

Political Ecologies

In this chapter I have two goals. The first is easier than the second: I retell a couple of worm stories, first heard from Charles Darwin and Bruno Latour, to show how worms are “like” us. Here, as elsewhere in the book, I find in a non- or not-quite-human body evidence of the vitality of matter. Worms, or electricity, or various gadgets, or fats, or metals, or stem cells are actants, or what Darwin calls “small agencies,” that, when in the right confederation with other physical and physiological bodies, can make big things happen. The second goal is to confront the hard question of the *political* capacity of actants. Even if a convincing case is made for worms as active members of, say, the ecosystem of a rainforest, can worms be considered members of a *public*? What is the difference between an ecosystem and a political system? Are they analogs? Two names for the same system at different scales? What is the difference between an actant and a political actor? Is there a clear difference? Does an action count as *political* by virtue of its having taken place “in” a public? Are there nonhuman members of a public? What, in sum, are the implications of a (meta)physics of vibrant materiality for political theory?

After the worm stories, I try to explore these very difficult questions by engaging two theories of democracy. I will focus on their different understandings of what a public is, how a public is formed and deformed, and what counts as a political act. I choose the first theory, by John Dewey, because in it the analogy between an ecosystem and a political system is fairly strong and the gap between action and political action relatively small. Key here is Dewey's notion of the generative field that he calls "conjoint action." Conjoint action is the agency behind the emergence of a public; a public's agency or capacity to produce effects is also a function of conjoint action. Dewey's theory leaves open the possibility that some of the acts of conjoint action originate in non-human (natural and technological) bodies. I choose the second theory, that of Jacques Rancière, because it emphasizes the extent to which the political constitutes a distinctive realm of action and thus outlines why a polity ought not to be considered an ecology. On Rancière's account, the public is constituted by bodies with uniquely human capabilities, talents, and skills, and political action is something that only they can do. Both models are instructive, and together they help us begin to discern the politics of vital materialism.

The "Small Agency" of Worms

Darwin watched English worms: many, many of them for many, many hours. He watched how they moved, where they went, and what they did, and, most of all, he watched how they made topsoil or "vegetable mould": after digesting "earthly matter," they would deposit the castings at the mouth of their burrows, thus continually bringing to the surface a refined layer of vegetable mold. It is, writes Darwin, "a marvellous reflection that the whole of the . . . mould over any . . . expanse has passed, and will again pass, every few years through the bodies of worms."¹ But the claim with which Darwin ends his *Formation of Vegetable Mould through the Actions of Worms with Observations on Their Habits* (1881) is not about biology or agronomy but about history: "Worms have played a more important part in the history of the world than most persons would at first assume" (*Mould*, 305). How do worms make history? They make it by making vegetable mold, which makes possible "seedlings of all kinds," which makes possible an earth hospitable to humans, which

makes possible the cultural artifacts, rituals, plans, and endeavors of human history (Mould, 309). Worms also "make history" by preserving the artifacts that humans make: worms protect "for an indefinitely long period every object, not liable to decay, which is dropped on the surface of the land, by burying it beneath their castings," a service for which "archaeologists ought to be grateful to worms" (Mould, 308).

Darwin claims that worms inaugurate human culture and then, working alongside people and their endeavors, help preserve what people and worms together have made. Darwin does not claim that worms intend to have this effect so beneficial to humankind, or that any divine intention is at work through them. Rather, that the exertions of worms contribute to human history and culture is the unplanned result of worms acting in conjunction and competition with other (biological, bacterial, chemical, human) agents. Darwin describes the activities of worms as one of many "small agencies" whose "accumulated effects" turn out to be quite big.² It would be consistent with Darwin to say that worms participate in heterogeneous assemblages in which agency has no single locus, no mastermind, but is distributed across a swarm of various and variegated vibrant materialities.³

