections, is a method of apportioning blame for poor political performance, a way of ensuring the rotation of leadership, guided by merit and humility, in the presence of electors equipped with the power to trip leaders up and throw them out of office, if and when they underperform, as often they do. Every act of choosing a representative is as much a beginning as it is an ending. The whole point of elections is that they are a means of disciplining representatives who disappoint their electors, who are then entitled to throw harsh words, and paper or electronic rocks, at them. If representatives were always virtuous, impartial, competent, and responsive, then elections would lose their purpose. In other words, the ability of representatives to define and interpret the interests of those whom they represent depends upon a process of permanent contact and deliberation and potential conflict between representatives and the represented. Representation always has a vicarious dimension: it implies a relationship between the representative and the represented that goes well beyond a pure and simple face-to-face contract. Ideally conceived, in both its elected and unelected forms,³⁰ representation is an act of delegation through which the represented in effect grant to representatives the task of defending their interests, all the while insisting that they remain accountable and responsible to the represented for their actions.

Greening Representation

The dynamics of representation seem to be of marginal theoretical importance to green-minded scholars who fashionably champion some or other vision of “deliberative democracy”³¹ or “deliberative ecological democracy,”

²⁹ John Keane, “Hypocrisy and Democracy,” *WZB-Mitteilungen* 120 (June 2008): 30-32.

³⁰ The phenomenon of unelected representation is analyzed in my “Life after Political Death—The Fate of Leaders after Leaving High Office,” in *Dispersed Leadership in Democracy: Foundations, Opportunities, Realities*, ed. John Kane, Haig Patapan, and Paul ‘t Hart (Oxford: Oxford University Press, 2009), and *Democracy and Media Decadence* (Cambridge, UK: Cambridge University Press, 2013), 55ff.

³¹ See John S. Dryzek, *The Politics of the Earth: Environmental Discourses* (New York: Oxford University Press, 2013), and the introduction to *Deliberative Democracy and Beyond: Liberals, Critics, Contestations* (New York: Oxford University Press, 2002), in which the “essence of democracy” is said to be “deliberation, as opposed to voting, interest aggregation, constitutional rights, or even self-government.” What is called “authentic deliberation” is “the requirement that communication induce reflection upon preferences in non-coercive fashion.” It is claimed that the emphasis on deliberation in this sense renews concern with “the authenticity of democracy: the degree to which democratic control is substantive rather than symbolic, and engaged by competent citizens,” 1-2 ff.

understood as “decentralised, organic and grassroots democratic practices that embody ecological values and give greater weight to the interests of nonhumans and future generations.”³² Despite their important environmental diagnoses and honorable political intentions, green theories of deliberative democracy are unconvincing. They suffer multiple weaknesses. Their sense of historicity, and of the age of monitory democracy to which they belong, is weak. They seem tempted to suppose that there is, or could be, a “general will” consensus about the meaning of “ecological values” crafted through democratic deliberation and “materialist practices”; like nineteenth-century Christian democrats and champions of the parliamentary road to socialism, ecological democrats imagine that democratic means (public deliberation) and substantive ends (ecological values) can and should be harmonized. It is as if democratic politics—organized public efforts by citizens and their chosen representatives to eradicate social injustice, fear and violence, and all forms of arbitrary power—can be wished and willed away, replaced by communitarian harmony. Their penchant for “inclusion” and “participation” through small-scale, face-to-face deliberative forums begs difficult tactical questions about scalability, including whether micro-level schemes can be replicated in time-space-variable-nested ways at the national, regional, and global levels, without relying on structures of representation that are deemed antithetical to citizen “inclusion” and “participation.”³³ Deliberative democrats, meanwhile, downplay the strategic challenges posed by the “artificiality” of small-scale, pilot-scheme experiments (where indefatigable citizen deliberators are expected to behave as if they were rational communicators in a good-natured scholarly seminar) and the political wrecking power of power-hungry vested interests wedded to the old carbon-fueled energy regime. Inspired originally by the work of Jürgen Habermas, many ecological deliberative democrats are secretly Greek: convinced that democracy is quintessentially assembly democracy, or “participatory democracy,”³⁴ they devalue the strategic and

³² David Schlosberg, Karin Bäckstrand, and Jonathan Pickering, “Reconciling Ecological and Democratic Values: Recent Perspectives on Ecological Democracy,” *Environmental Values* 28, no. 1 (2019): 1.

