

# New Materialisms

*Ontology, Agency, and Politics*

EDITED BY

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## Introducing the New Materialisms

As human beings we inhabit an ineluctably material world. We live our everyday lives surrounded by, immersed in, matter. We are ourselves composed of matter. We experience its restlessness and intransigence even as we reconfigure and consume it. At every turn we encounter physical objects fashioned by human design and endure natural forces whose imperatives structure our daily routines for survival. Our existence depends from one moment to the next on myriad micro-organisms and diverse higher species, on our own hazily understood bodily and cellular reactions and on pitiless cosmic motions, on the material artifacts and natural stuff that populate our environment, as well as on socioeconomic structures that produce and reproduce the conditions of our everyday lives. In light of this massive materiality, how could we be anything other than materialist? How could we ignore the power of matter and the ways it materializes in our ordinary experiences or fail to acknowledge the primacy of matter in our theories?

Yet for the most part we take such materiality for granted, or we assume that there is little of interest to say about it. Even (or perhaps, especially) in the history of philosophy, materialism has remained a sporadic and often marginal approach. For there is an apparent paradox in thinking about matter: as soon as we do so, we seem to

distance ourselves from it, and within the space that opens up, a host of immaterial things seems to emerge: language, consciousness, subjectivity, agency, mind, soul; also imagination, emotions, values, meaning, and so on. These have typically been presented as idealities fundamentally different from matter and valorized as superior to the baser desires of biological material or the inertia of physical stuff. It is such idealist assumptions and the values that flow from them that materialists have traditionally contested. It is true that over the past three decades or so theorists have radicalized the way they understand subjectivity, discovering its efficacy in constructing even the most apparently natural phenomena while insisting upon its embeddedness in dense networks of power that outrun its control and constitute its willfulness. Yet it is on subjectivity that their gaze has focused. Our motivation in editing this book has been a conviction that it is now time to subject objectivity and material reality to a similarly radical reappraisal. Our respective researches have prompted our own interests in changing conceptions of material causality and the significance of corporeality, both of which we see as crucial for a materialist theory of politics or agency. We now advance the bolder claim that foregrounding material factors and reconfiguring our very understanding of matter are prerequisites for any plausible account of coexistence and its conditions in the twenty-first century.

Our commitment to editing a book on the new materialisms at this time springs from our conviction that materialism is once more on the move after several decades in abeyance and from our eagerness to help define and promote its new directions. Everywhere we look, it seems to us, we are witnessing scattered but insistent demands for more materialist modes of analysis and for new ways of thinking about matter and processes of materialization. We are also aware of the emergence of novel if still diffuse ways of conceptualizing and investigating material reality. This is especially evident in disciplines across the social sciences, such as political science, economics, anthropology, geography, and sociology, where it is exemplified in recent interest in material culture, geopolitical space, critical realism, critical international political economy, globalization, and environmentalism, and in calls for a renewed materialist feminism, or a more materialist queer theory or postcolonial studies. We interpret such developments as signs that the more textual approaches associated with

the so-called cultural turn are increasingly being deemed inadequate for understanding contemporary society, particularly in light of some of its most urgent challenges regarding environmental, demographic, geopolitical, and economic change.

The eclipse of materialism in recent theory can be negatively associated with the exhaustion of once popular materialist approaches, such as existential phenomenology or structural Marxism, and with important challenges by poststructuralists to the ontological and epistemological presumptions that have supported modern approaches to the material world. More positively, materialism's demise since the 1970s has been an effect of the dominance of analytical and normative political theory on the one hand and of radical constructivism on the other. These respective Anglophone and continental approaches have both been associated with a cultural turn that privileges language, discourse, culture, and values. While this turn has encouraged a *de facto* neglect of more obviously material phenomena and processes, it has also problematized any straightforward overture toward matter or material experience as naively representational or naturalistic. Notwithstanding the capacity of these currently dominant theories to clarify arguments and to alert us to the way power is present in any attempt to represent material reality, however, we believe it is now timely to reopen the issue of matter and once again to give material factors their due in shaping society and circumscribing human prospects. The essays we have commissioned for the current volume are exemplary of some of the new and innovative ways of conceptualizing and responding to this reorientation.

The essays that follow are at the forefront of current thinking about matter; about how to approach it, and about its significance for and within the political. They resonate with our own belief that to succeed, a reprisal of materialism must be truly radical. This means returning to the most fundamental questions about the nature of matter and the place of embodied humans within a material world; it means taking heed of developments in the natural sciences as well as attending to transformations in the ways we currently produce, reproduce, and consume our material environment. It entails sensitivity to contemporary shifts in the bio- and eco-spheres, as well as to changes in global economic structures and technologies. It also demands detailed analyses of our daily interactions with

material objects and the natural environment. What is at stake here is nothing less than a challenge to some of the most basic assumptions that have underpinned the modern world, including its normative sense of the human and its beliefs about human agency, but also regarding its material practices such as the ways we labor on, exploit, and interact with nature.

In labeling these essays collectively as *new* materialisms, we do not wish to deny their rich materialist heritage. Many of our contributors indeed draw inspiration from materialist traditions developed prior to modernity or from philosophies that have until recently remained neglected or marginalized currents within modern thinking. From this perspective their interventions might be categorized as *renewed* materialisms. If we nevertheless persist in our call for and observation of a *new* materialism, it is because we are aware that unprecedented things are currently being done with and to matter, nature, life, production, and reproduction. It is in this contemporary context that theorists are compelled to rediscover older materialist traditions while pushing them in novel, and sometimes experimental, directions or toward fresh applications.

If we pluralize these new materialisms, this is indicative of our appreciation that despite some important linkages between different strands of contemporary work and a more general materialist turn, there are currently a number of distinctive initiatives that resist any simple conflation, not least because they reflect on various levels of materialization. What has been exciting for us as editors has indeed been our sense of encountering the emergence of new paradigms for which no overall orthodoxy has yet been established. Our aim in presenting the twelve essays collected here is accordingly to initiate a debate about the new materialism while on the one hand, leaving its future possibilities relatively open and on the other, eliciting key themes and orientations that we judge to be bringing structure and velocity to current arguments. It has been our ambition here to contribute to a broad-ranging discussion that is emerging about the nature of our materially and discursively fast-changing world by bringing together a number of leading scholars who are engaging critically with it. In introducing their work our more specific aims are to explain the reasons for a widespread sense that rejuvenating materialism is necessary, to outline and contextualize some of the principal questions and modes of thinking that are emerging in response, and to make clear our own commitment to a renewed materialism in social and political analysis.

## The Context of the New Materialism

In advocating a new materialism we are inspired by a number of developments that call for a novel understanding of and a renewed emphasis on materiality. Of great significance here are, firstly, twentieth-century advances in the natural sciences. The great materialist philosophies of the nineteenth century, notably those of Marx, Nietzsche, and Freud, were themselves hugely influenced by developments in the natural sciences, yet the new physics and biology make it impossible to understand matter any longer in ways that were inspired by classical science. While Newtonian mechanics was especially important for these older materialisms, for post-classical physics matter has become considerably more elusive (one might even say more immaterial) and complex, suggesting that the ways we understand and interact with nature are in need of a commensurate updating. While we recognize that there can be no simple passage from natural to social science theories or from science to ethics, developments in the former do become disseminated among educated publics; they inform expert witnesses who contribute to relevant policy making, and they gradually transform the popular imaginary about our material world and its possibilities. As Stephen White points out, ontology involves not simply the abstract study of the nature of being but also the underlying beliefs about existence that shape our everyday relationships to ourselves, to others, and to the world: "Ontological commitments in this sense are thus entangled with questions of identity and history, with how we articulate the meaning of our lives, both individually and collectively."<sup>1</sup> From this point of view, thinking anew about the fundamental structure of matter has far-reaching normative and existential implications.

A second and urgent reason for turning to materialism is the emergence of pressing ethical and political concerns that accompany the scientific and technological advances predicated on new scientific models of matter and, in particular, of living matter. As critically engaged theorists, we find ourselves compelled to explore the significance of complex issues such as climate change or global capital and population flows, the biotechnological engineering of genetically modified organisms, or the saturation of our intimate and physical lives by digital, wireless, and virtual technologies. From our understanding of the boundary between life and death and our everyday work practices to the way we feed ourselves and

recreate or procreate, we are finding our environment materially and conceptually reconstituted in ways that pose profound and unprecedented normative questions. In addressing them, we unavoidably find ourselves having to think in new ways about the nature of matter and the matter of nature; about the elements of life, the resilience of the planet, and the distinctiveness of the human. These questions are immensely important not only because they cast doubt on some of modernity's most cherished beliefs about the fundamental nature of existence and social justice but also because presumptions about agency and causation implicit in prevailing paradigms have structured our modern sense of the domains and dimensions of the ethical and the political as such. Recent developments thus call upon us to reorient ourselves profoundly in relation to the world, to one another, and to ourselves.

In terms of theory itself, finally, we are summoning a new materialism in response to a sense that the radicalism of the dominant discourses which have flourished under the cultural turn is now more or less exhausted. We share the feeling current among many researchers that the dominant constructivist orientation to social analysis is inadequate for thinking about matter, materiality, and politics in ways that do justice to the contemporary context of biopolitics and global political economy. While we recognize that radical constructivism has contributed considerable insight into the workings of power over recent years, we are also aware that an allergy to "the real" that is characteristic of its more linguistic or discursive forms — whereby overtures to material reality are dismissed as an insidious foundationalism — has had the consequence of dissuading critical inquirers from the more empirical kinds of investigation that material processes and structures require. While by no means are all the essays in this volume hostile to constructivism, and new materialists countenance no simple return to empiricism or positivism, we share the view current among many critics that our contemporary context demands a theoretical rapprochement with material realism.

Congruent with these imperatives for readdressing materiality, we discern three interrelated but distinctive themes or directions in new materialist scholarship, and we use these to organize the rest of our discussion here. We do so in the hope of setting a framework for ensuing debate, although we are aware that our three themes are somewhat unevenly represented in the essays that follow. First among them is an ontological

reorientation that is resonant with, and to some extent informed by, developments in natural science: an orientation that is posthumanist in the sense that it conceives of matter itself as lively or as exhibiting agency. The second theme entails consideration of a raft of biopolitical and bioethical issues concerning the status of life and of the human. Third, new materialist scholarship testifies to a critical and nondogmatic reengagement with political economy, where the nature of, and relationship between, the material details of everyday life and broader geopolitical and socioeconomic structures is being explored afresh. An important characteristic shared by all three components is their emphasis on materialization as a complex, pluralistic, relatively open process and their insistence that humans, including theorists themselves, be recognized as thoroughly immersed within materiality's productive contingencies. In distinction from some recent examples of constructivism, new materialists emphasize the productivity and resilience of matter. Their wager is to give materiality its due, alert to the myriad ways in which matter is both self-constituting and invested with — and reconfigured by — intersubjective interventions that have their own quotient of materiality.

### Towards a New Ontology: Matter, Agency, and Posthumanism

At first glance it seems hard to imagine how we might think about matter differently since its brute "thereness" seems so self-evident and unassailable. It seems literally to provide the solid foundation of existence and to offer itself to an unambiguous ontology. Yet exposing such commonsense and philosophical beliefs as contingent assumptions is a precondition for thinking materiality in new ways. Many of our ideas about materiality in fact remain indebted to Descartes, who defined matter in the seventeenth century as corporeal substance constituted of length, breadth, and thickness; as extended, uniform, and inert. This provided the basis for modern ideas of nature as quantifiable and measurable and hence for Euclidian geometry and Newtonian physics. According to this model, material objects are identifiably discrete; they move only upon an encounter with an external force or agent, and they do so according to a linear logic of cause and effect. It seems intuitively congruent with what common sense tells us is the "real" material world of solid, bounded objects that occupy space

and whose movements or behaviors are predictable, controllable, and replicable because they obey fundamental and invariable laws of motion.

The corollary of this calculable natural world was not, as one might have expected, a determinism that renders human agency an illusion but a sense of mastery bequeathed to the thinking subject: the *cogito* (I think) that Descartes identified as ontologically other than matter. In distinction from the passivity of matter, modern philosophy has variously portrayed humans as rational, self-aware, free, and self-moving agents. Such subjects are not only deemed capable of making sense of nature by measuring and classifying it from a distance but are also aided in such a quest by theories whose application enables them to manipulate and reconfigure matter on an unprecedented scale. The Cartesian-Newtonian understanding of matter thereby yields a conceptual and practical domination of nature as well as a specifically modern attitude or ethos of subjectivist potency.

It has been important briefly to sketch this modern account of matter because in many ways new materialists define their materialism as an alternative to it. As mentioned already, we discern as an overriding characteristic of the new materialists their insistence on describing active processes of materialization of which embodied humans are an integral part, rather than the monotonous repetitions of dead matter from which human subjects are apart. It is important for us to make this difference clear because a further trait of much of the new materialism is its antipathy toward oppositional ways of thinking. As such, its exponents generally decline to locate themselves explicitly through critiques of ontological dualism such as one finds in Cartesianism: they prefer a creative affirmation of a new ontology, a project that is in turn consistent with the productive, inventive capacities they ascribe to materiality itself. The prevailing ethos of new materialist ontology is consequently more positive and constructive than critical or negative: it sees its task as creating new concepts and images of nature that affirm matter's immanent vitality. Such thinking is accordingly post- rather than anti-Cartesian. It avoids dualism or dialectical reconciliation by espousing a monological account of emergent, generative material being. It draws inspiration from exploring alternative ontologies, such as that of Spinoza, whose work emerged more or less contemporaneously with Cartesianism in early modernity yet which until recently enjoyed a far more subterranean or subjugated existence.<sup>2</sup> This new materialist ontology is evident in a number of the essays that follow.

Given the lively immanence of matter associated with new materialisms, it is unsurprising that they should be emerging contemporaneously with a new vitalism.<sup>3</sup> Gilles Deleuze, whose work has been influential in much of the new ontology, did not count himself a materialist despite his radical empiricism and some evocative descriptions of materialization. But he was emphatic that everything he wrote "is vitalist, at least I hope it is."<sup>4</sup> Hostilities between these respective approaches have traditionally been staged as an opposition between mechanistic and vitalist understandings of (dead versus lively) matter. Typically, they were resolved by distinguishing between the sort of mechanical, inorganic matter described by physicists and the evolving organic systems described by biologists. But new materialists are attracted to forms of vitalism that refuse this latter distinction. They often discern emergent, generative powers (or agentic capacities) even within inorganic matter, and they generally eschew the distinction between organic and inorganic, or animate and inanimate, at the ontological level. Jane Bennett has provocatively labeled this an "enchanted materialism," ascribing agency to inorganic phenomena such as the electricity grid, food, and trash, all of which enjoy a certain efficacy that defies human will.<sup>5</sup>

Even natural science, whose influence on some of these new accounts of matter is far from nugatory, now envisages a considerably more indeterminate and complex choreography of matter than early modern technology and practice allowed, thus reinforcing new materialist views that the whole edifice of modern ontology regarding notions of change, causality, agency, time, and space needs rethinking. Perhaps most significant here is the way new materialist ontologies are abandoning the terminology of matter as an inert substance subject to predictable causal forces. According to the new materialisms, if everything is material inasmuch as it is composed of physicochemical processes, nothing is reducible to such processes, at least as conventionally understood. For materiality is always something more than "mere" matter: an excess, force, vitality, relationality, or difference that renders matter active, self-creative, productive, unpredictable. In sum, new materialists are rediscovering a materiality that materializes, evincing immanent modes of self-transformation that compel us to think of causation in far more complex terms; to recognize that phenomena are caught in a multitude of interlocking systems and forces and to consider anew the location and nature of capacities for agency.



Conceiving matter as possessing its own modes of self-transformation, self-organization, and directedness, and thus no longer as simply passive or inert, disturbs the conventional sense that agents are exclusively humans who possess the cognitive abilities, intentionality, and freedom to make autonomous decisions and the corollary presumption that humans have the right or ability to master nature. Instead, the human species is being relocated within a natural environment whose material forces themselves manifest certain agentic capacities and in which the domain of unintended or unanticipated effects is considerably broadened. Matter is no longer imagined here as a massive, opaque plenitude but is recognized instead as indeterminate, constantly forming and reforming in unexpected ways. One could conclude, accordingly, that “matter becomes” rather than that “matter is.” It is in these choreographies of becoming that we find cosmic forces assembling and disintegrating to forge more or less enduring patterns that may provisionally exhibit internally coherent, efficacious organization: objects forming and emerging within relational fields, bodies composing their natural environment in ways that are corporeally meaningful for them, and subjectivities being constituted as open series of capacities or potencies that emerge hazardingly and ambiguously within a multitude of organic and social processes. In this monolithic but multiply tiered ontology, there is no definitive break between sentient and nonsentient entities or between material and spiritual phenomena.

So far we have emphasized the extent to which new materialist ontologies are rejecting the presuppositions that underpin modern philosophy and the classical sciences that have been its ontological conjugate. But we also want to draw attention to ways in which the natural sciences have themselves been problematizing the notion of matter and thus undermining classical ontologies while inspiring the sort of radical reconceptions of matter we associate with new materialisms. In order to explain such developments, we need to undertake a brief excursus through modern physics. What we want to emphasize here is the way matter as such has become both less conceptually important and more ontologically negligible, while at the same time its very possibility of being has become more elusive.

When Newton laid the foundations of modern physics in the seventeenth century, he realized that one of the most important properties of a material object is its mass. While for laypersons mass is generally en-

visaged as equivalent to size or weight, for Newton it was the property of an object or body that makes it difficult to accelerate (its inertia). What sets an object in motion, he concluded, are forces of attraction and repulsion that act upon it. Broadly speaking, it would be the task of classical (mechanical) physics to examine the interactive relationships between bodies and the forces that act upon them. Although physics began with ordinary objects, it developed as a science of forces and movements that are less obviously material yet from which matter is inseparable. According to this mechanical model, when a force moves something, it performs work, and the ability of a system to perform work is measured as energy. Einstein's theory of relativity would show that mass and energy can be converted into one another and are in this sense equivalent: a theory that further subverted the idea that solid matter persists as such.

In 1905 Einstein also produced the first persuasive argument for the existence of atoms (although there were atomists even among the pre-Socratics); gross matter itself now became a more negligible component of the cosmos. For the microscopic atom consists of a positively charged nucleus surrounded by a cloudlike, three-dimensional wave of spinning electrons.<sup>6</sup> And if most of the atom's mass resides in its nucleus, this is itself but a tiny percentage of the atom's volume. The atom is a smeared field of distributed charge whose subatomic particles are less like planets in solar orbit than they are like flashes of charge that emerge from and dissipate in the empty space from which they are composed. Even when vast numbers of atoms are assembled in the kind of macrostructures we experience in the “condensed matter” of the perceptible world, their subatomic behavior consists in the constant emergence, attraction, repulsion, fluctuation, and shifting of nodes of charge: which is to say that they demonstrate none of the comforting stability or solidity we take for granted. While this does not of course mean that the objective world we inhabit is mere illusion, it does suggest that even—or especially—the most ardent realist must concede that the empirical realm we stumble around in does not capture the truth or essence of matter in any ultimate sense and that matter is thus amenable to some new conceptions that differ from those upon which we habitually rely.