Worms do not intend to enable human culture, but worms do, according to Darwin, pursue what appear to be prospective endeavors. His close observations of worms led him to conclude that worm actions are not the result of "an unvarying inherited impulse" (Mould, 64–65), but are intelligent improvisations. For example, in "plugging up the mouths of their burrows" with leaves, worms "act in nearly the same manner as would a man" — that is, they make apparently free, or at least unpredictable, decisions based on the available materials. Though they usually seize leaves (to be dragged to their burrows) by their pointed ends, "they do not act in the same unvarying manner in all cases," but adjust their technique to the particular situation and its set of possibilities: Which leaves are available? Is the ground wet or dry? What other creatures are around? (Mould, 312). Further evidence of a certain freedom to their acts is the phenomenon of a worm *overriding* a normal physiological response, as when a worm fails to recoil and retreat to its burrow when exposed to a bright light. Darwin notes that this overruling occurs when a worm is focused closely on a task, such as eating, dragging leaves, or mating:

When a worm is suddenly illuminated and dashes like a rabbit into its burrow . . . we are at first led to look at the action as a reflex one. The irritation of the cerebral ganglia appears to cause certain muscles to contract in an inevitable manner, independently of the will or consciousness . . . , as if it were an automaton. But [this is contested by] . . . the fact that a worm when in any way employed and in the intervals of such employment, whatever set of muscles and ganglia may then have been brought into play, is often regardless of light. . . . With the higher animals, when close attention to some object leads to the disregard of the impressions which other objects must be producing on them, we attribute this to their attention being then absorbed; and attention implies the presence of a mind. (*Mould*, 23–24)

Darwin's worms pay attention, and they respond appropriately to unprecedented situations, displaying what Hans Driesch called the power of "individual correspondence." Their actions are neither an expression of divine purpose nor reducible to an unvarying mechanical instinct. Let us call the assemblage in which these wiggling actants participate not (as in Baruch Spinoza) God or Nature, but History or Nature, or, to be more precise, British History or England's Nature. This assemblage is an ecology in the sense that it is an interconnected series of parts, but it is not a fixed order of parts, for the order is always being reworked in accordance with a certain "freedom of choice" exercised by its actants.

In *Pandora's Hope*, Latour tells a story about Amazonian rather than English worms, and again we see that worms play a more important part in the history of (that part of) the world than most persons would at first suppose. The story begins with the puzzling presence, about ten meters into the rainforest, of trees typical only of the savanna. The soil under these trees is "more clayey than the savanna but less so than the forest." How was the border between savanna and forest breached? Did "the forest cast its own soil before it to create conditions favorable to its expansion," or is the savanna "degrading the woodland humus as it prepares to invade the forest"?⁴ This question presumes a kind of vegetal agency in a natural system understood not as a mechanical order of fixed laws but as the scene of not-fully-predictable encounters between multiple kinds of actants. Savanna vegetation, forest trees, soil, soil microorganisms, and humans native and exotic to the rainforest are all responding, in real time and without predetermined outcome, to each other and to the collective force of the shifting configurations that form.

The task at hand for humans is to find a more horizontal representation of the relation between human and nonhuman actants in order to be more faithful to the style of action pursued by each.

Latour and the scientists he is observing eventually conclude that, for reasons unknown to the humans, worms had gathered at the border and produced a lot of aluminum, which transformed the silica of the sandy soil into the clay more amenable to forest trees, and so it was the forest that was advancing into the savanna.⁵ It is difficult to pinpoint just who or what was the key operator or “assemblage converter” here:⁶ The worms? Their diet? The aluminum excrement? Had the human inhabitants of the rainforest done something to make the worms migrate? These various materialities do not exercise exactly the same kind of agency, but neither is it easy to arrange them into a hierarchy, for in some times and places, the “small agency” of the lowly worm makes more of a difference than the grand agency of humans.

We consider it a political act, for example, when people distribute themselves into racially and economically segregated neighborhoods, even if, in doing so, they are following a cultural trend and do not explicitly intend, endorse, or even consider the impact of their movements on, say, municipal finances, crime rates, or transportation policy. There are many affinities between the act of persons dragging their belongings to their new homes in the suburbs and the acts of worms dragging leaves to their burrows or migrating to a savanna-forest border.