³³ Elinor Ostrom, “Polycentric Systems for Coping with Collective Action and Global Environmental Change,” *Global Environmental Change* 20, no. 4 (October 2010): 550-557, and Robyn Eckersley, “Ecological Democracy and the Rise and Decline of Liberal Democracy: Looking Back, Looking Forward,” *Environmental Politics* (March 2019): 1-21.

³⁴ Some observers are certain that green politics heralds the rebirth of “participatory democracy,” a twenty-first-century version of the original Greek ideal of assembly democracy. An example is Tim Flannery’s *Here on Earth: An Argument for Hope* (Melbourne: Text Publishing, 2010), which speaks of a “globally participative democracy” (p. 252) and gives as an example the Vote Earth campaign during the 2011 Copenhagen negotiations, a partnership between Google Earth and the World Wildlife Fund’s (WWF’s) Earth Hour, which managed to distribute electronic ballot boxes across thousands of web portals, then to urge people to “vote Earth” in support of a robust outcome of the negotiations, guided by the visionary principle (as Flannery puts it) of “online elections, organised by the people, of the people and for the people” (ibid). This line of

normative importance of courts, general elections, media platforms, integrity commissions, and other power-monitoring institutions. Generally, they seem blind to the ubiquity and functional necessity of representation within political life.³⁵

The neglect and maltreatment of representation by theorists of deliberative democracy and ecological democracy are understandable but regrettable, especially because the “stretching” of democratic forms of political representation to include the biosphere is among the remarkable novelties of our age of monitory democracy. Symptomatic is the way some researchers seek to “bridge the gap” between “nature” and “politics” by reviving neovitalist accounts (let’s call them) of the nonhuman world. The age of monitory democracy witnesses the rebirth and flourishing of the view that living matter is not machine-like and “soul-less” but in fact structured by “formative drives” (*Bildungsbetrieb* was the word deployed in the eighteenth century by Johann Friedrich Blumenbach³⁶) or intelligent capacities for self-repair and auto-regulation. Worker bees are shown to do “waggle dances” in support of the efforts of their colonies to handle the life-and-death challenge of deciding annually the location of their new homes; chimpanzees are said to be “the honest politicians we all long for” because they do not conceal their desires to get to the top; trees are known to communicate by means of chemical and electrical signals sent from their roots through vast “wood-wide web” networks (known as *mycorrhiza*).³⁷ These contributions stimulate our sense of wonder but the point remains that nonhuman nature cannot speak and act for itself, in any human sense. It cannot enjoy “rights”; to do so (by definition) would require it to observe sets of duties. But nonhuman nature can be publicly represented in human affairs. In Heidegger’s language, it can be convoked, coaxed into appearance (*apophainesthai*). Nonhuman nature can be brought forth from “concealment” into “unconcealment.” Its political representation enables it to “come forward” and to “arrive” in human affairs. Political representation in this sense might be considered a form of *poiesis*, a

political thinking is misleading in several ways. Aside from its underestimation of the dangers of populism—the blind worship of “the people,” green calls for “direct democracy” misread the ways in which many monitory bodies underscore the fact and positive effects of representation in political affairs.

³⁵ The weaknesses of the theory of undistorted communication of Jürgen Habermas are detailed in my *Public Life and Late Capitalism* (Cambridge, UK: Cambridge University Press, 1984).

³⁶ Johann Friedrich Blumenbach, *Über den Bildungstrieb und das Zeugungsgeschäfte* [On the instinct for education and procreation] (Göttingen, Germany: Dieterich, 1781).