On entering the realm of subatomic particles one finds an even more quixotic and elusive sense of matter. In little more than a century, well over one hundred subatomic particles have been discovered (or, as radical

constructivists might argue, invented), yet this quantum realm seems scarcely less strange than that of medieval theology. For instance, here matter is described as being composed of two kinds of particle, quarks and leptons, which together compose fermions. In the Standard Model, quarks are the building blocks of the universe, although they are not really distinct or discrete quantifiable “units” because the states that constitute them as “particles” are variable, a variability that produces the electrical charge of which they are composed.<sup>7</sup> When quarks interact inside a proton, it is the massless “gluon” that is credited with holding them together. But while there is no accepted theory about why particles exist in the way that they do or how their characteristics might be rendered more predictable for the purposes of instrumentalization, there is agreement that any account of matter also requires an inference of short-lived virtual particles that flash in and out of existence, clustering around the more enduring particles whose properties they alter. Interestingly, what causes mass remains something of a mystery: a type of particle called a Higgs boson is hypothesized as having the capacity to make space “sticky” in a manner that we experience as mass. A popular science book lyrically declares that the “material world is fashioned from frozen matter.”<sup>8</sup> However, the “freezing” mechanism remains an enigma. In sum, “particles” are more like vibrating strands of energy, strings that oscillate in eleven dimensions, than like small versions of the sand grains suggested by their name. In any case, physicists infer that most of the universe is composed of the so-called “dark matter” that is needed to explain the gravitational pull manifest in the galaxy, and they claim that only some 10 to 15 percent of the theoretically required material is visible. Indeed, recent astronomical research suggests that as little as 3 or 4 percent of the universe may be composed of ordinary matter, while something called “dark energy” or “quintessence” is invoked to explain an expanding universe.<sup>9</sup>

The point of this synopsis for new materialisms is to show that theoretical physics’ understanding of matter is now a long way from the material world we inhabit in our everyday lives and that it is no longer tenable to rely on the obsolete certainties of classical physics as earlier materialists did. Granted, one can still discern in physics’ terminology of fundamental forces and elementary particles the holy grail of discovering the fundamental constituents of matter. But forces, charges, waves, virtual particles, and empty space suggest an ontology that is very different from the sub-

stantialist Cartesian or mechanistic Newtonian accounts of matter. And while scientific theories cannot simply be imported into philosophy, the tropes and rhythms they suggest can transform theoretical discourses. In fact, it is evident from new materialist writing that forces, energies, and intensities (rather than substances) and complex, even random, processes (rather than simple, predictable states) have become the new currency. Given the influence of classical science on the foundations of modern political thought, it is germane for new materialists to ask how these new conceptions of matter might reconfigure our models of society and the political. Furthermore, the practical applications of the new physics, such as the ones scientists anticipate in nanotechnology or quantum computing, may soon have significant material effects upon our bodies and our working or recreational environments.

While particle physics has radically changed our sense of the composition of matter, other currents within physics, notably chaos and complexity theory, are also transforming our sense of the patterns or characteristics of matter’s movements.<sup>10</sup> They, too, are undermining the idea of stable and predictable material substance, hastening a realization that our natural environment is far more complex, unstable, fragile, and interactive than earlier models allowed. Complexity theory is playing an increasingly significant role in understanding sociomaterial processes, too, because it appreciates their inextricability from a wider natural environment.

During the 1970s scientists turned their attention to nonlinear dynamic systems that seem structured yet unpredictable and which mainstream physics had tended to ignore because they are inexplicable in mechanistic terms. As James Gleick remarks of chaos theory, “fractals and bifurcations, intermittencies and periodicities . . . are the new elements of motion, just as, in traditional physics, quarks and gluons are the new elements of matter. To some physicists chaos is a science of process rather than state; of becoming rather than being.”<sup>11</sup> While for chaos theory apparently random effects have an extremely complex, nonlinear provenance, for complexity theory the emphasis is on unpredictable events that can catapult systems into novel configurations. For both, the physical world is a mercurial stabilization of dynamic processes. Rather than tending toward inertia or a state of equilibrium, matter is recognized here as exhibiting immanently self-organizing properties subtended by an intricate filigree of relationships.<sup>12</sup> Tumbleweeds, animal species, the planetary ecosystem, global

weather patterns, but also new social movements, health and crime, and economics are all amenable to the kind of explanation developed by complexity theorists.<sup>13</sup> Such phenomena are now understood as emergent systems that move with a superficially chaotic randomness that is underlain by patterns of complex organization, which in turn function as foci for further organization and development. Such systems are marked by considerable instability and volatility since their repetition is never perfect; there is a continuous redefining and reassembling of key elements that results in systems' capacities to evolve into new and unexpected forms. Their logic of proliferation is again resonant with new materialist senses of contingent, immanent self-transformation.

If such patterns of organization are not predictable or determinable, this is in part because there is no longer a quantitative relationship between cause and effect. For any emergent material configuration, infinitesimally small causes can transform successive conditions for interaction among elements such that they end up having massive but unanticipated effects.<sup>14</sup> What is famously known as "the butterfly effect" in weather patterns, for example, refers to the possibility that a slight disturbance of air precipitated by a flapping of diaphanous wings could set off a succession of complex meteorological and atmospheric changes that trigger a hurricane in another hemisphere. In such cases it is not, as John Urry explains, that "the sum is greater than the parts — but that there are system effects that are different from their parts. [The] components of a system through their interaction 'spontaneously' develop collective properties or patterns. . . . These are non-linear consequences that are non-reducible to the very many individual components that comprise such activities."<sup>15</sup> Because innumerable interactions between manifold elements that produce patterns of organization successively *transform* those elements, it is impossible either to predict outcomes in advance or to repeat an event.<sup>16</sup> Since, moreover, determination within dynamic systems is nonlinear, terminal effects cannot be construed as possibilities that were already latent in some initial moment.<sup>17</sup> Again, one can discern in such material productivity a posthumanist sense of material agency and a limitation of humans' agentic efficacy.

In outlining elements of a new materialist ontology in this section we have drawn attention to the vibrant, constitutive, aleatory, and even immaterial indices that characterize the new senses of materiality and mate-

rialization evident in current scientific and philosophical thinking. At this level we have alluded to indirect implications that we believe such dynamic ways of conceptualizing matter have for our most basic ideas about humanity and agency and thus for politics and society. We believe there is much work for politically minded materialists to do here. In considering a second direction of the new materialism in the next section, we examine more directly some of the already urgent political and ethical challenges presented by recent developments in the natural sciences and their application. Our attention shifts here from the physical to the biological sciences of matter.

### Bioethics and Biopolitics

There is something unprecedented about our contemporary situation in which the prefix "bio-" proliferates. Molecular biology and its cognates are achieving the sort of privileged status previously reserved for theoretical physics, fuelled by a revolution in biomedicine and biotechnology. This is in turn propelling an unprecedented range of issues concerning the nature and status of living matter onto the agenda of critical thinkers and defining what we see as a second major strand of a *new* materialism. While there are many relevant initiatives developing here, we draw attention to four in particular. These are the spillover effects and applications of complexity theory, a new focus on the body and its role in politics, a number of bioethical controversies that again touch on some fundamental questions about the distinctiveness of the human and of moral agency, and biopolitical concerns regarding new possibilities for and configurations of bio-power that are also shifting perspectives on and definitions of politics.

In the previous section we considered the importance of complexity theory for new ways of understanding dynamic physical systems. We now draw attention to some of the broader ways this approach is affecting the treatment of biological organisms and their relationship to other aspects of their material environment. In the life sciences as well as in physics, material phenomena are increasingly being conceptualized not as discrete entities or closed systems but rather as open, complex systems with porous boundaries.<sup>18</sup> Such theories challenge earlier distinctions between physical and biological systems, drawing attention to their interaction and transforming the way scientists think of biological matter and its imbrica-

tion in the social. Whether we are talking about unforeseen mutations, trajectories of illness or distress, patterns of global climate change, or the vagaries of the international economy, the open systems or ecological perspective provokes us to consider (and find better ways to think about) the interactions between socioeconomic and environmental conditions and biological and physiological or physical processes.<sup>19</sup> As with postclassical physics, the new biology facilitates new ways of thinking about matter and its effects on our visceral-social economy; these in turn pose significant challenges for our modern conceptions of moral and political agency.

Approaches to global warming offer one example of such thinking as well as exemplifying a new emphasis on the material dimensions of social existence. As instances of the deleterious effects of rapid climate change mount, there is increasing attention to the way seemingly insignificant daily activities work synergistically to produce effects that devastate the global environment. The enormous macroscopic impact of myriad mundane individual actions provokes critical, political, and legal reflection not only upon the nature of causation but also upon the nature of the responsibilities that individuals and governments have for the health of the planet. The unequal effects of occurrences such as rising sea levels and drought associated with climate change also pose serious questions for advocates of social justice, especially in light of the mismatch between actions, intentions, and consequences. Questions regarding the definition, the ethical value, and the moral and political culpability of the human, the nonhuman, and the virtually human become especially vexed as concerns about environmental degradation and dwindling natural resources acquire an urgency unimaginable just a generation ago. Such questions not only prompt reflection upon who or what should be taken as the subjects and objects of ethical, legal, or political action; they also suggest a need for new ways of theorizing risk and accountability as humans meddle more vigorously in natural processes and thus become more materially, if not yet ethically, responsible for outcomes.<sup>20</sup>

A rather different example of the blurring of clear boundaries or distinctions between bodies, objects, and contexts is evident in the myriad biotechnological and digital technological developments that are changing the landscape of the living. Genetically modified organisms now feed much of the world and fuel its vehicles; they seem destined to change forms of agricultural production and energy use irrevocably. Wondrous

medical and digital prostheses, too, now enable, enhance, and enrich our physical and social lives in many ways. Whether it is pacing the heartbeat, dispensing medication, catching the news on a podcast, elaborating an internet-based community, finding directions via the web or GPS, or sending family love via wireless communications, digital technologies have become a part of our lives and of who we are. It is not merely the case that more people are becoming something akin to Donna Haraway's cyborg (a fusion of human and technology).<sup>21</sup> More radically, as N. Katherine Hayles argues, our saturation with networked and programmable media shunts us out of the realm of the human and into the realm of the post-human: "an informational pattern that happens to be instantiated in a biological substrate."<sup>22</sup> Such changes have significant implications for our understanding of the human as a distinctive biological or moral entity.<sup>23</sup>

A further example of the way new materialists are being obliged to recognize the interactions of different orders of matter is evident in genetics. For some geneticists, insight into the porosity of organisms' boundaries has been prompted by the discovery that there is a considerably smaller number of genes in the human genome than was initially anticipated. Before mapping the genome, many had imagined that each gene produces a corresponding protein that is responsible for a specific trait: a distinctly mechanistic conception of the work of genes.<sup>24</sup> The assumption that followed was that once all the genes were known and mapped, humans might be able precisely to predict and control their organic life process. The unexpectedly small number of genes that geneticists actually found compelled them to abandon the explanatory framework of simple genetic determinism and to acknowledge that an organism's particular properties and susceptibilities are produced through complex interactions between genes and a host of other factors such as hormones, neurochemical stimuli, dietary intake, and environmental conditions. This has in turn prompted a reappraisal of organisms as discrete, autonomous units with relatively tidy, bounded causal patterns. It has also provided an incentive to study gene behavior using more complex ideas of "systems-biology," epigenomics, and gene-ecology.<sup>25</sup>

While such conclusions reinforce some of the new physics' challenges to older Cartesian-Newtonian conceptions of matter and to correspondingly Promethean ideas of human mastery over nature, they also suggest that previously separate fields such as those of medical and political science

must work together more closely since in such models the body is also understood as an open system and one whose interactions with its environment significantly shape its neurochemical functioning and the trajectory of disease and health. Indicative of such cooperation is the way exponents have used an “open developmental systems approach” to examine the effects of successive social contexts on differential health outcomes over time<sup>26</sup> or to reconsider patterns of social behavior, for example, by pointing to suggestive correlations between the demographics of criminal behavior and the geographic distribution of industrial pollutants. Inasmuch as the aggregated effects of environmental toxins can be shown to have deleterious effects upon judgment and behavior, the implication is that cleaning up the environment or changing diet may be more efficacious than incarcerating disaffected urban youth.<sup>27</sup> Such examples show the important policy-making implications of new ways of understanding the internal dynamics of material processes as well as suggest how social stratifications such as class affect and cycle through apparently natural processes.

Biotechnological developments may also have more indirect political repercussions whose complex unfolding it is difficult to predict or control. At issue here is the complex interrelationships between open systems that enable events in one “ecodomain” to precipitate events in another. For instance, petroleum is not only a pillar of the global economy but also, and consequently, a central feature of current foreign policy and international relations. Accordingly, recent efforts to create synthetic bacteria that might produce biofuel could generate considerable macrolevel effects: to end dependence on fossil fuels might not only catapult a different configuration of economies to international prominence, but such a shift in the balance of economic powers might also transform the imperatives that guide international diplomacy and foreign relations, shift the direction of capital flows, and reconfigure the topography of economic migration.

Insofar as politics is understood as an ongoing process of negotiating power relations (a perspective, we suggest, that is particularly congruent with materialism) rather than as a merely formal constitutional, institutional, or normative edifice, political analysts cannot afford to ignore the way biotechnological developments and their corporate owners are implicated in the entire geopolitical system. Clearly, too, developments in biomedicine and biotechnology prompt renewed reflection on the rela-

tionship between science and politics. If, for example, biotechnological developments have potentially far-reaching political, economic, and ethical implications, is there not a need for more public, political dialogue about the goals, uses, and ownership of research? Yet if science is brought explicitly into a public forum, what kinds of arguments are to be accorded merit: those informed by secular science, or economic interest, or religious faith?<sup>28</sup>

We have noted that complexity theories and developing technologies are rendering bodies less discrete qua organic entities distinct from physical, environmental, or technologically refabricated matter. As a consequence, when researchers use complexity theories in their consideration of biomatter, they are very quickly led to incorporate into their analyses a host of ethical and political issues. However, a second aspect of the new biomaterialism that we wish to draw attention to is an increasing acknowledgment within theories of politics—and especially in theories of democracy and citizenship—of the role played by the body as a visceral protagonist within political encounters. We suggest not only that this emphasis on bodily processes and corporeal capacities is a notable element within some of the new materialisms but also that it is indispensable to any adequate appreciation of democratic processes.

For new materialists, no adequate political theory can ignore the importance of bodies in situating empirical actors within a material environment of nature, other bodies, and the socioeconomic structures that dictate where and how they find sustenance, satisfy their desires, or obtain the resources necessary for participating in political life. This is in fact something that feminists and class theorists have often insisted upon, and we would add in this context only our concern that such material dimensions have recently been marginalized by fashionable constructivist approaches and identity politics. Of course, the latter have had a good deal to say about the body and its imbrication in relationships of power, but we are not convinced that they pay sufficient attention to the material efficacy of bodies or have the theoretical resources to do so. From this perspective we draw attention to a new materialist predilection for a more phenomenological approach to embodiment. In addition to focusing on the way power constitutes and is reproduced by bodies, phenomenological studies emphasize the active, self-transformative, practical aspects of corporeality as it participates in relationships of power. They find bodies exhibiting

agentic capacities in the way they structure or stylize their perceptual milieu, where they discover, organize, and respond to patterns that are corporeally significant. Such theories thus introduce elements of creative contingency, meaning, difference, efficacy, and a limited freedom for improvisation or resistance into nature before cognition begins. In other words, they complement ontologies of immanently productive matter by describing how living matter structures natural and social worlds before (and while) they are encountered by rational actors. Again, they give materiality its due.

This emphasis on corporeality further dislocates agency as the property of a discrete, self-knowing subject inasmuch as the corpus is now recognized as exhibiting capacities that have significant effects on social and political situations. Thus bodies communicate with other bodies through their gestures and conduct to arouse visceral responses and prompt forms of judgment that do not necessarily pass through conscious awareness. They are significant players in games of power whenever face-to-face encounters are involved, such as in deliberative models of democracy. Paying attention to corporeality as a practical and efficacious series of emergent capacities thus reveals both the materiality of agency and agentic properties inherent in nature itself.<sup>29</sup> Both have important implications for the way we understand political processes.

In this emphasis on corporeality, we also glimpse one of the most distinctive characteristics of the new materialist ontologies: their avowed posthumanism. They displace what Giorgio Agamben calls “the anthropological machine of humanism.”<sup>30</sup> While new materialists’ conceptualization of materialization is not anthropocentric, it does not even privilege human bodies. There is increasing agreement here that all bodies, including those of animals (and perhaps certain machines, too), evince certain capacities for agency. As a consequence, the human species, and the qualities of self-reflection, self-awareness, and rationality traditionally used to distinguish it from the rest of nature, may now seem little more than contingent and provisional forms or processes within a broader evolutionary or cosmic productivity. If human perfection or redemption is no longer understood as the destiny of history, neither is it the goal of evolution. While it does not follow that cognitive capacities for symbolism or reflexivity are no longer valued, the new materialism does prompt a way of reconsidering them as diffuse, chance products of a self-generative nature

from which they never entirely emerge. It further invites acknowledgment that these capacities are manifest in varying degrees across different species of being, that they are indelibly material in their provenance, that human intelligence emerges within a spectrum of vital materializations, and that rights—for example in the case of animals—can no longer automatically be understood solely as human rights.<sup>31</sup> From this perspective, the difference between humans and animals, or even between sentient and nonsentient matter, is a question of degree more than of kind. Recalling the earlier quote by Stephen White, it is clear both that thinking in these new ways will have a significant impact on our normative assumptions and that normative theory itself needs to become more engaged with the changing material context in which it considers concepts such as social justice.