A Note on Anthropomorphism

Darwin and Latour help make a case for worms as vibrant material actants whose difference from us may be smaller than we thought. And without worms or aluminum (or edibles or stem cells) and their conative endeavors, it would be difficult if not impossible for humans to exercise our exquisite wills or intentions. It seems both that worms are “like” us and that (to use a Kantian formulation) we must posit a certain nonhuman agency as the condition of possibility of human agency. Or are these claims fatally dependent on anthropomorphization?

Anthropomorphizing, the interpretation of what is not human or personal in terms of human or personal characteristics, is clearly a part of

the story, but it is less clear how fatal it is. According to George Levine, "Darwin's extraordinary curiosity about the talents of worms has to do with his inveterate anthropomorphism," which was "absolutely central to his larger theoretical project."⁷ Darwin anthropomorphized his worms: he saw in them an intelligence and a willfulness that he recognized as related to his own. But the narcissism of this gaze backfired, for it also prompted Darwin to pay close attention to the mundane activities of worms, and what came to the fore through paying attention was their own, distinctive, material complexity. He was able to detect what natural historians call the "jizz" of a worm, which the geographer Jamie Lorimer describes as "the unique combination of properties . . . that allows its ready identification and differentiation from others."⁸ In a vital materialism, an anthropomorphic element in perception can uncover a whole world of resonances and resemblances—sounds and sights that echo and bounce far more than would be possible were the universe to have a hierarchical structure. We at first may see only a world in our own image, but what appears next is a swarm of "talented" and vibrant materialities (including the seeing self).

A touch of anthropomorphism, then, can catalyze a sensibility that finds a world filled not with ontologically distinct categories of beings (subjects and objects) but with variously composed materialities that form confederations. In revealing similarities across categorical divides and lighting up structural parallels between material forms in "nature" and those in "culture," anthropomorphism can reveal isomorphisms. A good example of this is the sensibility expressed in the *Great Treatise on Supreme Sound*, a fourteenth-century handbook for musicians. It describes the various sounds of the lute in terms of a movement style expressed by an animal and instructs the lute player to mimic that movement style: to make a staccato sound, the player should try to reproduce with his finger the motion of "an emaciated crow perched on a bare tree or pecking at the snow in hope of finding something to eat"; to make the characteristic sound that comes when the index, middle, and third fingers grip two strings at once, the lutist is to render his hand in the image of "the nonchalant flick of a carp's tail"; to produce a "floating sound," fingers should imitate the series of movements made by a "white butterfly fluttering at flower level" who "lingers but does not stay."⁹ In the twentieth century, complexity theory also focused on iso-

morphic resonances. Clusters of neurons in a human brain, groupings of buildings in a city, and colonies of slime molds all have been shown to follow similar organizational rules; each is an instance of what Steven Johnson has called "organized complexity."¹⁰

The Public and Its Problems

What, if anything, does the claim that worms and trees and aluminum are participants in an ecosystem say about political participation? The answer depends in part on whether a political system itself constitutes a kind of ecosystem. Dewey's notion of a public suggests that it does. I turn now to him and to the advantages and limits of modeling politics as an ecology. If Darwin highlights the power of choice in worms to contest the idea that worms are moved only by animal instinct or bodily affect, Dewey closes the gap between human and nonhuman from the other direction: he highlights the affective, bodily nature of human responses.

In *The Public and Its Problems*, Dewey presents a public as a confederation of bodies, bodies pulled together not so much by choice (a public is not exactly a voluntary association) as by a shared experience of harm that, over time, coalesces into a "problem." Dewey makes it clear that a public does not preexist its particular problem but emerges in response to it.¹¹ A public is a contingent and temporary formation existing alongside many other publics, protopublics, and residual or postpublics. Problems come and go, and so, too, do publics: at any given moment, many different publics are in the process of crystallizing and dissolving.¹²