³⁷ Thomas D. Seeley, *Honeybee Democracy* (Princeton, NJ: Princeton University Press, 2010); Frans de Waal, cited in Henry Mance, “The Emotional Life of Chimpanzees,” *Financial Times* (London), March 9–10, 2019, 22; and Peter Wohlleben, *Das geheime Leben der Bäume: Was sie fühlen, wie sie kommunizieren - die Entdeckung einer verborgenen Welt* [The hidden life of trees: What they feel, how they communicate—Discovering a secret world] (Munich: Ludwig Buchverlag, 2015).

bringing forth (*Her-vor-bringen*). But representation is neither a covert form of attempted mastery of nature nor submission to its aesthetic beauty. Political representation defies this Heideggerian distinction: it is a special dynamic relationship through which humans limit and restrain their own will to master the biosphere by offering to protect and nurture the nonhuman nature to which they belong.

Representation is a fiduciary relationship in which humble people aware of their own bio-limits are entrusted to act on behalf of biomes incapable of representing themselves. Nonhuman nature is voiceless; it cannot speak and act for itself, though it withers and dies if maltreated by humans. As fiduciaries (from Latin *fiduciarius*, meaning “[holding] in trust”; from *fides*, meaning “faith”; and *fiducia*, meaning “trust”), humans are charged with prudently taking care of the needs and interests of nonhuman nature, to protect and nurture it as a partner, to act as its loyal shepherd, not its omnipotent savior. To represent nonhuman nature is to acknowledge that humans (as agents) have a duty to provide its biomes (as principals) with the highest standards of care. It does not suppose that “nature” is a fixed, or given-for-all-time, or uncontroversial substratum of human existence. It recognizes that matters of what should be represented, how, and why are difficult and political. Political representation is not mimicry or communion with Nature conceived as an unalterable foundation linking the Earth with the dead and the living and the unborn, as was supposed by Joseph de Maistre, Edmund Burke, Hippolyte Taine, and other early modern European conservatives. Human efforts to represent nonhuman nature politically invite public controversies, both about the nature of “nature” and the ways in which it has changed through time, not just according to its own endogenous dynamics but also (and now increasingly) under the impact of changing forms of human interaction with the bio-environments in which humans dwell.³⁸ Heidegger failed to see that political representation is not another more subtle and insidious tool for mastering nonhuman nature. Rather, it is guided by human awareness of the limits of being human, so that human judgments about what counts as “human” and what nonhuman nature “is” or is “becoming” are seen as fallible, contestable, and publicly revisable. The political representation of nonhuman nature rejects the fallacy that humans are the only or primary measure of things. It acknowledges the vast complexity and restless dynamism and deep materiality of the biomes in which humans dwell. Political representation has no investment in easy solutions. For that reason alone, it champions the public monitoring and restraint of currently unequal and destructive power relationships exercised by some humans over others, and over the tissue-thin fabrics of their environment. But it is not a magical formula for imagining a new perpetual peace, an earthly paradise in which humans and nonhuman nature are united, freed at last from problems

³⁸ Philippe Descola, *The Ecology of Others* (Chicago: University of Chicago Press, 2013).

caused by ignorance, misunderstanding, doubt, capitalism, and arbitrary political power.

The key point here is that since our biosphere cannot authorize or render accountable the human representatives who speak and act on its behalf, its representation is irrevocably a human affair. Humans necessarily act as its proxies through institutional forms of what Burke called “virtual representation.”³⁹ Under conditions of monitory democracy, this implies that humans often will disagree about the “interests” and “needs” of the biosphere and, on that basis, using democratic procedures, reach agreements and working compromises that are subject to rethinking and practical revision. The political geography of public scrutiny mechanisms ensures that the human representation of the biosphere is a contestable and often stormy affair, so that (for example) animal rights activists resist preservationist efforts to remove non-native animals from threatened habitats, or employers and trade unions stubbornly refuse to support political efforts to switch from carbon- to renewable-energy regimes.

It may be objected that the whole notion of extending powers of representation to nonhuman nature is not a recent invention. It is indeed true that (a) all human societies have created ways of registering or representing their interdependence with the biosphere and its (sometimes invisible) elements by means of verbal, oral, and pictorial expressions,⁴⁰ and (b) within the representative tradition there are older customs and traditions of politically representing “nature.”⁴¹ Medieval and early modern Europe saw many durable practices of this kind, including rural *tings* (assemblies) and the common peasant custom of taking animals, plants, and vegetables to local courts for the purpose of settling ownership disputes. Other examples included the powerful water boards (known as *waterschappen*) that sprang up in the low-lying parts of the North Sea coast, and the water tribunals of the Iberian peninsula, representative assemblies invented and operated by farmers in drought-prone regions to manage their crop irrigation systems through periodic public meetings of elected representatives.