The third biodimension we recognize as a vital element of the new materialism concerns a range of specifically bioethical challenges that arise from the way living matter and its definitions are being materially and discursively transformed. At a practical level, biosciences and biotechnologies yield gene therapies, microsurgeries, assisted reproductive technologies, life-saving prosthetic devices, and pharmaceutical mood and behavioral adjusters, as well as cloning, genetically modified crops, and gene hybridization. All such biotechnological developments purport to enhance, extend, or give us control over the hidden depths and minutiae of life, and in this sense they contribute only to a modern will to dominate nature. Yet their negative externalities and their inability to control the forces they unleash are also apparent, opening up a minefield of ambiguous ethical and political possibilities (such as biodisasters and bioterrorism). As both promises and threats, such developments summon new materialists to confront pressing bioethical and biopolitical questions about the nature of responsibility and property ownership, the relationship of humans to the world, the very definition of the human in relation to the nonhuman, and the way shifting definitions of nature and life affect subjective experiences of selfhood or the forms and domains of politico-judicial regulation. For as Nikolas Rose points out, while biotechnologies bring new tools and procedures for classifying, measuring, monitoring, and modifying biological stuff—genes, carbohydrates, amino acids, cholesterol, cell structure, facial profiles, heart rates, and so forth—within our daily routines, so individuals’ experiences of themselves as subjects and agents of their own lives are also transformed.<sup>32</sup> This, too, raises significant

questions regarding the distribution of material resources and of access to new biotechnologies that literally promise more life, in terms of longer, healthier life spans, to the privileged.<sup>33</sup>

At the same time, it is becoming evident that changes in living matter are rendering obsolete many of the conventional ethical categories used to evaluate them. As scientists succeed in bridging species, artificially creating and extending human and animal life, and manipulating and synthesizing genes to create new life forms, they muddle the concepts and boundaries that are the ground for much ethical and political thinking. Smart synthetic life forms, for example, challenge our very conception of ourselves as persons since distinctions between intelligent and unintelligent life have been crucial in efforts to distinguish humans from other animals and to justify humans' instrumental appropriation of material resources.<sup>34</sup> If scientists have the capacity to create life from matter, and if such life forms can take the form of intelligent agents able to carry out specific tasks, then previously essential distinctions are rendered less viable, and the norms that depend upon them become less intelligible. This raises questions pertaining to life forms themselves. What kind of ethical value should we attribute to synthetic life forms and according to what criteria? If synthetic life forms act in unexpected and unacceptable ways, we need to consider who is, should, and can be held responsible. In this domain, science fiction may well be ahead of mainstream ethics.<sup>35</sup>

The final aspect of new biomaterialist inquiry that we see as important concerns the emergent modes of biopower afforded by biotechnological developments. To be sure, some of these questions center on the ownership of the new patents and the considerable power accumulated by global corporations which have no accountability to the world's population beyond their own shareholders but which are acquiring extensive control over the food, water, and energy that are the very condition of human survival. This is one reason why in the next section, we advocate renewed attention to international political economy. But our particular interest here is to identify the importance for new materialists of the unprecedented micropowers that biotechnology is engendering. As Rose warns, theorists need to be alert to the ways in which the culture and norms of the contemporary biopolitical context provide opportunities for controlling groups and individuals in new ways. Readers of Foucault, such as Rose, are well aware of the biopolitical interest the modern state has taken in

managing the life, health, and death of its populations since the eighteenth century. The state's management of fertility rates, marriage and funeral rites, epidemics, food hygiene, and the nation's health is not new or even necessarily malign. But there has until recently been a dearth of attention paid to this material aspect of power that justifies incursions into the most intimate habits of daily existence and thus warrants critical investigation. Similarly, while the bevy of new biotechnological capacities, as well as movements to ameliorate environmental degradation, are to be welcomed in many ways, the tools, practices, policies, and regulations they occasion must also be considered critically in terms of their capacity to facilitate and encourage more intensive interventions in the everyday minutiae of our material lives. For even as we might welcome a broad transformation in lifestyle according to an ecoethos, the norms, incentives, and identities people adopt inevitably become part of new disciplinary formations whose contours need to be specified and traced.

Biotechnological developments also raise specifically political questions about what life is and how far it can or must fall under state control. According to Agamben, contemporary history has witnessed the "growing inclusion of man's natural life in the mechanisms and calculations of power."<sup>36</sup> As we see in debates about fetal rights, abortion, stem cell research, and euthanasia: medical, scientific, or religious accounts of the boundary between life and death are currently becoming further enmeshed with issues surrounding sovereignty because increasingly the state must legislate on matters that were formerly left to God or nature. Seemingly technical questions about biological life processes enter the political order because the state must frequently make decisions about the worthiness of different lives. Assisted suicide, for example, demonstrates how the very definitions of life and death are thrown into the political arena once decisions about survival rely on medical expertise.<sup>37</sup> Agamben himself explains how the condition called *coma dépassé* (a state in which vital functions cease but life-support machines maintain the comatose, artificially surviving body in a limbo between life and death) has obliged legislators to redefine death by shifting the final border of life. In the face of this "bare life" that is sustained and controlled by human technologies, nature is no longer a reliable guide to the difference between life and death. Instead, the distinction becomes a scientific, medical, and ethicopolitical question.<sup>38</sup>

The current interest among social scientists and policymakers in demography similarly demonstrates how scientific innovations and their widespread social uptake in areas of formerly unregulated natural processes—notably reproductive technologies facilitating the reliable management of fertility and medical advances extending life expectancy—may have unexpected but extensive macrolevel consequences to which political actors are increasingly obliged to respond. Aging and even declining populations pose significant political and economic challenges for the welfare state, as well as potentially engendering widespread structural shifts in the balance of global power as developed and developing regions exhibit differential demographic momentums that affect the relative sizes of workforces and armies, ethnic groups and electoral age profiles, and ecological footprints.<sup>39</sup> The sheer materiality and mass of bodies—their numbers, their needs, their fecundity, their productivity, their sustainability and so on—is becoming a key dimension of political analysis and intervention.

In this section we have sketched a number of directions that we discern within new biomaterialist thinking and whose importance for ethico-political inquiry we are especially eager to foreground. Our main argument here has been that new ways of thinking about living matter are radically and rapidly reconfiguring our material world—both empirically and conceptually—not only transforming our most basic conceptions of life and the human but also intervening in the very building blocks of life and altering the environment in which the human species—among others—persists. While these reconfigurations pose huge ethical and political questions with which many new materialists are engaging, we are also aware that from a materialist perspective normative questions cannot be treated adequately in isolation from a well-informed understanding of new scientific and technological developments or from their material implications and context. In turning now to the third main direction we see a new materialism taking, we emphasize this renewed attention to material context in terms of its economic and political power relations.

### Practicing Critical Materialism

The final major trend we identify as a component of renewed materialism is the most explicitly political as well as, sometimes, the most theoretically polemical. It encompasses approaches for which materialism means prac-

tical, politically engaged social theory, devoted to the critical analysis of actual conditions of existence and their inherent inequality. This focus orients it toward a methodological realism that is at odds with some more radical, and especially linguistic, forms of constructivism as well as with dominant trends in abstract normative political theory. What we see as new in this aspect of materialism is twofold. First is its practitioners' reinvention of materialism in response to criticisms that radical constructivists and deconstructionists rightly made of earlier critical materialisms and realisms, Marxism in particular; second is this cohort's ongoing invention of new concepts and theoretical frameworks in order to understand the complexities of global capitalism (in its broadest sense) and its diverse, localized effects on everyday lives. Through this creative and sometimes experimental form of materialism, critical social theorists are analyzing current events and developments in a way that is congruent with the pluralist, contingent rhythms of materialization noted within new materialism's other main strands.

There are a number of indications that critical social theory is reorienting toward more realist approaches to political analysis. For example, Axel Honneth complains of "a growing tendency today for social criticism to be practiced as a form that is without a component of sociological explanation."<sup>40</sup> Ian Shapiro calls for a more realist, problem-solving approach to overturn the assumption that ideas or beliefs are elemental and constitutive of reality.<sup>41</sup> Margaret Archer advocates a mode of social realism that "makes our real embodied selves living in the real world really load-bearing."<sup>42</sup> David Harvey warns against the "serious danger" of proceeding as if "material and absolute space did not matter." Harvey concedes that evocations of the proletariat or multitude in motion, or of the effects engendered by postmodern spatial constructions, are illuminating. But he also points out that "no one knows what any of that means until real bodies go into the absolute spaces of the streets." Harvey thus cites approvingly the materialist claim that rights "mean nothing without the ability to concretize them in absolute space and time."<sup>43</sup> From this materialist point of view, it is ideological naïveté to believe that significant social change can be engendered solely by reconstructing subjectivities, discourses, ethics, and identities—that is, without also altering their socioeconomic conditions or tracing crucial aspects of their reproduction to the economic interests they unwittingly serve. Similarly, John Smith and



Chris Jenks observe that paradoxically, “radical constructivisms rest on the over-estimation of *human* construction and authorship.” They argue that to claim that something is constructed often has the unintended effect of recentering the human subject as the locus of agency despite the intention to undermine such claims.<sup>44</sup> In other words, a constructivism that presumes matter’s passivity or plasticity in the face of power may echo an earlier ontology for which matter is inert stuff awaiting cultural imprint.

Yet what sort of materialism is being retrieved, reinvented, and advocated here? Is it primarily a *methodological* or *epistemological* reorientation toward more realist, sociological analysis? Or is its principal concern a different *focus* that catches more material (and specifically, political-economic) aspects of society and power in its sights? Surely, it is both. For, from a methodological perspective, although a turn to more realist, empirical modes of investigation implies a rejection of the more radical aspects of recent constructivism, it by no means entails any definitive antithesis. In light of critiques leveled at crude empiricism’s ignorance of the relationships that subtend facts and at representationalist beliefs that knowledge is a mirror of nature, new materialist realisms can hardly ignore the role of *social* construction. For example, when Peter Berger and Thomas Luckmann published their pathbreaking *The Social Construction of Reality* in 1966, they drew on a phenomenological (“empirical” but not “scientific”) approach to everyday life in order to explore how commonsense meaning emerges through intersubjective interaction. Understanding society as emerging through an ongoing dialectic between objective and subjective reality, they had no qualms about referring to social reality.<sup>45</sup> Similarly, when Marx developed historical materialism as a critical advance over metaphysical materialism, it was in order to show that things which seem natural and thus unassailable—such as markets, the bourgeois family, the liberal state, or the free, autonomous self—are actually social, historical constructions which are amenable to social change, yet whose collective and systemic logic renders them difficult to recognize and, a fortiori, to transform. Indeed, it is this insight that more recent constructivists have radicalized in order to contest a broader series of constitutive processes inherent in language and discourse. Yet, new materialists stubbornly insist on the generativity and resilience of the material forms with which social actors interact, forms which circumscribe, encourage, and test their discourses. They dwell on the particular salience of economic and state power

in shaping, constraining, and constituting life chances and existential opportunities. The challenge for them is thus to track the complex circuits at work whereby discursive and material forms are inextricable yet irreducible and material structures are simultaneously over- and underdetermined.

It is entirely possible, then, to accept social constructionist arguments while also insisting that the material realm is irreducible to culture or discourse and that cultural artifacts are not arbitrary vis-à-vis nature. Even as the most prosaic or carnal lifeworld unfolds within a socially constructed milieu, it does not follow that a) material objects or structures are devoid of efficacy in the way they affect either our moods or well-being, or our concepts and theories, b) matter is without recalcitrance or directedness in its own brutish way, or c) acknowledging nondiscursive material efficacy is equivalent to espousing a metaphysical claim regarding the Real as ultimate truth. For critical materialists, society is simultaneously materially real and socially constructed: our material lives are always culturally mediated, but they are not only cultural. As in new materialist ontologies, the challenge here is to give materiality its due while recognizing its plural dimensions and its complex, contingent modes of appearing.

We now turn to the second aspect of a new critical materialism, where returning to a more materialist mode of social analysis suggests a shift of perspective or focus within social theory. Alongside ethical concerns about subjectivity, normative concerns about social justice, cultural concerns about postmodern diversity, and discursive concerns about the construction of gender or ethnicity, this entails paying attention to the material, historical, and sociological structures of international political economy that lend context as well as practical inertia to identities that entail unequal life chances. It calls for a detailed phenomenology of diverse lives as they are actually lived—often in ways that are at odds with abstract normative theories or official ideologies.

What we have in mind in referring to a critical new materialism is a range of approaches in which interest is currently being rekindled in the wake of poststructuralism and which complement one another in a fairly pragmatic way. They include the Weberian insights of critical theory regarding the bureaucratic state, whose tentacles reach increasingly deeply to control ordinary lives through governance and governmentality, and aspects of Foucauldian genealogy that describe *how* the minutiae of power develop and practically manage embodied subjectivities. They are mani-

fest in a resurgence of interest in sociologies of everyday life, such as those developed by Pierre Bourdieu, Henri Lefebvre, and Michel de Certeau, and in a renewed interest in phenomenologies of ordinary, and particularly corporeal, experience such as those developed by Simone de Beauvoir and Maurice Merleau-Ponty. And they are apparent in new forms of nondogmatic (for example, autonomist) Marxism, too, especially in the turn to critical international political economy and critical geographies of space. In bringing them all under the umbrella of a new materialism, our aim is to discern what they have in common, namely, their interest in the emergent materialities of contemporary coexistence.

Bringing biopolitics, critical geopolitics, and political economy together with genealogies and phenomenologies of everyday life is an especially fertile development in critical materialist analysis. With this eclectic combination of approaches, scholars pay attention to the production and consumption of goods, to the uneven effects of globalization on differently located citizens, to the management, distribution, and legitimization of unequal life chances, and to the operation of power at state and quotidian levels. They examine the way identities are inflected through the circuit of markets and the ways diversity is managed in the reproduction of global capitalism. They explore the differential and often visceral effects of war, violence, climate change, and poverty, and also the relationship between biopolitics, changing demographic patterns, and biocapitalism. In short, the renewal of critical materialism after the cultural turn foregrounds an appreciation for just what it means to exist as a material individual with biological needs for survival yet inhabiting a world of natural and artificial objects, well-honed micropowers of governmentality, and the more anonymous but no less compelling effects of international economic structures.

Characteristic of such efforts is the way they echo elements of the new materialisms we remarked upon earlier: they insist upon the openness, contingency, unevenness, and complexity of materialization as an ongoing process within which social actors and theorists are irremediably immersed. Thus, these “new” critical materialists situate citizens, ideas, and values (as well as theorists themselves) within the fields of material forces and power relations that reproduce and circumscribe their existence and coexistence. They trace the various logics of, and interrelationships between, broad political and economic structures and critically inter-

rogate the complicated causalities that link them to everyday experiences. What is crucial here is detailed, evidence-based knowledge of domestic and international politics and of shifting geopolitical relations. For while there is no question of indulging in economic reductionism or determinism, critical materialists pay close attention to global and regional market economies whose workings have such immense consequences for the survival and opportunities of ordinary but manifestly unequal people.

With these new critical materialisms, the capitalist system is not understood in any narrowly economic way but rather is treated as a detotalized totality that includes a multitude of interconnected phenomena and processes that sustain its unpredictable proliferation and unexpected crises, as well as its productivity and reproduction. In other words, new critical materialists, including those working with new forms of open Marxism, envisage a dense, inexhaustible field that resists theoretical totalization even as they investigate its complex material structures, trajectories, and reversible causalities. This renewed attention to structures of political economy complements new materialist sensitivities to the resilience of matter in the face of its reconstruction, the agency of nonsubjective structures, the importance of bodily experience, and the myriad interrelated material systems needed to sustain citizens before they can vote or deliberate. That is, the new critical materialisms are congruent with new materialist ontologies inasmuch as they understand materiality in a relational, emergent sense as contingent materialization—a process within which more or less enduring structures and assemblages sediment and congeal, sometimes as a result of their internal inertia but also as a manifestation of the powerful interests invested therein.

Further, these theoretical approaches are consonant with complex systems theory in their recognition that particular effects are the outcome of intricate interlocking systems whose interactions and dynamic processes are variable and, for the most part, unpredictable. Indeed, markets play a significant role in explaining and shaping the outcomes of bio- and ecosystems. For example, as we noted earlier, biotechnological developments that pose significant ethical and political questions also cycle through the market. They facilitate the commodification of body parts or microbes within the bioeconomy, encourage elective health procedures, and promise to reconfigure the carbon-based economy that is central to contemporary capitalism and its distribution of rich and poor nations. The state’s

biopolitical interests in the nation's health also circle through the food and pharmaceutical industries, while private companies profit from a market in carbon trading and organic food fuelled by ecological anxieties. Whatever passes through these economic circuits is redistributed to the material advantage of some rather than others, while entering into systemic relations that outrun the comprehension or intentions of individual actors. Questions about livable lives are thus as economic as they are ethical and political.

As should already be clear, the renewed critical materialisms are not synonymous with a revival of Marxism. Yet, this legacy does remain important, not least because traditionally Marxism has been the critique of capitalism par excellence. A critical understanding of global capitalism and its multifarious effects remains crucial for contemporary critical materialists, for some of whom a Marxist label has helped to signify their opposition to dominant neoliberal trends. But coming after poststructuralism and its criticisms, no workable version of Marxism can advance a historical metanarrative, aspire to the identification of determining economic laws, valorize an originary, pristine nature, or envisage communism as history's idealized material destiny. As a method that facilitates and orients an ongoing critical analysis of emergent economic and geopolitical structures, revised versions of Marxism accommodate novel approaches and perspectives that help them forge the conceptual and empirical tools needed to gain insight into the intricacies of twenty-first-century global capitalism. In its more authentic modes, a dialectical approach calls, after all, for appropriate theories and concepts to be engendered out of an interrogation of the material conditions of the times, not to be imposed as a rigid formula aiming for accurate representation.

Work by the Regulation School is one example of such a living Marxism construed as ongoing, critical analysis of the material conditions of the times.<sup>46</sup> This is a Marxism that takes seriously the political in political economy and that sees the state, governance, and production as entwined. This view encourages its exponents to incorporate Foucauldian analyses of governmentality, biopolitics, and the role of discourse in maintaining social order, while taking heed of the state's enduring importance for maintaining conditions conducive to capital accumulation. Focusing on regimes of capital accumulation and the regulative structures that help reproduce them, it takes into account the intersectionality of social rela-

tions while still recognizing the importance of class. If it examines everyday customs and practices as well as the broader geopolitical developments they sustain or disrupt, this is because it is aware of the complicated, reversible relationships that link micro- and macrolevel processes. It investigates the emergence of new social and economic forms, such as post-Fordism, examines potential sources of rupture immanent to the system and its reproduction, and also remains sensitive to global developments that are uneven, contingent, and pluralist.<sup>47</sup>

From the vantage of the new recessionary phase of capitalism that commenced in 2008, it is abundantly clear just how important is such ongoing analysis and identification of its material elements. For example, if there is a lesson to be learned from recent events associated with subprime lending and the consequent banking crisis, it is how few people any longer grasp the complexities of the deregulated financial system, and yet how many are affected, in so many places worldwide and in such immediately material ways, by any hiatus in financial markets.<sup>48</sup> Among social theorists it has been fashionable to talk about deterritorialized, dematerialized capital flows. Yet it is the poverty of individuals induced to take on mortgages they could ill afford that remains the material bottom line underpinning the elaborate but fragile structures of recent financial growth. Spasms in the convoluted flows of capital and futures causes immense and immediate material hardship for real individuals. People lose their life savings, their pensions, their homes, and their jobs; industries are brought to a standstill and national economies to their knees. Indeed, the effects of neoliberal financialization have included the dispossession of peoples from their land, the privatization of services and commodification of formerly free or communally owned goods, internal migrations into cities without jobs but with burgeoning slums and mass poverty, and external migrations by those seeking better standards of living far from their indigenous homelands.<sup>49</sup> These are some of the economic and political conditions sometimes eclipsed in the celebration of pluralistic immigrant cultures: it is surely incumbent on social theorists to study the differential effects of world population growth, the reasons for mass migration, the social and economic backgrounds in which divergent immigrant cultures were nurtured, and the broader effects on global population movements of a volatile global economy.