When diverse bodies suddenly draw near and form a public, they have been provoked to do so by a problem, that is, by the "indirect, serious and enduring" consequences of "conjoint action."¹³ Problems are effects of the phenomenon of conjoint action. Like the conjoint action of Darwin's worms, the conjoint action of Dewey's citizens is not under the control of any rational plan or deliberate intention. No efficient cause of the problems it generates can really be pinpointed. What is more, there is no action that is not conjoint, that does not, in other words, immediately become enmeshed in a web of connections. For Dewey, any action is always a trans-action, and any act is really but an initiative

that gives birth to a cascade of legitimate and bastard progeny. This is because an act can only take place in a field already crowded with other endeavors and their consequences, a crowd with which the new entrant immediately interacts, overlaps, interferes. The field of *political* action is thus for Dewey a kind of ecology. No one body owns its supposedly own initiatives, for initiatives instantly conjoin with an impersonal swarm of contemporaneous endeavors, each with its own duration and intensity, with endeavors that are losing or gaining momentum, rippling into and recombining with others. In Dewey's own terms, conjoint actions generate "multitudinous consequences," and each of these consequences "crosses the others" to generate its own problems, and thus its own publics or "group of persons especially affected."¹⁴

Dewey imagines a public as a set of bodies affected by a common problem generated by a pulsing swarm of activities. Let us bracket for the moment Dewey's claim that a public is a group of "persons especially affected" and leave aside the question of what *kinds* of bodies can do the "acts" that are conjoining, and focus instead on the way Dewey defines the members of a public in terms of their "affective" capacity. We would then get this (Spinozist) version of Dewey's theory of the public and of conjoint action: problems give rise to publics, publics are groups of bodies with the capacity to affect and be affected; problems are signals that the would-be or protomembers of a public had already encountered the indirect effects of other endeavoring bodies, effects that have decreased the capacity for action of the protomembers. A public is a cluster of bodies harmed by the actions of others or even by actions born from their own actions as these trans-act; harmed bodies draw near each other and seek to engage in new acts that will restore their power, protect against future harm, or compensate for damage done—in that consists their political action, which, fortunately or unfortunately, will also become conjoint action with a chain of indirect, unpredictable consequences.

Dewey presents the members of a public as having been *inducted* into rather than *volunteering* for it: each body finds itself thrown together with other harmed and squirming bodies. Dewey's political pragmatism, like the one expressed at the end of my discussion of the black-out in chapter 2, emphasizes consequences more than intentions and makes "responsibility" more a matter of responding to harms than of

identifying objects of blame. Dewey's concept of conjoint action distributes responsibility to many different (human) actors. What is more, in naming a *problem* (rather than an act of will) as the driving force behind the formation of a public, Dewey (almost) acknowledges that a *political* action need not originate in human bodies at all. For is it not the case that some of the initiatives that conjoin and cause harm started from (or later became conjoined with) the vibrant bodies of animals, plants, metals, or machines?

In *Art as Experience*, Dewey comes close to saying that even human initiatives are not exclusively human; he flirts with a posthuman conception of action when he notes the porosity of the border between a human body and its out-side: "The epidermis is only in the most superficial way an indication of where an organism ends and its environment begins. There are things inside the body that are foreign to it, and there are things outside of it that belong to it *de jure* if not *de facto*; that must be taken possession of if life is to continue. The need that is manifest in the urgent impulses that demand completion through what the environment—and it alone—can supply, is a dynamic acknowledgment of this dependence of the self for wholeness upon its surroundings."¹⁵

Of course, Dewey is not quite a vital materialist. His language quoted above ultimately relegates the nonhuman and the nonorganic to the role of "environment" rather than actor and affirms a profound "dependence" of humans on "surroundings," but not a true reciprocity between participants of various material compositions. And Dewey generally assumes that the acts in conjoint action are *human* endeavors. Such anthropocentrism is impossible to avoid completely: as Theodor Adorno said, we are (almost) blind to the gap between concept and thing, and we have a tendency, as did even Spinoza, to privilege *human* efforts even when acknowledging the presence of other kinds of conative bodies. A pragmatic approach to politics, which emphasizes problem solving, may call forth with particular vigor what Henri Bergson described as action-oriented perception. For are not human bodies the ones best equipped to analyze a problem and devise strategies for its solution? All kinds of bodies may be able to join forces, but a pragmatist would be quick to note that only *some* bodies can make this association into a *task* force. And yet there also persists a self-interested motivation for the presumption that all material bodies are potential members of the public into

which one has been inducted. Such a presumption will enable me to discern more fully the extent of their power over me: How is this food or worm or aluminum contributing to a problem affecting me? How might these nonhumans contribute to its solution?