These ancient schemes supposed that the world of “nature” had political entitlements, blessed with a voice that prompted local people to take it into their care through human schemes of representation. Shepherds and farmers were deeply mindful that their labors would be in vain without heeding nature’s

³⁹ Edmund Burke, “Letter to Sir Hercules Langrishe [1792],” in *The Works of Edmund Burke*, vol. 4 (London: John C. Nimmo, 1899), 293: “Virtual representation is that in which there is a communion of interests, and sympathy in feelings and desires between those who act in the name of any descriptions of people and the people in whose name they act, though the trustees are not actually chosen by them.”

⁴⁰ Alessandro Nova, *The Book of the Wind: The Representation of the Invisible* (Kingston, Ontario: McGill-Queen’s University Press, 2011).

⁴¹ Keane, *The Life and Death of Democracy*, 188-193.

powers—and without getting others to do the same. Exactly this sentiment in multimediated democratic form is making its presence felt in our times, helped greatly by the invention and diffusion, for the first time in the long history of democracy, of power-scrutinizing and power-chastening monitory mechanisms that openly contest the human domination of the biosphere by representing its fate in human affairs. The age of monitory democracy complicates and enriches the prevailing common-sense understandings of democracy: the old belief that democracy is “one person, one vote, one representative” gradually has been replaced by practices guided by the rule of “one person, many interests, many voices, multiple votes, multiple representatives.” Green politics enriches and redefines the meaning of representation. It also helps rid the whole idea of democracy of its anthropocentrism (what could be more anthropocentric than a political ideal that originally supposed humans are masters and possessors of “nature”?). Green politics makes way for the entrance of the biosphere into the political life of human beings, who reconnect the political and natural worlds in hybrid public spaces that Bruno Latour has called “parliaments of things.”⁴² The new green politics does more than urge humans to reimagine themselves as humble beings deeply entangled in the ecosystems upon which they depend. It redefines democracy to mean, descriptively speaking, a way of life that renders power publicly accountable by means of representative institutions in which humans and their biosphere are treated symmetrically, as interdependent equals, in opposition to the reigning view that humans are the pinnacle of creation, lords and ladies of the universe, “the people” who are the ultimate source of sovereign power and authority on Earth.

Especially striking is the way the advent of monitory democracy coincides with manifold efforts to wean the world off its dependence upon coal mines, fracking, oil refineries, filling stations, and fuel-oil engines, to replace them with a new post-carbon energy regime founded on solar- and wind-power and revolutionary electricity-storage techniques.⁴³ The push toward post-carbon energy regimes overlaps with many new power-restraining platforms that function as early warning detectors, public broadcasting stations, and sites of active resistance and power reversals. Most obviously, there are green political parties (the first in the world were the United Tasmania Group [1972] and

⁴² Bruno Latour, “From Realpolitik to Dingpolitik or How to Make Things Public,” in *Making Things Public: Atmospheres of Democracy*, ed. Bruno Latour and Peter Weibel (Cambridge, MA: MIT Press, 2005), 14-41, and id., *We Have Never Been Modern* (Cambridge, MA: Harvard University Press, 1993).

⁴³ Popular accounts of the transition include Christiane Grefe, *Global Gardening: Bioökonomie—Neuer Raubbau oder Wirtschaftsform der Zukunft?* [Global gardening: Bioeconomy—A new exploitation or the economic form of the future?] (Munich: Verlag Antje Kunstmann, 2016), and Chris Goodall, *The Switch: How Solar, Storage and New Tech Means Cheap Power for All* (London: Profile Books, 2017).