In summary, we have associated new materialism with renewed atten-

tion to the dense causes and effects of global political economy and thus with questions of social justice for embodied individuals. We have also noted the affinity between the rhythms of materialization discerned in the socioeconomic processes of global capitalism and those described in the previous sections of our analysis. Commensurate with these dimensions of the new critical materialisms is what we are calling a multimodal methodology, one congruent with the multitiered ontologies, the complex systems, and the stratified reality we have been describing. In particular, we emphasize here the way new materialist analysis traces the complex and reversible causalities that run between different levels of the social system and especially between the microlevel or everyday, and the macrolevel or structural. Indeed, there is currently a surge of interest in everyday life, one that is elaborated through a combination of phenomenological, anthropological, and ethnographic studies on the one hand, and genealogical and sociological studies on the other.<sup>50</sup> Interestingly, some indication of how new materialists might investigate both the quotidian and structural dimensions of late capitalism can already be found in work by Althusser and Foucault. Here we present a few aspects of their ideas that we find salient and provocative for a multimodal materialism.

While Foucault's work has been widely used to study the powerful effects of discursive constructs and to pose posthumanist questions about agency and ethics, what we emphasize here is the concrete material analysis genealogy encourages vis-à-vis the prosaic details of bodily existence. This is the aspect that has often commended itself to feminists eager to investigate the construction of female flesh.<sup>51</sup> Of particular significance is Foucault's insistence that genealogy requires "a knowledge of details": that it documents a discontinuous, "effective history" of the body that is "broken down by rhythms of work, rest, and holidays . . . poisoned by food or values, through eating habits or moral laws"; a body that also "constructs resistances." In its emphasis on "the body, the nervous system, nutrition, digestion and energies,"<sup>52</sup> such an approach takes seriously the material intricacies of existence and the way bodies are constituted as productive but docile matter through disciplining, enhancing, and redirecting their visceral capacities.<sup>53</sup> This in turn opens the way to understanding a more general field or economy of power relations in which bodily capacities are rendered determinate. Foucault describes the kind of micropractices that are at stake in pacifying and reproducing social regimes in order to demon-

strate how thoroughly our ordinary, material existence is affected by, and saturated with, power and how protean yet banal many of its tactics remain. While he insists that the development of such powers is not to be explained simply as an effect of, or as functional for, broader structural changes associated with capital, demography, or state building, he does show that these micro- and macromodalities (the everyday and the structural) are mutually interdependent. In other words, he recognizes the multimodal materialist analysis needed to explain the production and reproduction of the modern social order. The matter whose materialization Foucault describes is malleable, socially produced, and inscribed with its histories; paradoxically, it is obliged to acquire (additional, redirected) agentic capacities as an aspect of its subjection.

This attention to material detail and to the plural dimensions and power relations in which such details are to be understood is elaborated in Althusser's essay "Ideology and Ideological State Apparatuses (Notes towards an Investigation)." Althusser's work attracted considerable attention when it first appeared because of the way it developed a materialist alternative to more reductionist or teleological forms of Marxism that rejected its then dominant mechanical and humanist modes. Althusser claims in this particular essay that Marx had envisaged social structure in terms of levels or instances, each with their own "indices of effectivity" and ways of relating to other levels.<sup>54</sup> From this perspective, it is insufficient to regard the state as simply functional for reproducing the social relations of production; one needs to examine its complex, differential elements that are both repressive and ideological in their operations. Similarly, it is necessary to pay attention to "all the direct or indirect forms of exploitation" and to the "subtle everyday domination" whose material details are redolent, we suggest, of Foucault's descriptions in *Discipline and Punish*.

Althusser goes on to distinguish between the Repressive State Apparatus (RSA) and the Ideological State Apparatus (ISA), but he acknowledges that both utilize a mixture of coercive and ideological means: "Very subtle explicit or tacit combinations may be woven" and these need to be "studied in detail" (19f.). Thus parts of the ideological apparatus, such as the church, school, or family, use symbolic modes of discipline that include various forms of punishment, expulsion, or exclusion. And while "the relations of production are first reproduced by the materiality of the processes of production and circulation," ideological relations are also

“immediately present in the same processes” (22 n. 12). Habits of working or practices of consuming help to stabilize the system as something that is daily renewed as the familiar, material horizon of ordinary lives and maintained through their routinized performances. As such, the capitalist economy, the juridico-political domain, and the material quotidian are interrelated but not in any fixed or formulaic way. It is these different levels and their shifting interconnections that a multimodal materialist analysis investigates.

Of especial interest here is Althusser’s insistence that despite its apparently ideal forms, ideology “has a material existence” (39). “Of course,” he adds in a caveat that is crucial for our appropriation of his argument, “the material existence of the ideology in an apparatus and its practices does not have the same modality as the material existence of a paving-stone or a rifle. But, at the risk of being taken for a Neo-Aristotelian, . . . I shall say that [in Marx] matter is discussed in many senses, or that it exists in different modalities, all rooted in the last instance in ‘physical’ matter” (40). This recognition of different modalities of matter allows Althusser to explain that for the complicit subject, “the ideas of his belief are material in that his ideas are his material actions inserted into material practices governed by material rituals which are themselves defined by the material ideological apparatus from which derive the ideas of the subject” (43). He accordingly draws attention to the way “ideas” are inscribed in actions whose repetitive, ritualized performances are borne by concrete individuals who are thereby practically constituted as compliant or agentic subjects. While such performances are institutionalized in rituals and ceremonies, they also become sedimented at a corporeal level, where they are repeated as habits or taken for granted know-how: lodged in the bodily memory that Bourdieu calls *habitus* or which phenomenologists refer to as a lifeworld. It is indeed this nonreflexive habituality and the way it imbues objects with familiarity that makes artifacts, commodities, and practices seem so natural that they are not questioned. It is in this sense that ideology or power operate most effectively when embedded in the material, practical horizons and institutions of everyday life. Althusser’s materialism here is surely exemplified by Foucault’s insistence that an analytics of power must focus on its “real and effective practices”; that “we should try to discover how it is that subjects are gradually, progressively, really and materially constituted through a multiplicity of organisms, forces, ener-

gies, materials, desires, thoughts, etc. We should try to grasp subjection in its material instances as a constitution of subjects.”<sup>55</sup> In conjunction with the broader system dynamics and ecological perspectives mentioned earlier in this essay, such interventions suggest to us a multimodal analysis that is post- rather than (as in Althusser’s earlier work) antihumanist.

This last point is elaborated by a final aspect of Althusser’s work that we cite here because of its affinity with some of the new materialist ontologies discussed above. It emerges elusively, scattered across a few brief texts (1982–86) that were published posthumously and whose recent publication is only now prompting an engagement with Althusser’s later allusions to an aleatory materialism.<sup>56</sup> In these essays, Althusser refers to materialism as the hardest question of all. Aleatory materialism, or a “materialism of the encounter,” refers to an underground current in the history of philosophy that he finds running from Epicurus through Spinoza, Marx, and Wittgenstein, to Heidegger and himself. It is distinguished by its nonteleological principles and its consequent ignoring of origins or ends. Instead, it emphasizes emptiness, contingency, and chance. Althusser implies that materialism might itself be no more than a temporarily convenient label and that its aim might be to engender a certain sensitivity — a theoretical practice — rather than to define an ontology as such.

The idea of the encounter alludes to a chance conjuncture of atoms, the event, whose consequence may be the provisional configuring of facts or forms. History emerges here as the continuous transformation of provisional forms by new, indecipherable and unanticipated events, with the corollary lesson that an aleatory intervention may be more efficacious than the patient understanding of trajectories and working through of continuities whose internal logic of development is assumed to endure. In politics, this means that the state is always inscribed with the possibility of its imminent collapse or reconfiguration, where the utter indifference of the people to rule and their unresponsiveness to interpellation by the state apparatus yields the permanent possibility of a revolutionary event capable of halting the political machine. Such events occur in what Althusser calls the void: the space in which the encounter occurs that reconfigures the current conjuncture’s elements. However, although the constitution of new phenomena (such as western capitalism) is now viewed as entirely contingent rather than as the destiny of forces maturing in an earlier phase, such phenomena may still have necessary effects and persist for a

greater or lesser period of time. While the choreography of the encounter suggests an affinity with chaos theory, Althusser's own approach suggests that he was not equating aleatory materialism with a new set of theoretical, systemic abstractions but with an empirical, concrete analysis of the forms and forces at work. What we would like to emphasize here is that in a multimodal materialist analysis of relationships of power, it is important to recognize their diverse temporalities by examining their more enduring structures and operations as well as their vulnerability to ruptures and transformation—all the while acknowledging that they have no predestined, necessary, or predictable trajectory.

If we have found it useful to cite some of Althusser's and Foucault's more materialist pronouncements in concluding this section, it is not in order to advise fidelity to their theories as such. Rather, it is because we find aspects of their work provocative in suggesting how ordinary material practices might be critically investigated. They encourage us to explore the complex ways in which such familiar practices are effects of more distant power relations that they also help to reproduce. And contra Foucault's insistence on his own nonnormative positivism, what makes such analyses grist for the critical materialist is the recognition that such dense networks of relationships support socioeconomic structures that sustain the privileges and interests of some rather than others, that these advantages are not randomly, much less fairly, distributed, and that understanding how they operate and are maintained is a crucial task for the engaged social theorist, especially one who eschews any lingering faith in the inevitability of either the present or the future.

### The New Materialisms: A Collection of Essays

The essays in this volume explore many of the themes and questions we have considered in this introduction. Indeed, in identifying what we have categorized as three principal directions of analysis in the new materialisms, we have been immensely indebted to the way the essays' evocative insights resonate together, sometimes reinforcing but at other times challenging one another. As we had anticipated when we solicited them, the essays are richly diverse both in their understanding of what the new materialisms might be or portend and in the philosophical traditions and conventions they elaborate and contest. Yet collectively, they offer some-

thing more than simple diversity. Broadly, the authors concur in their recognition that new materialist ontologies demand a rethinking of, and renewed attention to, the dynamics of materialization. They also share an acknowledgment that such a project demands, as a corollary, a radical reappraisal of the contours of the subject, a reassessment of the possibility and texture of ethics, an examination of new domains of power and unfamiliar frames for imagining justice, and an exploration of the sources, quality, and dimensions of agency. Indeed, as editors, what we have found so striking is that each essay is both profoundly philosophical and also insistently politically engaged: even without our explicit directive, each writer endeavors to link ontological and metaphysical questions with their ethical and political correlates and implications. The essays' convergence on this point binds them into a coherent yet multifaceted constellation.

At the same time, the themes and questions that emerge and reemerge in the essays make it difficult to separate, group, and order them in a definitive way. Drawing on what we learned from the essays as well as our own researches for the project, we decided to divide the text into three sections whose topics—"the force of materiality," "political matters," and "economies of disruption"—rehearse the themes that organize the distinct sections of this introduction: ontology, bioethics/politics, and critical materialisms. Since the authors all engage questions about the forms of subjectivity, power, agency, and ethics opened up by new materialist ontologies, it would have been entirely possible to place most of the essays under any of the rubrics that divide the text. We must acknowledge, then, that there is a respect in which the ordering of the essays is somewhat arbitrary, and we invite readers to reinvent the collection by reading the essays in whichever order commends itself to them. For us, this has meant grouping the essays in a way that allows the discordance and resonance produced by the textual proximity of sources, framings, and focal questions to provoke illuminating reconsiderations and conceptual shifts.

The essays in the first section, "The Force of Materiality," explore the ontologies of the new materialisms, suggesting how we might conceive of matter and materiality outside of the dualism of the material and the ideal. In her comparative study of the vitalist philosophies of Hans Driesch and Henri Bergson, Jane Bennett explores efforts to specify and give a philosophical and scientific language to the liveliness of living matter while also warning of the ways vitalism can be given troubling new life in the po-

litical rhetoric of Nazism or the contemporary “culture of life.” In tracing Jacques Derrida’s and Gilles Deleuze’s distinctive projects of figuring materiality outside of the grasping hold of consciousness, Pheng Cheah marks the ways the new materialist ontologies call into radical question some of the foundational concepts in politics. Diana Coole uses Maurice Merleau-Ponty, among other thinkers, to trace the philosophical paths by which phenomenologists have tried to refigure perception and agency by relocating and reimagining the body-in-the-world. Emphasizing and analyzing the impersonal character of both Friedrich Nietzsche’s notion of the will to power and Sigmund Freud’s account of psychic life, Melissa Orlie explores how we might imagine creativity and freedom from within a new materialist framework.

The essays in the second section, “Political Matters,” investigate how the ontological, scientific, and technological dimensions of the new materialisms demand a reformulation of the forms and domains of power, ethics, and politics. Elizabeth Grosz analyzes Henri Bergson’s effort to sidestep the “freedom versus determinism” problem that is often posed as an obstacle to political elaborations of new materialist ontologies. She explores the feminist political possibilities in Bergson’s contention that freedom is best conceived not as a characteristic of a subject but rather as a characteristic of acts that express the subject. Samantha Frost draws out Thomas Hobbes’s materialist analysis of the ways the passions orient subjects in space and time to suggest that fear is a passion through which individuals produce a sense of themselves as autonomous agents. William Connolly weaves together insights about perception and power gathered from Maurice Merleau-Ponty, Michel Foucault, Gilles Deleuze, and contemporary neuroscience to explore how our attachment to the world shapes the texture of political judgment and critique. And finally, situating pain and death in relation to impersonal life processes, Rosi Braidotti reassesses contemporary forms of biopower and sketches the possibility of an affirmative ethics and citizenship.

The essays in the third section, “Economies of Disruption,” analyze the relationship between the materiality of the corpus and the materiality of practice, exploring the ways social and economic practices produce and reproduce embodied subjectivity and existential inequalities, as well as the spaces of, and possibilities for, political transformation. Using Alfred Sohn-Rethel, Louis Althusser, and Slavoj Žižek to reexamine historical

materialism and its progressivist teleology, Rey Chow considers the potential for terror as well as progress when iterative practices are presented as a model of political agency. Reading Edmund Husserl’s phenomenology alongside Karl Marx’s historical materialism, Sara Ahmed meditates on the ways the materialization of bodies is bound up with the materialization and objectification of the world(s) in which they live. Sonia Kruks uses Simone de Beauvoir’s diagnoses of the infirmities and oppressions of old age to illustrate how the materialisms in existential phenomenology, Marxism, and social constructivism can, in tandem, provide fruitful insights on the genesis, experience, and perpetuation of injustice. Jason Edwards supplements Karl Marx’s and Louis Althusser’s analyses of the development of capitalism with Henri Lefebvre’s studies of the practices of everyday life, in order to propose an expansive and more politically useful conception of the material practices that reproduce global capitalism and structure the geopolitical system.

We conclude by sincerely thanking all our contributors and by reiterating our great pleasure at presenting these essays. We do so in the conviction that, collectively, they set the new materialisms on course to become a significant orientation for social research after the cultural turn. Our hope is that they will not only encourage debate about a new materialist paradigm but also inspire innovative investigations of the fragile, volatile world we inhabit.

## Notes

- 1 White, *Sustaining Affirmation*, 3f.
- 2 See Israel, *Radical Enlightenment* for a rich elaboration of the history of Spinoza’s work. See also Tuck, *Philosophy and Government, 1572–1651* for a historical analysis of the development of Cartesian and non-Cartesian materialist philosophies.
- 3 See, for example, the special issue of *Theory, Culture and Society*, “Inventive Life: Approaches to the New Vitalism,” Mariam Fraser, Sarah Kember, and Celia Lury, eds. Vitalism, the editors contend in their introduction, “matters now” because its attention to “vital processes” assists in current attempts at thinking of process as a mode of being and at introducing “information, knowledge or ‘mind’ into social and natural entities, making them seem less inert, more process-like: bringing them alive.” Fraser, Kember, and Lury, eds., “Inventive Life,” 1.
- 4 Deleuze, *Negotiations*, 143.

- 5 Bennett, *The Enchantment of Modern Life*.
- 6 Dobson, Grace, and Lovett, *Physics*, 571. We have drawn on this text in constructing this brief excursus through modern physics, along with Calder, *Magic Universe*; Bryson, *A Short History of Nearly Everything*; Smolin, *The Trouble with Physics*; and a useful guide published in the *Financial Times Magazine*, 24/25 November 2007. Also, many thanks to Michael Weissman for assistance in explaining some of the more abstruse details.
- 7 There are also antiquarks and, possibly, squarks — quarks' heavier twin — too. Battersby, "Messenger from the Multiverse," 36–39.
- 8 Calder, *Magic Universe*, 465.
- 9 Lee Smolin writes that no "observation in the last thirty years has been more upsetting than the discovery of dark energy in 1998. What we mean when we say that energy is dark is that it seems to differ from all forms of energy and matter previously known, in that it is not associated with any particles or waves. It is just there." Smolin, *The Trouble with Physics*, 149.
- 10 Chaos theory and complexity theory are not the same thing, and scholars in the respective fields make the effort to differentiate them. However, because these theories share similar kinds of insights, in this cursory survey below, we ignore the distinctions between chaos theory and complexity theory in order to elucidate a broad trend.
- 11 Gleick, *Chaos*, 5.
- 12 Urry, "The Complexity Turn," 10–14.
- 13 See, for example, Chesters and Welsh, *Complexity and New Social Movements*. For these authors, the application of complexity theory to society is a pre-eminently Deleuzian undertaking.
- 14 For instance, see Gladwell, *The Tipping Point*.
- 15 Urry, "The Complexity Turn," 5.
- 16 Interestingly, John Searle has recently suggested that this particular understanding of the dynamic and transformative relationship between the parts and the whole of a system may be a fruitful way to derive a theory of consciousness within neurobiology. Searle, *Freedom and Neurobiology*.
- 17 As Monica Greco notes, accounts of complex causation "demand that we acknowledge, and learn to value as the source of qualitatively new questions, the possibility of a form of ignorance that cannot simply be deferred to future knowledge." Greco, "On the Vitality of Vitalism," 24.
- 18 Thus Fritjof Capra notes that "a living organism is an open system that maintains itself in a state far from equilibrium, and yet is stable." Capra, "Complexity and Life," 37.
- 19 Latour, *Politics of Nature*.
- 20 The management of risk has itself become a significant field in areas such as public health and the environment. Much of this follows in the wake of Ulrich Beck's *The Risk Society*, which illustrates its arguments with some stark examples of risks being deemed acceptable by chemical and other companies,

- provided those risks were borne by others, notably those in developing countries with little access to legal redress. The case of the Bhopal chemical works in India and the shocking treatment of its victims provides an especially clear example of Beck's argument, while reinforcing the sense in which risk-management requires an intricate systems-wide approach. See Beck, *The Risk Society*; Beck, "The Terrorist Threat"; Franklin, *The Politics of Risk Society*.
- 21 Haraway, "A Cyborg Manifesto." See also "Annual Review," the special issue of *Theory, Culture and Society*, Mike Featherstone and Nicholas Gane, eds., which includes a series of articles considering the legacy of Haraway's notion of the cyborg.
- 22 Hayles, "Unfinished Work," 160. See also Hayles, "Computing the Human."
- 23 Hayles, *How We Became Posthuman*; Fukuyama, *Our Posthuman Future*; Cheah, *Inhuman Conditions*.
- 24 Wynne, "Reflexing Complexity."
- 25 *Ibid.*, 72–74.
- 26 Daniels, *At Women's Expense*; Oyama, *The Ontogeny of Information*; Oyama, *Evolution's Eye*; Fausto-Sterling, "The Bare Bones of Sex."
- 27 Masters and Coplan, "Water Treatment with Silicofluorides and Lead Toxicity"; and Roger, Hone, and Doshi, "Environmental Pollution, Neurotoxicity, and Criminal Violence."
- 28 Jasanoff, *Designs on Nature*; Rajan, *Biocapital*.
- 29 Merleau-Ponty, *Phenomenology of Perception*; *The Primacy of Perception*; *The Visible and the Invisible*. For further development of this phenomenological argument see Coole, "Rethinking Agency," and Coole, "Experiencing Discourse." For a critical realist account that has many points of similarity and which also uses Merleau-Ponty's work, see Archer, *Being Human*.
- 30 Agamben, *The Open*, 29.
- 31 Sunstein and Nussbaum, eds., *Animal Rights*.
- 32 Rose, *The Politics of Life Itself*. See also Sharp, *Strange Harvest*.
- 33 Goodwin, *Black Markets*; Waldby and Mitchell, *Tissue Economies*; Sharp, *Bodies, Commodities, and Biotechnologies*.
- 34 MacIntyre, *Dependent Rational Animal*.
- 35 Such issues have been subjected to serious attention in films such as *2001, A Space Odyssey*, *I, Robot*, and *Blade Runner*.
- 36 Agamben, *Homo Sacer*, 119. The text of Foucault's he has in mind here is *The History of Sexuality*, vol. 1.
- 37 Agamben, *Homo Sacer*, 136ff.
- 38 *Ibid.*, 160–64.
- 39 See, for example, Jackson and Howe, *The Graying of the Great Powers*; and Magnus, *The Age of Aging*.
- 40 Honneth, "The Intellectual Legacy of Critical Theory," 345.
- 41 Shapiro, *The Flight from Reality in the Human Sciences*.
- 42 Archer, *Being Human*, 2, 4, 9, 22, 44, 111, 121.