Latour pushes Dewey's theory of the public and its problems further in a vital materialist direction. He does so, first, by inventing the concept of an actant, which is an attempt, as is conjoint action, to pry some space between the idea of action and the idea of human intentionality. Second, Latour explicitly rejects the categories of "nature" and "culture" in favor of the "collective," which refers to an ecology of human and nonhuman elements.¹⁶ A polity is one of these collectives. Third, Latour frames political action not as the enactment of choices but as the call-and-response between "propositions."¹⁷ A proposition has no decisionistic power but is a lending of weight, an incentive toward, a pressure in the direction of one trajectory of action rather than another.¹⁸ Any given response to a problem is less the result of "deliberation" than of the "fermentation" of the various propositions and energies of the affected bodies.¹⁹ Finally, Latour distributes agentic capacity also to the "event." Policy directions and political moods are irreducible to the sum of the propositions of even an ontologically plural public, for there is always a slight surprise of action: "There are events. I never act; I am always slightly surprised by what I do. That which acts through me is also surprised by what I do, by the chance to mutate, to change, and to bifurcate."²⁰

Dewey's account of a public as the product of conjoint action paints a picture of a political system that has much in common with a dynamic natural ecosystem. This, along with his claim that a member of a public is one "affected by the indirect consequences of transactions to such an extent that it is deemed necessary to have those consequences systematically cared for,"²¹ paves the way for a theory of action that more explicitly accepts nonhuman bodies as members of a public, more explicitly attends to how they, too, participate in conjoint action, and more clearly discerns instances of harm to the (affective) bodies of animals, vegetables, minerals, and their ecocultures. These harms will surely provoke some "events" in response, but it is an open question whether they will provoke people to throw their weight toward a solution to them. Humans may notice the harm too late to intervene effectively, or their

strategies of intervention may be ineffective, or they simply may deem it unnecessary “to systematically care for” a harm, as we regularly sacrifice some actants for the sake of ourselves. For while every public may very well be an ecosystem, not every ecosystem is democratic. And I cannot envision any polity so egalitarian that important human needs, such as health or survival, would not take priority.

Why not? Since I have challenged the uniqueness of humanity in several ways, why not conclude that we and they are equally entitled? Because I have not eliminated all differences between us but examined instead the affinities across these differences, affinities that enable the very assemblages explored in the present book. To put it bluntly, my conatus will not let me “horizontalize” the world completely. I also identify with members of my species, insofar as they are bodies most similar to mine. I so identify even as I seek to extend awareness of our interinvolvements and interdependencies. The political goal of a vital materialism is not the perfect equality of actants, but a polity with more channels of communication between members. (Latour calls this a more “vascularized” collective.²³)

There are many practical and conceptual obstacles here: How can communication proceed when many members are nonlinguistic? Can we theorize more closely the various forms of such communicative energies? How can humans learn to hear or enhance our receptivity for “propositions” not expressed in words? How to translate between them? What kinds of institutions and rituals of democracy would be appropriate? Latour suggests that we convene a “parliament of things,” an idea that is as provocative as it is elusive.²³ Perhaps we can make better progress on this front by looking at a theory designed to open democracy to the voices of excluded humans. I turn to Rancière’s theory of democracy as disruption.