the Values Party in New Zealand⁴⁴). Green themes have surfaced in “liquid democracy” parties such as the Pirates in Sweden and Germany, the Party for the Animals in the Netherlands, and the Best Party in Iceland. There are meanwhile “rewilding” projects, local government covenants, environmental impact hearings, and citizen science projects (the Open Air Laboratories [Opal] project in the UK is an example). There are global agreements, such as the Convention on Biological Diversity and the Aarhus Convention, which call upon states to guarantee their citizens’ rights of information, justice, and participation in environmental decision making. Daring multimedia civic insurgencies multiply, ranging from “Tell the truth, and act like it’s real” campaigns by Extinction Rebellion to “don’t be hopeful, feel the fear” (Greta Thunberg) climate strikes by young schoolchildren who have not yet reached the formal age of citizenship. In countries such as Guatemala and El Salvador, scholar activists have built monitory bodies such as *Red de Educadores Independientes por la Soberanía Alimentaria* (REISA). There are green think tanks and green academies, such as Berlin’s Grüne Akademie, funded by the Heinrich Böll Foundation. Public intellectuals and scientists (think of the Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services [IPBES] and the work of the geochemist Wallace Broecker, who introduced the term “global warming”⁴⁵) ring bells of alarm about the coming environmental catastrophes. A new genre of “gonzo” nature writing, literary works emphasizing humans’ interdependence with the nonhuman “natural” world, has been born; among the earliest examples is Erich Kästner’s classic children’s tale of an assembly of the world’s animals that calls on humans to behave more decently in the world.⁴⁶ Photographers (Todd Hido’s images of the “coming darkness” spring to mind), graphic artists, and documentary broadcasters (David Attenborough’s *Blue Planet II*) issue warnings against a future uninhabitable Earth. So do world-famous musicians (Neil Young’s *Rockin’ in the Free World*: “In the endless search for a drop of oil/People’s lives get shattered while we suck it from the soil”). The greening of contemporary politics includes regional initiatives such as the Mediterranean Action Plan (MAP) and regional fisheries management organizations (RFMOs), some of them specialists in monitoring highly migratory species of fish (an example is the Commission for the Conservation of Southern Bluefin Tuna), or others

⁴⁴ Stephen L. Rainbow, “Why Did New Zealand and Tasmania Spawn the World’s First Green Parties?” *Environmental Politics* 1, no. 3 (Autumn 1992): 321-346.

⁴⁵ See the “IPBES Global Assessment Summary for Policymakers” (Bonn: Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services, 2019), and Wallace S. Broecker, “Climatic Change—Are We on the Brink of a Pronounced Global Warming?” *Science* 189 (1978): 460-463.

⁴⁶ Erich Kästner, *The Animals’ Conference* (New York: David McKay Company, 1949). More recently, see the vivid personal account of the “exhilarating inaccessibility” that greets human efforts to live as badgers and otters, in Charles Foster, *Being a Beast: Adventures Across the Species Divide* (New York: Metropolitan Books, 2016).

concerned with the living marine resources within a region (an example is the Commission for the Conservation of Antarctic Marine Living Resources). There are very local initiatives (citizens building “butterfly bridges” in urban spaces, for instance) and large-scale Earth-watch summits. For the first time, there are legal victories for the redefinition of lands (the Te Urewera Act 2014 in Aotearoa [Māori] New Zealand is an example) deemed to enjoy “all the rights, powers, duties and liabilities of a legal person.” Green politics in the era of monitory democracy includes trend-setting experiments with indigenous self-government, for instance, in the northeast Pacific archipelago, Haida Gwaii (Islands of the People), and Uluru-Kata Tjuta National Park in central Australia.⁴⁷ Striking is the way these experiments are infused with a strong democratic sense of (a) the dynamic and fragile complexity of the world; (b) the interconnectivity and self-organizing potential of all living and nonliving elements within the political environment; and (c) deep respect for the nonhuman and its legitimate “right of representation” in human affairs.⁴⁸ For the first time, there are clauses within written constitutions designed to protect the biosphere; their phrases radically alter the meaning of citizenship in a democratic political order. Mongolia’s constitution expressly states that citizens must enjoy rights to a “healthy and safe environment, and to be protected against environmental pollution and ecological imbalance” (chap. 2, art. 16). Slovenia’s constitution stipulates that “everyone has the right to drinkable water,” while the democratic Constitution of the Kingdom of Bhutan specifies that every citizen

is a trustee of the Kingdom’s natural resources and environment for the benefit of the present and future generations and it is the fundamental duty of every citizen to contribute to the protection of the natural environment, conservation of the rich biodiversity of Bhutan and prevention of all forms of ecological degradation including noise, visual and physical pollution through the adoption and support of environment friendly practices and policies (art. 5).