- 43 Harvey, *Spaces of Global Capitalism*, 129, 147. Harvey's reference about rights is to Mitchell, *The Right to the City*.
- 44 Smith and Jenks, "Complexity, Ecology, and the Materiality of Information," 147.
- 45 Berger and Luckmann, *The Social Construction of Reality*, 34.
- 46 For a representative Regulation School approach, see de Angelis, "Neoliberal Governance, Reproduction and Accumulation."
- 47 David Harvey's commentary is indicative of this open Marxism and its materialist challenges. He observes: "If there has been some kind of transformation in the political economy of late twentieth-century capitalism, then it behooves us to establish how deep and fundamental the change might be. Signs and tokens of radical changes in labour processes, in consumer habits, in geographical and geopolitical configurations, in state powers and practices, and the like, abound. Yet we still live, in the West, in a society where production for profit remains the basic organizing principle of economic life. We need, therefore, some way to represent the shifting and churning that has gone on since the first major post-war recession of 1973, which does not lose sight of the fact that the basic rules of a capitalist mode of production continue to operate as invariant shaping forces in historical-geographical development." See Harvey, *The Condition of Postmodernity*, 121.
- 48 See for example, Lanchester, "Cityphilia"; and "Citiphobia."
- 49 Davis, *Planet of Slums*.
- 50 The editors of a current New Sociology series note that while the discipline had retreated from everyday issues, it is now starting to place "renewed emphasis on the mediation of everyday events and experiences by distant social forces, the intermeshing of the local and global in the production of social practices" and the need to situate "everyday social practices in the broader context of life in a globalizing world." Elliott, "Foreword," viii. New materialists might usefully begin with Henri Lefebvre's introductory words to the final volume of *The Critique of Everyday Life*. Noting how radically everyday life had changed during the course of his investigations (1947–81), Lefebvre ponders: "But what is their significance? Here our problematic emerges, and can be reformulated thus: is daily life a shelter from the changes, especially when they occur abruptly? Is it a fortress of resistance to great changes, or certain minor but significant changes? Or, contrariwise, is it the site of the main changes, whether passively or actively?" Lefebvre, *The Critique of Everyday Life*, vol. 3, 41. See also Certeau, *The Practice of Everyday Life*, which takes its impetus from Foucault's *Discipline and Punish*. What "I really wish to work out," Certeau explains, "is a *science of singularity*; that is to say, a science of the relationship that links everyday pursuits to particular circumstances. And only in the *local* network of labor and recreation can one grasp how, within a grid of socio-economic constraints, these pursuits unfailingly establish relational tactics (a struggle for life), artistic creations (an aesthetic), and auton-

- omous initiatives (an ethic). The characteristically subtle logic of these 'ordinary' activities comes to light only in their details." *The Practice of Everyday Life*, ix.
- 51 While a more poststructuralist use of Foucault's work by feminists and queer theorists has emphasized the construction of discourses, there is a rich field of more materialist feminist studies that examines the material strategies and effects that produce gendered flesh. See, for example, Diamond and Quinby, eds., *Feminism and Foucault*. Biddy Martin's intervention concerning materialism in "Feminism, Criticism, and Foucault" (4–5) is significant, although it is the concrete nature of the analyses to which we especially wish to draw attention.
- 52 Foucault, "Nietzsche, Genealogy, History," 153, 155.
- 53 As Paul Patton argues, this way of understanding Foucault's argument does not endorse naturalism but neither does it efface the body's materiality; rather, it understands power "in its primary sense of capacity to do or become certain things" and presents power as redirecting such capacities. Patton, "Foucault's Subject of Power," 65.
- 54 Althusser, "Ideology and Ideological State Apparatuses (Notes towards an Investigation)," 8f.
- 55 Foucault, *Power/Knowledge*, 97.
- 56 Althusser, *Philosophy of the Encounter*.

THE FORCE OF MATERIALITY

*Jane Bennett*

## A Vitalist Stopover on the Way to a New Materialism

This essay is part of a larger study of materiality in politics, in which I experiment with narrating events (a power blackout, a crisis of obesity) in a way that presents non-human materialities (electricity, fats) as themselves bona fide agents rather than as instrumentalities, techniques of power, recalcitrant objects, or social constructs. What would happen to our thinking about politics if we took more seriously the idea that technological and natural materialities were themselves actors alongside and within us—were vitalities, trajectories, and powers irreducible to the meanings, intentions, or symbolic values humans invest in them? I'm in search of a materialism in which matter is an active principle and, though it inhabits us and our inventions, also acts as an outside or alien power. This new, "vital materialism" would run parallel to a historical materialism focused more exclusively upon economic structures of human power.

Of course, such a "thing-power" materialism<sup>1</sup> would not be radically new, but part ad hoc invention and part a gathering of elements from preexisting traditions—from historical lines of thought in which materiality is figured not as inert or even passively resistant but as active and energetic, albeit not purposive in any strong sense. According to that tradition—which includes for me Epicurus, Lucretius, Hobbes, Spinoza, La Mettrie, Diderot,

the Marx of his dissertation on Democritus, the aleatory materialism of Althusser, Deleuze, and others — the distinctions between life and matter, organic and inorganic, human and nonhuman, man and god, are not necessarily the most important ones to honor.

In addition to these materialisms, I find a rich source of ideas about materiality in the tradition of “vitalism.” Especially those early twentieth-century strands called “critical” or “modern” vitalism.<sup>2</sup> These vitalists, who distinguished themselves from the “naive vitalism” of soul by means of their close engagement with experimental science, fought doggedly against one *kind* of materialism — the kind for which materiality is mechanical in operation and thus in principle always calculable to humans. Because the critical vitalists and I share a common foe in mechanistic or deterministic materialism, I devote this essay to one of them: Hans Driesch (1867–1941).

Driesch’s Gifford lectures in 1907–8 at the University of Aberdeen on “The Science and Philosophy of the Organism,” along with the work of his contemporary Henri Bergson, played a significant part in the popular enthusiasm for vitalism in America in the years before the First World War.<sup>3</sup> Central to this vitalism was the idea that “life” was irreducible to “matter,” that there existed a life-principle that animates matter, exists only when in a relationship with matter, but is not itself of a material nature.<sup>4</sup> “The concept of *nature* must be enlarged,” writes Driesch, so that it “consists of one completely spatial and one only partly spatial portion.”<sup>5</sup> The “vital principle” resides in the latter and provides the impetus for morphological changes in the embryo. But the scope of critical vitalism was not restricted to biology, for the same vital principle was also thought to be responsible for the progressive development of personality and history: insofar as seeds, embryos, personalities, and cultures were all *organic* wholes, there was an isomorphism between physical, psychological, and civilizational orders.

There was some disagreement among vitalists about just how to depict the vital force: Bergson’s *élan vital*, for example, competed with Driesch’s entelechy. But on the question of “matter,” the vitalists were in agreement with each other, as well as with their “materialist” opponents: matter was unfree, mechanistic, and deterministic (though “dynamic” in the sense of capable of undergoing regular changes of state). Whereas the vitalists lifted instances of “life” outside of the reach of this mechanical world, the

materialists insisted that every entity or force, however complex, organic, or subtle, was (ultimately or in principle) explicable in mechanical or, as they called it, “physico-chemical” terms.

While Driesch does not go as far as I do toward a materialist ontology, he does insist that the “vital principle” has absolutely no existence independent of “physico-chemical” matter. He makes the relationship between matter and life as close as it possibly can be while still retaining the distinction. I am thus intrigued by Driesch because he pushes the life-matter binary to the limit, even though, at the very last minute, he draws back from taking the plunge into a materiality that is *itself* vibrant or active. It is instructive to see why he draws back: it is for the sake of freedom conceived as a persistent capacity of the natural world to surprise — to produce events not fully determined by their antecedents. This picture of an aleatory world is one that my “vital materialism” too affirms.

Driesch identified a not-wholly calculable, not-quite-material impetus as responsible for organic becoming. Perhaps one of the reasons he, like Bergson, enjoyed popularity in America was because he was received as a defender of freedom, of a certain open-endedness to life, in the face of a modern science whose pragmatic successes were threatening to confirm definitively the picture of the universe as a godless machine. Driesch, a German embryologist, was also one of the first non-Jews to be stripped of his professorship by the Nazis because he objected to their use of his vitalism to justify German conquest of “less vital” peoples. I shall take up the question of the relationship of vitalism to political violence at the end of the essay, where I contrast Driesch’s vitalism with that of American evangelical advocates of the “culture of life,” a latter-day vitalism conjoined to a doctrine of preemptive war.

But first, I turn to Driesch’s entelechy, to his notion of vital force: a life-principle that activated the dull stuff of matter. The haunting association of matter with passivity, which Driesch almost but not quite overcame, is my target. It must go if we are to become more adept at discerning and contending productively with the force of things, with the positive vitality possessed by nonhuman entities and forces.

## Entelechy

Driesch was a Kantian, at least at first. Kant, in the *Critique of Judgment*, had repeatedly insisted upon the figure of passive matter: matter “as such” can have no “spontaneity.”<sup>6</sup> “We cannot even think of living matter as possible. (The concept of it involves a contradiction, since the essential character of matter is lifelessness, *inertia*).”<sup>7</sup> We must not “endow matter, as mere matter, with a property ([namely, the property of life, as] hylozoism [does]) that conflicts with its nature.”<sup>8</sup> Driesch affirms Kant’s image of matter to the extent that Driesch affirms the need for a nonmaterial supplement to direct, organize, and animate matter. Driesch also echoes Kant’s claim that the vital principle would never become fully transparent to us and could be known only as an invisible presence that performs the tasks that are in fact performed within the organism but which no mechanical matter could ever possibly perform by itself. Entelechy is born in the negative spaces of the machine model of nature, in the “gaps” in the “chain of strictly physico-chemical or mechanical events.”<sup>9</sup>

Driesch’s case for entelechy proceeds thus, first, by way of transcendental arguments: “x *must* be operative, given the indisputable reality of y.” To show how the vital principle cannot be “physico-chemical” in nature, for example, he starts from the observation that, in morphogenesis (the process by which a fertilized egg becomes an adult organism), “manifoldness in space is produced where no manifoldness was.” Though on first glance it might seem that this manifoldness in space emerged directly from the spatially uniform, undifferentiated egg, theoretical reason reveals this to be impossible: a *spatial* manifold cannot have a *spatial* unity as its source. Thus, it must be that *some other kind* of “manifold” is present “previous to morphogenesis.” Lacking an “extensive character,” this prior manifold, the basis of the organism’s later differentiation, *must* be an “intensive manifoldness,”<sup>10</sup> that is, “an agent acting manifoldly without being in itself manifold in space” (vol. 2, 250). “That is to say, [it is] . . . composite, though not in space” (vol. 2, 316). We have, then, a first definition of *entelechy*: it is the *intensive* manifoldness out of which emerges the extensive manifoldness of the mature organism.

Driesch’s negative and indirect case for vitalism proceeds, second, by way of his positive and direct interventions and observations in the laboratory. Indeed, what had initially provoked Driesch to posit the “autonomy

of life” was not theoretical reason but experiments on cell-division in the sea urchin. Calculated intrusion into the mechanism of sea urchins paradoxically uncovered the fact that life was inexplicable if conceived exclusively as a mechanism. But the fact that Driesch insists upon the inadequacy of mechanical explanation does not mean that his entelechy is a “psychic” factor: “It is important to grasp the *provisional negativeness* of entelechy, because it will save us from a mistake . . . of regarding the vitalistic agent as something ‘psychical.’ . . . But the contrary of *mechanical* is merely *non-mechanical*, and not ‘psychical’” (vol. 2, 115).<sup>11</sup> For Driesch the critical vitalist, the vital principle must be conceived as *neither* mechanical body nor ethereal soul.

The goal of Driesch’s laboratory work and the reason for his strict adherence to the protocols of empirical science was not simply to gain a more subtle understanding of the dynamic chemical and physical properties of the organism but also to better discern what *animated* the machine: “Why then occurs all that folding, and bending . . . , and all the other processes we have described? There must be something that *drives them out*, so to say.”<sup>12</sup> Driesch names that something, that animating impetus inside the embryo, entelechy. Neither a substance nor an energy (though active only in relation to those phenomena), entelechy is “the non-mechanical agent responsible for the phenomena of life.”<sup>13</sup> Driesch borrows his term of art *entelechy* from Aristotle, retaining its sense of a self-moving and self-altering power but rejecting its peculiarly Aristotelian teleology.<sup>14</sup>

In addition to animating matter, entelechy is also what “arranges” or composes artistically the bodies of organisms. In order to see how entelechy performs this, its “forming” task, *nonmechanically*, we need to take a closer look at morphogenesis, the mode of becoming Driesch says is unique to organisms. Morphogenesis refers both to the process by which a blastocyst moves from a less to a more differentiated form (ontogenesis) and to the process by which a mature organism re-forms itself in response to damage or disease (restitution).<sup>15</sup> While inorganic matter is capable of *change*, only life can *morph*: a crystal formation can diminish or increase in mass, but it cannot become qualitatively more complex and it cannot restore itself by replacing or repairing parts such that the “same” whole endures. “The organism is different . . . from all combinations of crystals, such as those called dendrites . . . which consists of a typical arrangement of identical units. . . . For this reason, dendrites . . . must be called aggre-

gates; but the organism is not an aggregate" (vol. 1, 25). The parts of a plant, unlike the mineral and chemical elements of a mountain, are *members*: when a change occurs in one, the others are not only thereby affected but affected in such a way as to provoke a *coordinated* response.

Developing the contrast between machines and organisms further, Driesch argues that whereas a phonograph "receives vibrations of the air and gives off vibrations of the air" and so "previous stimulus and later reaction are of the *same* nature," in an organism the "impressions on its sensory organs" (for example, sounds) can issue in something (for example, conversations) that belongs to an "absolutely *different* class of phenomena" (vol. 2, 61, my emphasis). Neither can inorganic systems (as mere matter) *learn* from their experiences, says Driesch, for that entails not only "the mere recollection of what has happened, but . . . also the ability to use *freely* in another field of occurring the elements of former happening for newly combined *individualised* specificities of the future which are *wholes*" (vol. 2, 79). Driesch describes the productivity of organisms as following "a curious principle, which may be called . . . *individual correspondence*. That is to say: any real action is an *individual* 'answer' to an individual stimulus."<sup>16</sup> Such individualized action tailored specifically to the situation at hand constitutes the "directing" action of entelechy.

Elsewhere, Driesch describes this "directing" power as the power to allow one of the many formative possibilities inside the emergent organism to become actual. There are always more potential shapes and lines of development for a cell, organ, or an organism than become actual. In (what we would call) the stem cells of the sea urchin, for example, there is "an enormous number of possibilities of happening in the form of difference of 'potential'" in each cell.<sup>17</sup> But if "something else *can* be formed than actually is formed, why then does there happen in each case just what happens and nothing else?" Again Driesch reasons that there *must* be some agent responsible for the singular specificity of the outcome, some decisive agent guarding the entrance to actuality:

According to our hypothesis, . . . in each of the *n* cells the *same* great number of possibilities of becoming is physico-chemically prepared, but checked, so to say, by entelechy. Development of the system now depends, according to our assumption, upon the fact that entelechy *relaxes its suspensory power* and thus . . . in cell *a* one thing is allowed to

occur, in cell *b* another, and in cell *c* something else; but what now actually occurs in *a* might also have occurred in *b* or *c*; for *each one* out of an enormous number of possibilities *may* occur in each cell. Thus, by the regulatory *relaxing* action of entelechy in a system in which an enormous variety of possible events had been suspended by it, it may happen that an *equal distribution of possibilities* is transformed into an *unequal distribution of actual effects*.<sup>18</sup>

Note that, once again, Driesch describes the power of entelechy to determine the trajectory of organic growth in negative terms: it acts by selectively "relaxing" its "suspensory power." This capacity for (negative) choice operates in a context of multiple possibilities, and so the actual path of organic growth is not determined in a rigid, mechanical way. Likewise, neither are the individual movements of an adult organism fully determined or mechanically caused by the stimuli of the individual's environment: outside events do affect the individual, but they create only "*a general stock of possibilities* for further acting and have *not* determined all further reactions quite in detail."<sup>19</sup> There is thus an "*indefiniteness* of correspondence between specific cause and specific effect."<sup>20</sup> It is in this indefiniteness that "freedom" exists.