Disruptions and the Demos

Compared to Dewey and Latour, Rancière is less concerned with how a public emerges than with the means by which its (apparent) coherence can be interrupted. In his influential *Disagreement*, he focuses on a potentially disruptive human force that exists within (though is not

recognized by) the public. He calls this the force of the people or of the "demos." The democratic act par excellence occurs when the demos does something that exposes the arbitrariness of the dominant "partition of the sensible."²⁴ This is the partition that had been rendering some people visible as political actors while pushing others below the threshold of note. Politics, as Rancière frames it, consists not in acts that preserve a political order or respond to already articulated problems, but is "the name of a singular disruption of this order of distribution of bodies."²⁵

These singular disruptions are neither intentional acts nor aleatory eruptions; Rancière locates them in the between-space of the staged event. The demos more or less spontaneously constructs "a polemical scene" within which what was formerly heard as noise by powerful persons begins to sound to them like "argumentative utterances."²⁶ Such scenes, however different in their cast of characters, always tell the same story: the story of "the equality of speaking beings."²⁷ The "mise-en-scènes that reconfigure the relations of the visible and the sayable" expose "the ultimate secret of any social order,"²⁸ that is, that "there is no natural principle of domination by one person over another."²⁹

For Rancière, then, the political act consists in the exclamatory interjection of affective bodies as they enter a preexisting public, or, rather, as they reveal that they have been there all along as an unaccounted-for part. (Rancière would be helped here, I think, were he to adopt Dewey's insight about multiple, coexisting publics, rather than speak of a single demos with an overt and a latent set of members.) What difference does this interjection by formerly ignored bodies make, according to Rancière? It modifies the "partition of the perceptible" or the "regime of the visible,"³⁰ and this changes everything. As an example Rancière cites the interruption staged by the plebeians of the Roman (patrician) Republic:

The plebs gathered on the Aventine . . . do not set up a fortified camp in the manner of the Scythian slaves. They do what would have been unthinkable for the latter: they establish another order, another partition of the perceptible, by constituting themselves not as warriors equal to other warriors but as speaking beings sharing the same properties as those who deny them these. They thereby execute a series of speech acts that mimic those of the patricians: they pronounce imprecations and apotheoses; they delegate one

of their number to go and consult *their* oracles; they give themselves representatives by rebaptizing them. In a word, they conduct themselves like beings with names. Through transgression, they find that they too . . . are endowed with speech that does not simply express want, suffering, or rage, but intelligence.³¹

The plebs managed to repartition the regime of the sensible. Is this an exclusively human power? Though the metaphors of eruption or disruption that Rancière employs may suggest that the political act is “like” a force of nature, his description of the act increasingly takes on a linguistic cast (“disruption” becomes “interruption” and then “disagreement”). It is an “objection to a wrong,” where a wrong is defined as the unequal treatment of beings who are equally endowed with a capacity for *human* speech. When asked in public whether he thought that an animal or a plant or a drug or a (nonlinguistic) sound could disrupt the police order, Rancière said no: he did not want to extend the concept of the political that far; nonhumans do not qualify as participants in a demos; the disruption effect must be accompanied by the desire to engage in reasoned discourse.³²

Despite this reply, I think that even against his will, so to speak, Rancière’s model contains inklings of and opportunities for a more (vital) materialist theory of democracy. Consider, for example, the way it imagines the being of the demos: not as a formed thing or fixed entity, but as an unruly activity or indeterminate wave of energy. The demos is, we read, “neither the sum of the population nor the disfavored element within,” but an “excess” irreducible to the particular *bodies* involved.³³ This idea of a force that traverses bodies without itself being one resonates with Spinoza’s *conatus* and Deleuze’s notion of (the motility of) intensities, discussed in chapters 2 and 4, respectively. Does not the protean “excess” that Rancière invokes flow through nonhuman bodies? Might not this be what the *New York Times* was pointing to by saying that the grid “lives and dies by its own rules”? (Or what is intuited in phrases like “the war has a momentum of its own”?) Rancière implicitly raises this question: Is the power to disrupt really limited to human speakers?