Bio-regional Assemblies

The invention known as bio-regional assemblies may well turn out to be an exemplar of the new green politics under conditions of monitory democracy.⁴⁹ Born in the early 1980s, bodies such as the Beaver Hills Initiative in Alberta

⁴⁷ See, for example, Director of National Parks, *Uluru—Kata Tjuta National Park: Tjukurpa Katutja Ngarantja Management Plan 2010–2020* (Canberra: Australian Government, 2010).

⁴⁸ Keane, *Power and Humility*.

⁴⁹ Kirkpatrick Sale, *Dwellers in the Land: The Bioregional Vision* (Athens: University of Georgia Press, 1985); G. Robert Thayer, *LifePlace: Bioregional Thought and Practice* (Los Angeles: University of California Press, 2003); and Mike Carr, *Bioregionalism and Civil Society: Democratic Challenges to Corporate Globalism* (Vancouver: UBC Press, 2004).

and the Tsá Túé biosphere reserve in the Northwest Territories are watchdog and action networks that work to stimulate critical awareness and public respect for whole ecological communities, to take their side against the painful “solastalgia” produced by blindly destructive “growth.”⁵⁰ These viridescent networks craft new ways of shaming and chastening human predation. Their representatives imagine territory in fresh, unbounded ways. They suppose that, in order to secure the clean air, water, and food humans need to survive healthfully, people must become guardians of the places where they live. Bio-regional assemblies encourage people to see the wondrous in the common. They probe the reasons why people do not act in order to get people to act. They highlight the costs generated by public ignorance of bio-surroundings. They note that the best way for families, friends, neighbors, and other human beings to take care of themselves and their successors is to protect and restore regions, and to pay attention to what is happening to land, plants and animals, springs, rivers, deserts, lakes, groundwater, reefs and oceans, and quality of air. These bio-regional assemblies insist that some things are just not for sale. They call upon human beings to swap their innocent attachments to “historical progress” and “modernization” with a more prudent sense of deep time that highlights the fragile complexity of our biosphere and its multiple rhythms.⁵¹ These initiatives sometimes demand a halt to consumer-driven “growth” and the fetish of GDP as the measure of well-being. At other moments, they call for green investments supportive of a post-carbon energy regime. They reason that if history is a train journey between stops, then progress requires reaching for the emergency brake, abandoning false hopes, putting an end to acts of wanton vandalism now rebounding on our planet. Bio-regional assemblies accuse middle-of-the-road political parties, including social democratic parties, of being trapped in a dead end. They typically reject the old fossil-fuel imagery of the Left—think of the once-popular imagery of warrior male bodies gathered at the gates of pits, docks, and factories, singing hymns to industrial progress, under smoke-stained skies, voting for socialism. Bio-regional assemblies rightly find such images worse than antiquated. They interpret them as bad moons, as warnings that unless we human beings have the courage to change our ways with the world things may turn out badly—so badly that the ideals and institutions of monitory democracy will perish, along with millions of biomes and living species that might well also include the species questionably known as *Homo sapiens*.

⁵⁰ Glenn A. Albrecht, “Solastalgia and the New Mourning,” in *Mourning Nature: Hope at the Heart of Ecological Loss & Grief*, ed. A. C. Willox and K. Landman (Kingston, Ontario: McGill-Queen’s University Press), 292-315; see also the prediction that “climate-induced societal collapse is now inevitable in the near term” by Jem Beadell, “Deep Adaptation: A Map for Navigating Climate Tragedy,” *IFLAS Occasional Paper 2* (July 2018), <https://www.lifeworth.com/deepadaptation.pdf> (accessed January 21, 2019).

⁵¹ John Keane, “A New Politics of Time,” *The Conversation* (December 3, 2016), <https://theconversation.com/a-new-politics-of-time-69137> (accessed April 24, 2019).