In the Gifford lectures, Driesch affirms a qualitative difference between life and matter. Entelechy, that *self-directing activeness* apparent in some bodies, is what distinguishes a crystal from an embryo, a parking lot from a lawn, me from my corpse. But does Driesch also affirm a qualitative difference between human and other forms of life? The question is an important one, I think, because it seems that much of the appeal of vitalism resides in the desire to view man as the apex of worldly existence.<sup>21</sup> Driesch's response is ambivalent. On the one hand, the "directing" power of entelechy (unlike its "formative" power which is distributed equally across all organisms) operates inside man with special intensity. This is evidenced in his greater capacity for "knowing" and "willing." But, on the other hand, Driesch also believes that some analogue of knowing and willing exists in *all* organic processes: "Indeed, as far as morphogenesis and physiological adaptation and instinctive reactions are concerned, there *must* be a something comparable metaphorically with specified knowing and willing."<sup>22</sup>

Close attention to morphogenesis reveals to Driesch a modality of

change distinctive to “life”: this change is *organizing, complexifying, holistic, and autonomic* (nondeterministic). But why not model the living systems that entail this type of change as highly complex and dynamic *machines*? If so, then there would be no need to invoke a special vital principle like entelechy to explain morphogenesis. Driesch takes up the question explicitly and finds all mechanistic accounts of morphogenesis inadequate. Here is why: an organism is a working whole capable of innovative action—it repairs injured parts, recreates severed ones, and adapts old parts to perform new roles—all in order to maintain the normal functioning of the whole and to preserve its identity. In contrast, a machine (as a mere aggregation of physico-chemical elements) “*does not remain itself, if you take from it whatever you please.*”<sup>23</sup> Because machines cannot self-repair, one must again conclude that there must be at work in the organism some nonmaterial agent that provides “the specific and real stimulus which calls forth the restoring processes.”<sup>24</sup>

Neither does the machine analogy hold, says Driesch, for individual organs of an organism. An ovary, for example, emerges from a single, totipotent cell (“*Anlage*”<sup>25</sup>) that “has been divided and re-divided innumerable times,” but “*how could a machine . . . be divided innumerable times and yet remain what it was?*”<sup>26</sup> Driesch’s experimental evidence for this involves the hydroid-polyp Tubularia, whose cut segments, however small, will regenerate the whole organism. According to the “mechanistic” view of the time, each segment would have to contain a machine, each of which, when cut in two, could still function as a half-size but complete machine. Mikhail Bakhtin, an early critic of Driesch’s work, aptly describes the conclusions Driesch draws from his experiments on Tubularia:

What kind of machine is this which we can divide to our heart’s content and which always preserves its normal functions? A number of highly complex, large and small machines with the same function must be contained within our two cm segment. . . . Moreover, these machines overlap one another: parts of one correspond to completely different parts of another. Such a mechanism contradicts the very concept of a mechanism. Thus, the machine theory (in Driesch’s opinion) leads to the absurd.<sup>27</sup>

In describing entelechy as the invisible but “real stimulus” for the movement of morphing, Driesch also considers the question of whether

entelechy might be conceived as “energy,” and thus as a special kind of physico-chemical entity. Again he answers no, rejecting the idea of “vital energy” as oxymoronic, for life is *unquantifiable* and all energies remain for him quantities: “In asserting . . . phenomena to be of the energetical order, we state that there can be a *more or less* of them. . . . *But entelechy lacks all the characteristics of quantity: entelechy is order of relation and absolutely nothing else.*”<sup>28</sup>

As I have already noted, Driesch’s “critical vitalism” emphasizes the necessarily intimate relationship between entelechy and the regular, observable operations of matter. Entelechy can make use only of “the possibilities of becoming” that are “physico-chemically prepared,” for “life is unknown to us except in association with bodies”;<sup>29</sup> entelechy always “uses material means in each individual morphogenesis” (vol. 2, 295); entelechy cannot make sulphuric acid if no hydrogen is present, but it can “*suspend* for as long a period as it wants any one of all the reactions which are *possible* with such compounds as are present, and which would happen without *entelechy*” (vol. 2, 180). These formulations display Driesch’s struggle to make the life-matter relationship as close as it can possibly be without going all the way over to a (mechanistic) materialism and without implying a metaphysics of “soul.”

What intrigues me perhaps the most about entelechy is the way it is a figure of an *impersonal* kind of agency. Like Machiavelli’s *fortuna* or the Homeric Greek notion of *psyche*,<sup>30</sup> entelechy is not the unique possession of each individual but rather a vitality flowing across all living bodies. Entelechy coordinates parts on behalf of a whole without following a rigid plan; it answers events innovatively and perspicuously, deciding on the spot and in real time which of the many possible courses of development will in fact happen. Neither is the agentic capacity of entelechy a disembodied soul, for it is constrained by the materiality that it must inhabit and by the preformed possibilities contained therein. But despite this heteronomy, entelechy has real efficacy: it animates, arranges, and directs the bodies of the living, even under changing conditions. It is “an *effective* extra-spatial intensively manifold constituent of nature.”<sup>31</sup>

Driesch’s invention of entelechy as a creative causality was initially propelled by his assumption that materiality was matter, that is, stuff so passive and dull that it could not possibly have done the tricky work of organizing and maintaining morphing wholes. Sometimes this mat-

ter is infused with entelechy and becomes "life," and sometimes it isn't and coagulates into inorganic "machines." Driesch thought he had to figure entelechy as nonmaterial because his notion of materiality was yoked to the notion of a mechanistic, deterministic machine. In 1926, Mikhail Bakhtin rebutted Driesch on this point, arguing that Driesch failed to imagine the possibility of "a relentlessly self-constructing, developing machine [which] . . . builds itself not from pre-prepared parts, but from self-constructing ones." Such a machine, were it to be damaged, would indeed be capable of a self-repair, a restitution prompted and guided by subtle and interactive physico-chemical signals, and thus would have no need for entelechy.<sup>32</sup>

Bakhtin pointed out that Driesch's vitalism depended upon his critique of materialism and that critique depended upon equating materiality with mechanical causality, with an image of machine as a "totally prefabricated" and "fixed and immovable" assemblage.<sup>33</sup> Bakhtin recommended that Driesch rethink what a "machine" can be rather than reject physico-materialist explanation per se.<sup>34</sup> I agree.

But I applaud the way Driesch yokes his vital principle to experiential activities in the lab. This helps him to ward off the temptation within vitalism to *spiritualize* the vital agent. As an example of a vitalism that surrenders to this temptation, I turn now to another figure of vital force, the "soul" inside human embryos produced as a result of fertility technologies.

### The "Culture of Life"

At the start of the twentieth century, Driesch was engaged in a public debate that was simultaneously moral and scientific: the vitalist-mechanist controversy combined discourses of freedom and vitality with studies of morphology and matter. At the start of the twenty-first century, many Americans were again participating in a similarly hybrid discourse, as can be seen in debates about abortion, artificial life support, and embryonic stem cell research. One position in these debates might be described as a latter-day vitalism: it is the "culture of life" position advocated by evangelical and Catholic Christians, including then-president George W. Bush. Like Driesch, defenders of the "culture of life" believe there to be something profoundly inadequate about a materialist metaphysic.

But not all vitalisms are alike, and it seems that the "culture of life" is a

return to what Driesch rejected as a naive vitalism of soul. Driesch took special pains to distinguish his vital principle from the idea of a disembodied spirit, he explicitly eschewed religious dogmatism in favor of laboratory experiments with sea urchins, and he refused political attempts to link the idea of a vital principle to the idea that some forms of life were more vital than others. The vitalism of the culture of life does none of these things.

In May of 2005, President Bush "appeared at the White House with babies and toddlers born of test-tube embryos" in order to dramatize his opposition to embryonic stem cell research. "The White House event, on what conservative Christians and the president call an important 'culture of life' issue, demonstrated just how far Mr. Bush is willing to assert himself on policy that goes to what he considers the moral heart of his presidency. . . . Tom DeLay of Texas managed the opposition to the bill, also casting it in stark moral terms. 'An embryo is a person, a distinct, internally directed, self-integrating human organism.'" <sup>35</sup> At a National Catholic Prayer Breakfast in April 2007, Bush reiterated his commitment to the life of human embryos: "We must continue to work for a culture of life where the strong protect the weak, and where we recognize in every human life the image of our Creator."<sup>36</sup> Three days later and four years into a preemptive war estimated to have killed between tens of thousands and hundreds of thousands of Iraqis,<sup>37</sup> Bush rejected Senate and House Democrats' attempt to tie \$100 billion in additional funding for the war to a timetable for withdrawal of U.S. troops. Said Bush: "We should not legislate defeat in this vital war."<sup>38</sup> Both human embryos and preemptive violence are "vital."

A stem cell is a neologism for a cell believed to be pluripotent, that is, able to become any of the various kinds of cells or tissues of the mature, differentiated organism. The hope is that better understanding of pluripotency will enable scientists to, among other things, induce the production of new nerve cells in damaged spinal cords or new brain tissue in people with Alzheimer's disease.<sup>39</sup> The contested procedure consisted in extracting cells from the "blastula" stage of the fertilized egg, when the egg is changing from a solid mass of cells into a hollow ball of cells around a fluid-filled cavity. The blastocyst may then continue on to the "gastrula" stage, where it differentiates into three germ-layers, whose cells, "channeled into their respective fate paths," are no longer pluripotent.<sup>40</sup> Bush



opposes embryonic stem cell research because the extraction halts the morphological process at the gastrula stage. Former House Republican leader DeLay describes this as “the dismemberment of living, distinct human beings for the purposes of medical experimentation.”<sup>41</sup> Many Americans agreed with him. Stem cells can also be taken from umbilical cord blood, adult human bone marrow, and fertilized embryos too old to be capable of developing further. The Bush administration does not object to these sources of stem cells, perhaps because blood, marrow, and decayed embryos are conceived as dead matter rather than life and thus pose no threat to the “culture of life.”

But what is the “culture of life”? The phrase was the central theme of Pope John Paul II’s 1995 “*Evangelium Vitae*” before it was adopted by non-Catholic evangelicals in the United States to refer to a cluster of theological beliefs linked to a set of public policies.<sup>42</sup> The policies are easy to name: the culture of life, defined in contrast to “the [secular] culture of death,” has been invoked to support legislation to keep a feeding tube inserted into a woman whose brain function had ceased, to restrict access by minors to abortion and to outlaw certain surgical techniques of abortion, as well as to oppose federal funding for embryonic stem cell research. The theological or cosmological beliefs within the culture of life are less clearly articulated, but the following four claims seem central:

- 1 *Life is radically different from matter.* Life is organized, active, self-propelled, and, in diverse registers of the term, “free.” Matter is intrinsically passive and predetermined in its operation. Life may be embodied, and when it is, it operates alongside physico-chemical entities and processes. But life is irreducible to the sum of those entities and processes. Life is detachable from embodiment.
- 2 *Human life is radically different from all other life.* The life of human bodies is not only qualitatively different from matter but also from every other life-form. Like other animals, humans are endowed with a life-force, but unlike all others, this force is “a unique life-principle or soul.”<sup>43</sup> “If society loses the sense of the essential distinction of human life from animal life and material things, whether in theory or in the practice of attempting to clone a human embryo, it has lost its stature as a human society. It has lost the compass of humanness and is, instead, laying the foundation for the replacement of a hu-

man living with biological chaos.”<sup>44</sup> The ensouled human organism is a quantum leap above other organisms.

- 3 *Human uniqueness expresses a divine intention.* Human exceptionalism is not a contingent event, an accident of evolution, or a function of the distinctive material composition of the human body. Rather, an omnipotent being (“the Almighty”) implants a divine spark or soul into the human individual.
- 4 *The world is a divinely created order and that order has the shape of a fixed hierarchy.* Humans are not only organic, unique, and ensouled, but ranked at the very top of the hierarchy, in a position *superior* to inorganic matter, to nonhuman organisms, and to the Earth as a whole.

In subscribing to the first point, the belief that life is irreducible to matter, the culture of life qualifies as a kind of vitalism, for it affirms what Driesch said is the central claim of vitalism, that is, that the developmental processes of the organism are *not* “the result of a special *constellation of factors known already* to the sciences of the inorganic,” but are rather “the result of an *autonomy peculiar*” to life.<sup>45</sup> Insofar as it affirms a soul whose existence is not tied to its relationship to matter, it qualifies as what Driesch called naive vitalism. This “old vitalism” fails to avail itself of the benefit of scientific insight into nature. For Driesch the lab and the reasoning scientist remained the privileged point of access to the life principle, and he insists that it is always “essential to reflect once more with an open mind on the actual biological data.”<sup>46</sup> The new vitalism was a falsifiable hypothesis and not a dogma that only immoralists dare contest.

Advocates of the culture of life often do affirm science, in particular weapons technology if it advances the project of American mastery. But science can never contravene the theological verities of ensoulment, human exceptionalism, and the qualitative hierarchy of Creation. To DeLay, for example, no revelation from molecular chemistry or complexity theory about the self-organizing capacity of *inorganic* systems could disprove his conviction that matter is inert and only life is free and open-ended. And no data concerning the differential plasticity of cells at the blastula and gastrula stages could possibly alter the conclusion that the fertilized egg is a person ensouled by the Almighty.<sup>47</sup> What seems to be operative here is a kind of species-narcissism: “life” must remain special—that is, radically

other to matter — if we humans are to be able to think of ourselves as the *most* special of its expressions.

The culture of life is also more anthropocentric and hierarchical than the vitalism of Driesch. It posits the cosmos as a rank-ordered creation, at the top of which the Designer has placed his most vital creature, man. Man was given dominion over other earthly creatures because he is the most vital of them, in three conjoined senses of the term: he is the most animate or mobile, the most free or capable of action irreducible to the demands of the body and other material conditions, and the most important to the order because he is the image of God. The allied idea that there exist two ontologically distinct substances (brute matter and spirited life), in conjunction with the idea that man has the most life, helps to render practices of hyperconsumption and exploitation of nature laudable acts of human enterprise and productivity. The idea that the world was originally designed *as* a hierarchy also legitimates a hierarchically structured social order, and it justifies public policies that, because they intensify human inequalities, would otherwise appear unfair or unjust: policies that cut taxes of the wealthy, defend unprecedented levels of corporate executive compensation, and oppose universal health care. The presumption that the principle governing the divine hierarchy is rule by the most free species legitimizes a series of civilizational acts of violence committed in the name of allowing “freedom” to flourish among more and more peoples. Here, the violence of preemptive war, state-sponsored torture, and the militarization of outer space<sup>48</sup> become generous acts in accord with a culture of life where, in Bush’s words, “the strong protect the weak, and where we recognize in every human life the image of our Creator.” When lodged inside such a divine hierarchy, the culture of and for “life” becomes the righteous domination of the earth by God’s most free and vital creatures, that is, Americans. Or, as the post-9/11 bumper sticker announced in the grammar of a command: “God Bless America.”

I don’t think, however, that there is something intrinsic to vitalism, to the idea of the “autonomy of life,” that ties it to militarism, political inequality, insistently wasteful consumption, or civilizational imperialism. Driesch, for example, explicitly dissociated his vitalistic holism from a steep moral hierarchy and the desire for mastery, whether expressed as the view that humans should rule supreme over nonhumans or the view that one group of people has a natural right to dispose of the others. At the end

of *The History and Theory of Vitalism*, Driesch goes so far as to reject his own image of nature as divided into dead matter and organic life. He there concludes that everything, whether “inorganic” or “organic,” must be entelechial, life-ly, or vitalistic: “*nature is a something in evolution*. All natural becoming is like *one* great embryology.” Driesch thus ends his defense of vitalism by “destroying” “the [very] difference between ‘mechanism’ and ‘Vitalism,’ . . . which we have established so carefully.”<sup>49</sup>

And when the Nazis took up his theory of organic wholes directed by a vital principle in support of their claim that the German nation had to fulfill *its* vital destiny and wage its vital wars,<sup>50</sup> Driesch objected vehemently. “Entelechy recognized no state boundaries and . . . therefore the only biological ‘whole’ to which one could rightfully belong was ‘humanity.’ He opposed rising militarism in equally biological language, declaring that the militaristic actions of nature against nation needed to be recognized for what it was: ‘*the most terrible of all sins*’ against the vitalistic principles of life, holistic cooperation and higher development.”<sup>51</sup>

As I see it, the important political question that “culture of life” vitalism raises is not “Is the embryo matter or life?” but “How can the figure of life join forces with a celebration of (righteous) violence?” I have tried to illuminate an inner link between, on the one hand, Bush’s repeated invocations of life, freedom, and care for the weak, and, on the other hand, his policies of torture, economic inequality, and preemptive violence. The charge of hypocrisy does not quite get at what is at work here. Rather, it seems that faith in the idea of a divinely created *hierarchy* — of the righteous domination of some parts over others — flows into faith in the otherwise inexplicable ideas that the rich deserve to get richer, that war is prolife, and that force can set us free.

Whereas Drieschean and Bushean vitalisms diverge on the question of hierarchy, they share a valorization of freedom or the element of unpredictability and indeterminacy in action. For both, the world contains persistent moments of freedom, despite the comforting regularity provided by natural or divine law. To believe in entelechy is to affirm the freedom of a certain “*indefiniteness* of correspondence between specific cause and specific effect,”<sup>52</sup> a capacity for the aleatory that Driesch extended to the universe as a whole. To believe in the soul is also to affirm a kind of freedom, though one restricted to the “life” embodied in humans: this is the freedom for the sake of which America invades the territories of those

humans who “hate freedom” because “they love terror,”<sup>53</sup> but also the free will of a humanity capable of acts worthy of moral credit or blame.

Bakhtin was critical of the way Driesch’s ostensibly scientific descriptions insinuated the metaphysical assumption of freedom. Driesch claimed that the blastomere contained multiple intensities, only one of which will be chosen by entelechy, but because at any given time and place there is in fact only *one* possible outcome of morphogenesis, Driesch’s “talk of several potentials and possibilities serves only one purpose: it allows for the presupposition that they are all equally possible . . . and that therefore it is possible to *choose* one of them freely. Freedom of choice . . . is the ground of all of Driesch’s constructions.”<sup>54</sup> Bakhtin, I think, correctly identifies what is at stake in the vitalism of Driesch, and, albeit in a different one of its registers, also at stake in the vitalism of Bush. It is freedom, or faith in the existence of an undetermined world.

This resilient faith may help to explain vitalism’s ability to repeatedly rise from the dead, to recur in history despite serial attempts to debunk and dispel it. Vitalism may also draw some of its enduring, or at least periodic, vitality from the fact that there seems to be something inside the practice of experimental science — its pragmatic quest for useful results, perhaps? — that leads it to *understate* or downplay the freedom, the energetic fluidity or surprising creativity of the natural world. This seems to be the case long after mechanistic models of nature have morphed into systems theory and complexity theory, and long after the figure of inert matter has been challenged by fluid dynamics and chaos theory, as well as by the many earlier biophilosophies of flow that Michel Serres chronicles in *The Birth of Physics*. But if there is something internal to scientific thinking that is uneasy about highlighting the idea of an element of indetermination intrinsic to nature, perhaps this is also because, in the West, to admit to indetermination is always to invite its colonization by dogmatic forms of Christian theology. Hence, Bush and the politics of the culture of life.