A second opportunity for a more materialist theory of democracy arises when Rancière chooses to define what counts as political by what effect is generated: a political act not only disrupts, it disrupts in such

a way as to change radically what people can "see": it repartitions the sensible; it overthrows the regime of the perceptible. Here again the political gate is opened enough for nonhumans (dead rats, bottle caps, gadgets, fire, electricity, berries, metal) to slip through, for they also have the power to startle and provoke a gestalt shift in perception: what was trash becomes things, what was an instrument becomes a participant, what was foodstuff becomes agent, what was adamantine becomes intensity. We see how an animal, plant, mineral, or artifact can sometimes catalyze a public, and we might then see how to devise more effective (experimental) tactics for enhancing or weakening that public. It feels dangerous to leave the gate open, for it renders many conceptual, moral, and psychological possessions exposed and vulnerable. It seems safer to figure eruptive events as "argumentative utterances."

It is, of course, quite normal for democratic theory to be anthropocentric and quite reasonable to tie political participation to some degree of linguistic or deliberative competence.³⁴ These tendencies have directed democratic theorists toward important problems: the uninformed voter and a scarcity of deliberative forums, the unequal access of different human groups to political power, the harm caused when we fail to discern not just established constituencies but also what William Connolly has described as those protean identities emerging from inarticulate "currents of experience."³⁵

But what if we loosened the tie between participation and human language use, encountering the world as a swarm of vibrant materials entering and leaving agentic assemblages? We might then entertain a set of crazy and not-so-crazy questions: Did the typical American diet play any role in engendering the widespread susceptibility to the propaganda leading up to the invasion of Iraq? Do sand storms make a difference to the spread of so-called sectarian violence? Does mercury help enact autism? In what ways does the effect on sensibility of a video game exceed the intentions of its designers and users? Can a hurricane bring down a president? Can HIV mobilize homophobia or an evangelical revival? Can an avian virus jump from birds to humans and create havoc for systems of health care and international trade and travel?

Though Rancière objects to the "Platonic" prejudice against the demos, which positions commoners as defective versions of men in possession of logos, to imagine politics as a realm of human activity

alone may also be a kind of prejudice: a prejudice against a (nonhuman) multitude misrecognized as context, constraint, or tool. A vital materialist theory of democracy seeks to transform the divide between speaking subjects and mute objects into a set of differential tendencies and variable capacities. I think this is also what Darwin and Latour were trying to do when they told their worm stories.

A Diet of Worms

As our ability to detect and translate the more subtle forms of animal behavior and communication has grown, so, too, has our willingness to attribute intelligence to it and to recast it from behavior to action. But to truly take worms seriously, we would not only have to revise our assessment of their activities but also need to question our larger faith in the uniqueness of humans and to reinvent concepts now attached to that faith.³⁶ Theories of democracy that assume a world of active subjects and passive objects begin to appear as thin descriptions at a time when the interactions between human, viral, animal, and technological bodies are becoming more and more intense. If human culture is inextricably enmeshed with vibrant, nonhuman agencies,³⁷ and if human intentionality can be agentic only if accompanied by a vast entourage of nonhumans,³⁸ then it seems that the appropriate unit of analysis for democratic theory is neither the individual human nor an exclusively human collective but the (ontologically heterogeneous) “public” coalescing around a problem.³⁹ We need not only to invent or reinvoke concepts like *conatus*, *actant*, *assemblage*, *small agency*, *operator*, *disruption*, and the like but also to devise new procedures, technologies, and regimes of perception that enable us to consult nonhumans more closely, or to listen and respond more carefully to their outbreaks, objections, testimonies, and propositions. For these offerings are profoundly important to the health of the political ecologies to which we belong.

Of course, to acknowledge nonhuman materialities as participants in a political ecology is not to claim that everything is always a participant, or that all participants are alike. Persons, worms, leaves, bacteria, metals, and hurricanes have different types and degrees of power, just as different persons have different types and degrees of power, different

worms have different types and degrees of power, and so on, depending on the time, place, composition, and density of the formation. But surely the scope of democratization can be broadened to acknowledge more nonhumans in more ways, in something like the ways in which we have come to hear the political voices of other humans formerly on the outs: "Are you ready, and at the price of what sacrifice, to live the good life together? That this highest of moral and political questions could have been raised, for so many centuries, by so many bright minds, *for human only* without the nonhumans that make them up, will soon appear, I have no doubt, as extravagant as when the Founding Fathers denied slaves and women the vote."⁴⁰