### Vital Materiality

The National Institutes of Health 2001 Report on Stem Cells made two claims that surprised me, a surprise that revealed the extent to which I too had absorbed a machine model of nature. The first claim was that no one

yet knows whether “embryonic stem cells” exist as such in human embryos in the womb, that is, whether they have a presence *before* they are extracted from blastocysts and placed in a new, laboratory-generated milieu. Though “most scientists now agree that *adult* stem cells exist in many tissues of the human body (*in vivo*), . . . it is less certain that embryonic stem cells exist as such in the embryo. Instead, embryonic stem cells . . . *develop in tissue culture* after they are *derived* from the inner cell mass of the early embryo.”<sup>55</sup> The second unexpected claim was that it is also uncertain whether even the stem cells produced in the lab are in fact “homogeneous and undifferentiated,” even though they appear to be and their promise of pluripotency is premised upon that state of pure, quivering indeterminacy. What?! “Embryonic stem cells” might not even *exist* in the body and their laboratory avatars might not even *be* an exemplar of undifferentiated pluripotency?

I would not have been so surprised by this evidence of indeterminacy unless I had been thinking of my body as a physiological mechanism with fixed and determinate parts, including stem cells. In contrast, the NIH researchers seem to be encountering materiality as a continuum of becomings, of extensive and intensive forms in various states of congealment and dissolution. If no “embryonic stem cells” turn out to exist *in vivo*, it may be because an embryo is *not* a collection of discrete parts, perhaps not even of protoparts or preformed possibilities, and that it is only in the closed system *of the lab* that a vital materiality allows itself to be sliced and diced into “embryonic stem cells.”

If we think of the term *entelechy* as an attempt to name a force or an agency that is naturalistic but never fully spatialized, actualized, or calculable, as akin to what Georges Canguilhem described as “des enclaves d’indetermination, des zones de dissidence, des foyers d’heresie,”<sup>56</sup> then this vitalist gesture is not inimical to the materialism I seek. This materialism, which eschews the life-matter binary and does not believe in God or spiritual forces, nevertheless also acknowledges the presence of an indeterminate vitality — albeit one that *resists* confinement to a stable hierarchy — in the world. It affirms a cosmos of a lively materiality that *is* my body and which also operates outside it to sometimes join forces with it and sometimes to vie against it. Despite his great admiration for the wondrous complexity of nature, Driesch could not quite imagine a “material-

ism" adequate to it. Nevertheless, I now locate my "vital materialism" in Driesch's wake. Emerson wrote in his journal: "I have no longer any taste for these refinements you call life, but shall dive again into brute matter." I too go diving there, and find matter not so brute at all.

## Notes

- 1 I develop the idea of "thing-power" in "The Force of Things."
- 2 The "critical vitalism" of Henri Bergson and Hans Driesch, which contrasted itself to a "naive" vitalism that "allowed for spiritual animation amidst the workings of physical law," emerged "in the nineteenth century transition from a matter-based physics to an energy-based physics." Burwick and Douglass, "Introduction" to *The Crisis in Modernism*, 1. Driesch describes his vitalism as "modern" or "new" in *The History and Theory of Vitalism*.
- 3 Quirk, *Bergson and American Culture*, 1–2. Quirk also places the works of Willa Cather and Wallace Stevens in this context: "Both Cather and Stevens believed in the 'creative power,' and both . . . linked this power to a vital force, biological in nature and primordial in origin" (8). See also the debates between Arthur O. Lovejoy and H. S. Jennings about vitalism during the period 1911–15: Lovejoy, "The Meaning of Vitalism"; Lovejoy, "The Import of Vitalism"; Jennings, "Driesch's Vitalism and Experimental Indeterminism"; Lovejoy, "The Meaning of Driesch and the Meaning of Vitalism"; Jennings, "Doctrines Held as Vitalism."
- 4 A 1916 review of Driesch's *The History and Theory of Vitalism* notes that vitalism "will not go down. A consideration of recent literature drives us to this conclusion. One of the most widely read philosophical works of the past few decades (Bergson's *Creative Evolution*) is primarily a defense of this doctrine. The writings of Driesch, both in German and in English, have followed one another with marvelous rapidity and forced themselves upon the attention of even the most unswerving mechanist." Sumner, "Review."
- 5 Driesch, *The Science and Philosophy of the Organism*, vol. 2, 321.
- 6 Kant, *Critique of Judgment*, sec. 78, #411.
- 7 Ibid., sec. 73, #394.
- 8 Ibid., sec. 65, #374.
- 9 Driesch rejects a Spinozist theory of "psycho-physical parallelism" precisely because Spinozism, as Driesch understands it, holds "that the physical side of [the] . . . duality forms a continuous chain of strictly physico-chemical or mechanical events without any gap in it." Driesch, *The Science and Philosophy of the Organism*, vol. 2, 115. It is very important to Driesch that his own "proof" of vitalism be understood to be a negative one: "All proofs of vitalism i.e. all reasonings by which it is shown that not even the machine-theory covers the field of biological phenomena, can only be indirect proofs: they can only make it clear that mechanical or singular causality is not sufficient for an explanation of what happens." Driesch, *The History and Theory of Vitalism*, 208.
- 10 Driesch, *The Science and Philosophy of the Organism*, vol. 2, 144.
- 11 In Nature conceived scientifically — as here-now-such, there is "no room for 'psychical' entities at all." Driesch, *The Problem of Individuality*, 33. Driesch makes the same point in *The Science and Philosophy of the Organism*, where he says that "there 'are' no souls . . . in the phenomenon called nature in space" (vol. 2, 82).
- 12 Driesch, *The Science and Philosophy of the Organism*, vol. 1, 50, my emphasis. On this point Driesch echoes Kant's claim that in judging *organized* beings, "we must always presuppose some original organization that itself *uses* mechanism." Kant, *Critique of Judgment*, sec. 80, #418, my emphasis.
- 13 Driesch, *The Problem of Individuality*, 34.
- 14 Driesch does not elaborate on his differences with Aristotle and says only that he will retain Aristotle's idea that "there is at work a something in life phenomena 'which bears the end in itself.'" Driesch, *The Science and Philosophy of the Organism*, vol. 1, 144.
- 15 A blastocyst is the name for the developmental stage of a fertilized egg when it has changed from a solid mass of cells into a hollow ball of cells around a fluid-filled cavity.
- 16 Driesch, *The History and Theory of Vitalism*, 213. Or, as he puts the point in *The Science and Philosophy of the Organism*, vol. 1, 67: there is an "individuality of correspondence" between stimulus and effect."
- 17 Driesch, *The Problem of Individuality*, 38. In the vocabulary of today, it might be said that the stem cells have not yet been channeled into their respective "fate paths."
- 18 Ibid., 39.
- 19 Driesch, *The History and Theory of Vitalism*, 213.
- 20 Driesch, *The Science and Philosophy of the Organism*, vol. 2, 72, my emphasis. The organism's ability to respond perspicuously and inventively to an event (its capacity for "individual correspondence") is not *radically* free: entelechy is incapable of producing that which is *utterly* new, for its intelligent responsiveness remains under the guidance of compacted intensities, which Driesch describes as "a general stock of possibilities."
- 21 This desire is quite overt in Joseph Chiari's defense of Bergson and Driesch: "Darwin thought that changes and mutations were due to chance; Lamarck ascribed them to the pressure of the environment and to functionalism; Bergson ascribes them to the natural resistance that matter offers to the informing spirit which, through man, evolves into consciousness and therefore gives man his favored position as the goal and the apex of creation." Chiari, "Vitalism and Contemporary Thought," 254.

- 22 Driesch says he doesn't know just what this "something" is, but though it "may seem very strange" that the most perspicuous "'means' toward [the] . . . end [of maintaining the organic whole] are known and *found*" by every organism, "it is a *fact*." *The Science and Philosophy of the Organism*, vol. 2, 143.
- 23 Driesch, *The History and Theory of Vitalism*, 210.
- 24 *The Science and Philosophy of the Organism*, vol. 1, 110.
- 25 Driesch distinguishes, in his empirical proofs for vitalism (which are better described as disproofs of the sufficiency of a mechanistic account of morphogenesis) between the process of "the *differentiation* of the *harmonious* systems" and the development of the original cell within which differentiation will occur. The latter is "not what comes out of the complex systems, but what they themselves come from. And we shall take the ovary as one instance standing for them all. The ovary develops from one special single cell which is its *Anlage*, to use a German word not easy to translate." Driesch, *The Problem of Individuality*, 21–22.
- 26 Driesch, *The History and Theory of Vitalism*, 212.
- 27 Bakhtin, "Contemporary Vitalism," 89.
- 28 Driesch, *The Science and Philosophy of the Organism*, vol. 2, 169. What could it mean to be exclusively an "order of relation"? Driesch sheds some light on this notion by describing entelechy as an "agent that arranges" elements into a harmonious whole. Driesch sees evidence of this arranging power in instinctive movements: although "physiological factors" play a role in instincts, "there would be something else also at work, a 'something' that may be said to *make use* of the factors" (vol. 2, 51). This "new and autonomic natural factor . . . unknown to the inorganic world" (vol. 2, 114) is also "at the root of the transformism of the species" (vol. 1, 287). In addition, such an arrangement must have been operative in the process of inheritance. A mechanical explanation would speak only of the transfer of material units "localized in the nucleus," but, again, these material conditions cannot be "*the main thing*." Some agent that *arranges* is required, and this arranging agent of inheritance *cannot* be of a machine-like, physico-chemical character." Driesch, *The Problem of Individuality*, 23. Why not? Because, the physicochemical is by definition incapable of the "arranging" agency required. Arranging agency requires both precision and flexibility, an ad hoc judging exquisitely attuned to the singularity of the parts it is to arrange and the singularity of the context in which the organism swims. Physicochemical elements, qua inert matter, are too obedient to generic laws to perform the required juggling, too routinized to arrange artfully.
- 29 Driesch, *The Science and Philosophy of the Organism*, vol. 1, 16.
- 30 Psuche marks the difference between a living human and an inactive corpse. It is "composed of a very tenuous stuff, which resides in the body while the individual is alive, flies away through some orifice at death and goes down to

- Hades"; it is "simply that whose presence ensures that the individual is alive." Adkins, *From the Many to the One*, 15.
- 31 Driesch, *The Science and Philosophy of the Organism*, vol. 2, 326, my emphasis.
- 32 Bakhtin, "Contemporary Vitalism," 95–96. Bakhtin names this alternative machine-image "modern dialectical materialism" in contrast to Driesch's "naive-mechanist point of view with its fixed and immovable machines" (96). K. S. Lashley makes a similar point in 1923: "The vitalist cites particular phenomena—morphogenesis, regeneration, habit-formation, complexities of speech, and the like—and denies the possibility of a mechanistic account of them. But he thereby commits what we might term the egoistic fallacy. On analysis his argument reduces every time to the form, 'I am not able to devise a machine which will do these things; therefore no one will ever conceive of such a machine.' This is the argument from inconceivability of Driesch and McDougall, put badly. To it we may answer, 'You overvalue your own ingenuity.'" Lashley, "The Behavioristic Interpretation of Consciousness," Part 1, 269.
- 33 Bakhtin, "Contemporary Vitalism," 95–96.
- 34 So do Deleuze and Guattari. In *A Thousand Plateaus* they describe Nature as a plane of morphogenesis, which they call a "war-machine." Paul Patton suggests that a better term would have been "metamorphosis machine": "the 'war-machine' . . . is a concept which is betrayed by its name since it has little to do with actual war and only a paradoxical and indirect relation to armed conflict. [Its] . . . real object . . . is not war but the condition of creative mutation and change." Patton, *Deleuze and the Political*, 110.
- 35 Stolberg, "House Approves a Stem Cell Bill Opposed by Bush," 1.
- 36 Cole, "Bush Stands against 'Temptation to Manipulate Life.'"
- 37 The lower estimate is from [iraqbodycount.org](http://iraqbodycount.org), the larger one from Les Roberts and Gilbert M. Burnham of the Center for International Emergency, Disaster, and Refugee Studies at the Johns Hopkins Bloomberg School of Public Health in Baltimore; Richard Garfield of Columbia University in New York; and Riyadh Lafta and Jamal Kudhairi of Baghdad's Al-Mustansiriya University College of Medicine.
- 38 White House, "President Bush Discusses Iraq War Supplemental."
- 39 A stem cell, while pluripotent, is not "totipotent" or, as Driesch described it before the concept of stem cell was invented, is not a "potency" able to "play every *single* part in the totality of what will occur in the whole system." Driesch, *The Science and Philosophy of the Organism*, vol. 1, 120–21. See also National Institutes of Health, *Stem Cells*, ES-2.
- 40 Maienschein, "What's in a Name," 12.
- 41 Tom DeLay, quoted in Baer, "In Vitro Fertilization, Stem Cell Research Share Moral Issues." There is some dispute over whether a pregastrulated mass is an "embryo." If an embryo is defined as a fertilized egg, then the

answer is yes. But others define an embryo as a dividing egg that has passed *through* gastrulation: “many biologists . . . don’t call these early stages of development an embryo, but a preimplantation embryo or pre-embryo. The preimplantation embryo passes through three stages during its week of development: a zygote (one cell), morula (multiple cells in a cluster, all the same), and blastocyst [blastula] (when it develops sections, including a yolk sac, and has an inside and outside but still none of the defined structures of an embryo).” Spike, “Open Commentary,” 45.

42 “Evangelium Vitae.”

43 Best, “Testimony of Robert A. Best, President, the Culture of Life Foundation.”

44 Ibid.

45 Driesch, *The History and Theory of Vitalism*, 1. Driesch defines vitalism as “the doctrine of the *autonomy of life*. . . . I know very well that . . . ‘autonomy’ usually means the faculty of *giving* laws to oneself, and . . . is applied with regard to a community of men; but in our phrase autonomy is to signify the *being subjected* to laws peculiar to the phenomena in question.” *The Science and Philosophy of the Organism*, vol. 1, 143. Although, in the main, by the “autonomy” of life, Driesch is referring to the ability of organisms to self-arrange and self-restore, his use of the term also retains something of the Kantian sense of freedom, freedom from determinism. Henri Bergson affirms something close to Driesch’s view; for Bergson, while “analysis will undoubtedly resolve the process of organic creation into an ever-growing number of physico-chemical phenomena, . . . it does not follow that chemistry and physics will ever give us the key to life.” Bergson, *Creative Evolution*, 31.

46 *The History and Theory of Vitalism*, 57–58.

47 It is worth noting here that one need not be an atheist to reject the particular constellation of ideas inside the “culture of life”: pantheisms of various sorts discern divinity in *all* things, human and nonhuman, organic and inorganic; many “Jewish and Muslim scholars . . . regard life as starting . . . 40 days” after fertilization; some believers affirm that God would approve of embryonic stem cell research as a fuller realization of the potential within the process of morphogenesis. See Maienschien, “What’s in a Name,” 14.

48 In 2001, Donald Rumsfeld “recommended that the military ‘ensure that the president will have the option to deploy weapons in space’”; in 2002 Bush “withdrew from the 30-year-old Anti-Ballistic Missile Treaty, which banned space-based weapons”; and in 2005 General Lance Lord of the Air Force Space Command “told Congress [that] . . . ‘we must establish and maintain space superiority.’” New York Times News Service, “U.S. Policy Directive Might Open Door to Space Weapons.”

49 Driesch, *The History and Theory of Vitalism*, 223–24.

50 “Après 1933, l’entelechie est devenue un *Fuhrer* de l’organisme,” Canguilhem, “Aspects du vitalisme,” 124.

51 Harrington, *Reenchanted Science*, 190. After Hitler came to power in 1933, “Driesch was one of the first non-Jewish German professors to be forcibly retired” (191).

52 Driesch, *The Science and Philosophy of the Organism*, vol. 2, 72, my emphasis.

53 Terrorists kill because “they hate freedom.” White House, “Remarks by President and Mrs. Bush in Interview by Television of Spain.” “The more free the Iraqis become, the more electricity is available, the more jobs are available, the more kids that are going to school, the more desperate these killers become, because they can’t stand the thought of a free society. They hate freedom. They love terror.” White House, “President Bush, Ambassador Bremer Discuss Progress in Iraq.”

54 Bakhtin, “Contemporary Vitalism,” 92. The fuller quotation reveals Bakhtin’s own deterministic materialism: “It obviously goes without saying that at every place and every time, some specific conditions prevail. Therefore it is completely absurd to say [as Driesch does] that any particular possibility of development is really contained in a given blastomere. The potential is contained within it . . . to the same degree that it is part of the complex of its surrounding conditions. What is Driesch doing? He strays from any real conditions, locating abstract blastomere outside of the frames of time and space. . . . Talk of several potentials and possibilities serves only one purpose: it allows for the presupposition that they are all equally possible . . . and that therefore it is possible to choose one of them freely. Freedom of choice, not determinism in organic life, is the ground of all of Driesch’s constructions.”

55 National Institutes of Health, *Stem Cells*, ES-9, my emphasis.

56 Canguilhem, “Aspects du vitalisme,” 121. This is a description evangelical Christians, with their strong sense of an ordered Creation, would most likely reject.

*Pheng Cheah*

## Non-Dialectical Materialism

I gave this essay the tongue-in-cheek title of “non-dialectical materialism” to counterpose what one might call the materialisms of Derrida and Deleuze with that of Marx. Marx himself never used the phrase “dialectical materialism.” It was a phrase first used by Plekhanov to distinguish the Marxist approach to the sociohistorical process, which focuses on human needs and the means and methods of their satisfaction, from the teleological view of history in Hegelian idealism.<sup>1</sup> But the concept was already implicit in the distinction Engels drew between the metaphysical mechanical materialism of the eighteenth century and the modern materialism that arose in the wake of the critique of German idealism. “Old materialism looked upon all previous history as a crude heap of irrationality and violence; modern materialism sees in it the process of evolution of humanity, and aims at discovering the laws thereof.” Hence, “modern materialism,” Engels wrote in “Socialism: Utopian and Scientific,” “is essentially dialectic.”<sup>2</sup> He further distinguished the materialist dialectic from the Hegelian dialectic in terms of its understanding of history as the history of class struggles, where social classes are the products of economic conditions: “Hegel had freed history from metaphysics — he had made it dialectic; but his conception of history was essentially idealistic. But now idealism was driven from its last refuge, the

philosophy of history; now a materialistic treatment of history was propounded, and a method found of explaining man’s ‘knowing’ by his ‘being,’ instead of, as heretofore, his ‘being’ by his ‘knowing.’”<sup>3</sup> Simply put, the two key features of the materialist dialectic are first, the understanding of nature and history as law-governed processes that can be rationally understood instead of immutable metaphysical substances, and, second, the determination of these processes as processes with a *material* existence that can be explained through empirical science.

Regardless of Althusser’s qualifications concerning how Marx inverts the Hegelian dialectic, the concept of negation as the source of actualization remains a fundamental principle of Marxist materialism.<sup>4</sup> The decomposition of immediately present reality into social processes and the imminence of the proletarian revolution as the radical transformation of existing social conditions are premised on Marx’s understanding of material existence as something created through the purposive mediation of human corporeal activity as this is historically conditioned. Marx suggested that human beings indirectly produce actual material life when we produce our means of subsistence through labor. Material reality is therefore produced by negativity. This is because Marx defined creative labor as a process of actualization whereby given reality or matter is negated through the imposition of a purposive form. As a result of the complex development of forces of production, each immediately given object and also each individual or social subject comes into being only by being constitutively imbricated in a web of social relations that form a system or totality.<sup>5</sup> The template and synecdoche for this system of reciprocally interdependent relations is the vital body of the organism. As I have argued elsewhere, Marxism is irrigated by an ontology of organismic vitalism.<sup>6</sup>

The labor of the negative remains of fundamental importance in the entire tradition of Marxist philosophy even when this power is no longer viewed as primarily manifested in corporeal labor but in the aesthetic sphere, as in the work of the Frankfurt School. Herbert Marcuse expresses this succinctly: “Art contains the rationality of negation. In its advanced positions, it is the Great Refusal — the protest against that which is.”<sup>7</sup> This shadow of negativity also animates the accounts of resistance and dynamism in varieties of social constructionism and theories of performativity. In contradistinction, a nondialectical materialism is a materialism that no longer grants primacy to the work of the negative and, indeed, treats

negativity as metaphysical in the same way that dialectical materialism characterized mechanistic materialism and idealism as metaphysical. As we will see below, Derrida's delimitation of the metaphysics of presence includes Marxist materialism itself. There are important historical and political reasons for this non-dialectical turn in materialism. What I wish to do in this essay, however, is to elaborate on some of the key features of non-dialectical materialism's break with the concept of negation and some of its implications.

### 1. Materialism without Substance (Derrida)

In *Specters of Marx* (1994), Derrida spoke in passing of his "obstinate interest in a materialism without substance: a materialism of the *khôra* for a despairing 'messianism.'"<sup>8</sup> Although he did not explicitly elaborate on what this materialism would look like, he had in fact already given some sense of it in a 1971 interview. When pressed insistently by two Marxists to specify his position on Marxism, Derrida made a characteristically enigmatic but suggestive comment that cautioned against the conflation of deconstruction with materialism: "It follows that if, and in the extent to which, *matter* in this general economy designates . . . radical alterity . . . then what I write can be considered 'materialist.'"<sup>9</sup> His reticence in using the word "matter," he added, was not idealist or spiritualist but instead due to the insistent reinvestment of the term with logocentric values, "values associated with those of thing, reality, presence in general, sensible presence, for example, substantial plenitude, content, referent, etc." (64). As long as matter is not defined as "absolute exterior or radical heterogeneity," materialism is complicit with idealism. Both fall back on a transcendental signified.

Realism or sensualism — "empiricism" — are modifications of logocentrism. . . . [T]he signifier 'matter' appears to me problematical only at the moment when its reinscription cannot avoid making of it a new fundamental principle which, by means of a theoretical regression, would be reconstituted into a "transcendental signified." . . . It can always come to reassure a metaphysical materialism. It then becomes an ultimate referent, according to the classical logic implied by the value of referent, or it becomes an "objective reality" absolutely "ante-

rior" to any work of the mark, the semantic content of a form of presence which guarantees the movement of the text in general from the outside. (65)

In these tantalizing hints of what a deconstructive materialism might involve, Derrida suggests that we might understand matter through the figure of the text in general. This figure depicts the opening up or overflowing of any form of presence such that it becomes part of a limitless weave of forces or an endless process or movement of referral. In contradistinction, a metaphysical concept of matter regards materiality either as the endpoint of this movement of referral or as an external presence that sets off and secures this movement. Matter as presence is the arrestation of the text in general. It is important to add here that this movement is not the "free play" of textual indeterminacy, the joyful interpretive anarchy celebrated by deconstructive literary criticism. Paul de Man's definition of the text as an endlessly self-referential object that only offers an allegory of its own reading is well known. Derrida, however, immediately undermines such auto-referentiality by emphasizing the importance of materialism as a philosophy of the outside. It is important to understand the text as matter, he emphasizes, so as to prevent us from lapsing into a new idealism of the text as a self-interiority without an outside. For whether it is denigrated as contingent exteriority (as in Hegelian idealism) or celebrated as the actuality of sensuous corporeal existence (as in Marxist materialism), matter has always been the outside. As Derrida puts it,

The concept of matter must be marked twice . . . outside the oppositions in which it has been caught (matter/spirit, matter/ideality, matter/form, etc.). . . . [I]n the double writing of which we were just speaking, the insistence on matter as the absolute exterior of opposition, the materialist insistence . . . seems to me necessary. . . . In a very determined field of the most current situation, it seems to me that the materialist insistence can function as a means of having the necessary generalization of the concept of text, its extension with no simple exterior limit . . . , not wind up . . . as the definition of a new self-interiority, a new "idealism" . . . of the text. (66)

Yet, Derrida also warns us that this exteriority must not be thought in simple opposition to the inside. A simple outside is complicit with the



inside. It is important to remember here that the German word for object is *Gegenstand*, that external thing that stands against the subject. From a dialectical standpoint, the outside qua object is the negation of the inside qua subject. But it can be negated in turn when the outside is recognized by the subject as nothing other than itself, thereby allowing it to return back to itself in a moment of reflective internalization. Or alternatively, the outside can be posited as a reassuring external presence that anchors the subject and arrests its drifting: "The outside can always become again an 'object' in the polarity subject/object, or the reassuring reality of what is outside the text; and there is sometimes an 'inside' that is as troubling as the outside may be reassuring. This is not to be overlooked in the critique of interiority and subjectivity" (67). To think of matter outside the oppositions that have imprisoned it therefore requires us to think of matter outside opposition itself, including the oppositions that most patently denote opposition, the inside/outside and subject/object pairs.

In its interdefinability with text, matter exceeds and confounds the oppositions between the positive and the negative, the immediate and the mediated, presence and its representation. We have conventionally mistaken this materialist understanding of text for a form of linguistic constructionism because we have not framed it through the problem of time. For the implied question here is why is it that matter is text-*ile* or woven? Why is it that any present being always overflows itself and intimates an absolute alterity? Derrida's point is that in order to be present, any being must persist in time. This means that the form of the thing — that which makes it actual — must be identifiable as the same throughout all possible repetitions. But this iterability implies that any presence is in its very constitution always riven by a radical alterity that makes it impossible even as it makes it possible. By definition, this alterity cannot be a form of presence. Because it both gives and destabilizes presence, it subjects presence to a strict law of radical contamination.

Strictly speaking, this force or dynamism, if we can use these words, is inhuman. It is prior to any figure of human consciousness such as the subject, reason, or spirit, and even practical action. Nor does it issue from anthropologic structures that are commonly viewed as constituting reality through negativity or mediation such as society, culture, or language. In Derrida's view, these are all forms of presence. At the same time, however, "the system of spacing/alterity," he suggests, "[is] an essential and

indispensable mechanism of dialectical materialism" (94) even though the dynamism of alterity contravenes the two key terms of dialectical materialism. First, it evades the dialectical moments of negation and position. The non-phenomenality or non-presence of the other is not an absence or negated presence but "something . . . that deviates from the opposition presence/absence (negated presence)" (95). A negated presence always holds out the possibility of sublation that returns one to presence. By the same token, the other also cannot be posed or positioned (*setzen*) since this would be to reduce its alterity to the same, to an other that is posited by the subject as *its* other.<sup>10</sup> As Derrida puts it, "The position-of-the-other, in Hegelian dialectics, is always, finally, to pose-oneself by oneself as the other of the Idea, as other — than — oneself in one's finite determination, with the aim of repatriating and reappropriating oneself, of returning close to oneself in the infinite richness of one's determination, etc." (96). Second, the other is also not material in a Marxist sense because within Marxist discourse, body and matter are sensuous forms of presence or existence. Derrida insists that "no more than it is a form of presence, *other* is not a *being* (a determined being, existence, essence, etc.)" (95).

It would not be inappropriate to speak of deconstruction as a materialism of the other, or more precisely, as the thought of the materiality of the reference or relation to the other. This relation to alterity is more material than matter as substance or presence because it is more fundamental or "infrastructural," so to speak, since it constitutes matter as such. Simply put, Derrida's argument is that the very presence of matter — its persistence, endurance, or being in time — is premised on there being such a thing as a true gift of time, or which is the same thing, a pure event. As finite beings, we cannot give ourselves time. Under conditions of radical finitude, where we cannot refer to an infinite presence that can give us time, time can only be thought as the gift of an absolute other that is unrepresentable but that leaves a trace in the order of presence even as the phenomenalization, appearance, or presentation of the other is also its violation. Similarly, the very event-ness of an event consists in its not being identified, recognized, or anticipated in advance. Something is not an event if we can tell when and from where it is or will be coming. Hence, the event and the gift can only be if they are entirely other, if they come from the other. They must therefore be understood through the figure of the impossible, that which we cannot imagine or figure within the realm

of the possible. They require the thought of an inappropriable other that must necessarily remain unappropriated. For once the other that gives time and the event is appropriated, then it is no longer other, and there is no longer a gift or a pure event.

Although the impossible is not of the order of presence, it is not without relation to concrete actuality since it constitutes it. Indeed, the impossible is curiously more material and real than concrete actuality. In his later writings, Derrida repeatedly insists on the fundamental reality of this impossible relation to or coming of the other.

The deconstruction of logocentrism, of linguisticism, of economism (of the proper, of the at-home [*chez-soi*], *oikos*, of the same), etc., as well as the affirmation of the impossible are always put forward *in the name of the real*, of the irreducible reality of the real — not of the real as the attribute of the objective, present, perceptible or intelligible *thing* (*res*), but of the real as the coming or event of the other, where the other resists all appropriation, be it ana-onto-phenomenological appropriation. The real is this non-negative impossible, this impossible coming or invention of the event the thinking of which is not an onto-phenomenology. It is a thinking of the event (singularity of the other, in its unanticipatable coming, *hic et nunc*) that resists reappropriation by an ontology or phenomenology of presence as such. . . . Nothing is more “realist,” in this sense, than a deconstruction. It is (what-/who-)ever happens [*(ce) qui arrive*].<sup>11</sup>

This impossible coming of the other is not utopian. It is a force of precipitation that is experienced as an eruption within the order of presence and that in turn forces the experiencing subject to act. The impossible, Derrida writes, “gives their very movement to desire, action, and decision: it is the very figure of the real. It has its hardness, closeness, and urgency.”<sup>12</sup>

For present purposes, the desubstantialization of matter that occurs as a result of the deconstructive inscription of materiality as the impossible relation to the other has at least three practical implications. First, it problematizes the concepts of actuality (*Wirklichkeit*) and actualization (*Verwirklichung*) at the heart of Marxist materialism. Where Marx opposes ghosts and specters such as those of ideology, the commodity, and the money form to the concrete actuality that is actualized by the material corporeal activity of labor, Derrida argues that as instances of presence and

objective existence, concrete actuality and the work that effects it or brings it about are only possible because of a certain spectrality. The very form of actuality and the form that material activity seeks to actualize are premised on their iterability and temporalization. But because this iterability can only come from the absolutely other, it breaks apart from within any actuality that is established as a fundamental ground or *arche*. Iterability inscribes “the possibility of the reference to the other, and thus of radical alterity and heterogeneity, of difference, of technicity, and of ideality in the very event of presence, in the presence of the present that it dis-joins *a priori* in order to make it possible [thus impossible in its identity or its contemporaneity with itself].”<sup>13</sup>

Second, this movement of desubstantialization — the survival or living-on of the form of a thing — is a paradoxical form of causality that yokes together what have been viewed as diametrical opposites in the history of Western philosophy: automatism and autonomy. We conventionally distinguish the automatism of the machine from free human action on the grounds that the former is a form of mindless mechanical causality and the latter is spontaneous and universal rational-purposive activity. Now, the constitutive dislocation of the living present by iterability is precisely a freeing or independence from presence. But this freedom is inhuman because it is prior to and exceeds the spontaneity of human practical reason. What is broached here, Derrida notes, is “a certain materiality, which is not necessarily a corporeality, a certain technicity, programming, repetition or iterability, a cutting off from or independence from any living subject — the psychological, sociological, transcendental or even human subject.”<sup>14</sup> This materiality is a movement of freeing from the spontaneous rational subject. It is thus paradoxically a freedom prior to human freedom. “It is,” Derrida writes, “the contradiction of automatic autonomy, mechanical freedom, technical life.”<sup>15</sup>

Indeed, this materiality is even inorganic insofar as it is a scarring that threatens the teleological self-return of the organism as a self-organizing proper body or organic totality. Derrida goes as far as to describe it as a “machinistic materiality without materialism and even perhaps without matter.”<sup>16</sup> Materiality in this sense has four characteristics. First, as “a very useful generic name for all that resists appropriation, . . . materiality is not . . . the body proper as an organic totality” (154). Second, it is marked by suspended reference, repetition, and the threat of mutilation (156).

Third, it exhibits “a mechanical, machinelike, automatic independence in relation to any subject, any subject of desire and its unconscious” (157). Fourth, it implies the values of the arbitrary, the gratuitous, the contingent, the random, and the fortuitous (158).

In dialectical materialism, the process of actualizing material reality is part of the epigenesis, auto-production, and auto-maintenance of the human corporeal organism as it creates the means of its own subsistence. The proletarian revolution is precisely creative labor’s teleological process of appropriative return writ large on a world-historical stage. Deconstructive materialism is a delimitation of organismic vitalism and its teleological understanding of history. By attending to the machinic and spectral effects of iterability, it accounts for the possibility of the supplementation of organic life by *techné* and the contamination of living actuality by commodification, ideology, and so forth.<sup>17</sup> Indeed, Derrida argues that the key concepts of dialectical materialism are no longer adequate for understanding the rhythms and speeds of contemporary technomediated reality because they deconstruct the opposition between the actual and the ideal or virtual. The deconstruction of dialectical materialism is “demonstrated today better than ever by the fantastic, ghostly, ‘synthetic,’ ‘prosthetic,’ virtual happenings in the scientific domain and therefore the domain of techno-media and therefore the public or political domain. It is also made more manifest by what inscribes the speed of a virtuality irreducible to the opposition of the act and the potential in the space of the event, in the event-ness of the event.”<sup>18</sup>

Yet, despite the scarring, dislocation, and tearing that it inflicts on presence, materiality in the deconstructive sense has a rigorously affirmative and generative character. Because it refers us to the radically other, materiality is also the opening of an unforeseeable future, an *à-venir* (to-come) that cannot be anticipated as a form of presence. Despite his insistence that there was no ethicopolitical turn in his work, Derrida explored the ethicopolitical implications of this messianic dimension of materiality as absolute alterity in his writings from the 1990s onward.<sup>19</sup> Simply put, since the other is that from which time comes, the experience of absolute alterity, however disruptive, must be affirmed because without it, nothing could ever happen. An understanding of materiality in terms of negativity effaces this messianic dimension because, by positing the other as the same, it closes off the experience of radical alterity.

Materiality as the rational subject’s experience of alterity puts into question the classical distinction between *dynamis* and *energeia*, the potential and the actual, that underwrites our canonical understanding of power and action. For matter as *dynamis* has always been thought under the concept of possibility. It is potentiality as opposed to the act or *energeia* that actualizes what is merely potential, makes the potential actually existing, by giving it a defining form. In the Aristotelian subordination of potentiality to actuality, *dynamis* is what is *merely* virtual or potential, but it is also power or potency, ability, capacity, and faculty (*Vermögen*, *Kraft*) and therefore also sheer possibility. In the German philosophical tradition to which Marx belongs, the opposition is sublated in the idea of self-activity or self-actualization, of a power or potentiality that can continually make itself real or actual. This power is deemed to reside in the form of the human subject as the negation of the mere matter that nature gives us, whether negativity is conceived as the capacity of the concept to externalize itself in objective existence or as labor power—the capacity to work and produce the means of subsistence by actualizing ends in matter. In this case, *dynamis* is also the virtuality of the purposive image, what is possible for the subject to actualize through activity as long as it can be imagined or figured as an ideal form or image. What is at stake is possibility as the power of an “I can” or “I am able to.” It can have many permutations. For instance, in the vital organic body, living matter is endowed with the capacity of self-organization. Or in the case of performativity, a set of norms or conventions establishes a range of possibilities for the subject that can contest this set of norms even as the power of the subject is secured by this set of norms.

In contradistinction, the deconstructive understanding of materiality indicates a force that is impossible, something not yet and no longer of the order of presence and the possible.

[The im-possible] announces itself; it precedes me, swoops down upon and seizes me *here and now* in a nonvirtualizable way, in actuality and not potentiality. It comes upon me from on high, in the form of an injunction that does not simply wait on the horizon, that I do not see coming, that never leaves me in peace and never lets me put it off until later. Such an urgency cannot be *idealized* any more than the other as other can. The im-possible is thus not a (regulative) *idea* or *ideal*. It is

what is most undeniably *real*. And sensible. Like the other. Like the irreducible and inappropriable *différance* of the other.<sup>20</sup>

This weak force can be characterized through three motifs: first, it implies a constitutive heteronomy or finitude that derives from the structural openness of any material being to the gift of time or the pure event. Second, it is a structure of precipitation and urgency that prevents an indefinite deferral of the actualization of the potential. Third, since it comes from outside the capability or power of the subject, it is a fundamental passivity. But this passivity is not opposed to activity because it stimulates the activity of the subject as a response. It forces us to act. "What must be thought here, then, is this inconceivable and unknowable thing, a freedom that would no longer be the power of a subject, a freedom without autonomy, a heteronomy without servitude, in short, something like a passive decision. We would thus have to rethink the philosophemes of decision, of that foundational couple activity and passivity, as well as potentiality and actuality" (152).

In Derrida's view, the experience of absolute alterity is the origin of normativity, imperativity, and responsibility. Such ethicopolitical phenomena arise in situations where we encounter and respond to the inappropriable other who gives us actuality. For example, the undertaking of calculative legal decisions is propelled by our experience of an incalculable justice that escapes all rule. Or a truly responsible decision must break with the order of knowledge and undergo the ordeal of the undecidable because a decision that follows a rule of knowledge is a mere technics and therefore irresponsible. The experience of alterity is essentially the urgent force of any rational decision and action that cannot be reduced to the mastery or sovereignty of the rational subject. It makes every decision originally passive. Derrida explains it as follows:

The passive decision, condition of the event, is always in me, structurally, another event, a rending decision as the decision of the other. Of the absolute other in me, the other as the absolute that decides on me in me. . . . I decide, I make up my mind in all sovereignty — this would mean: the other than myself, the me as other and other than myself, *he makes or I make* an exception of the same. . . . [K]nowledge is necessary if one is to assume responsibility, but the decisive or deciding moment of responsibility supposes a leap by which an act takes off,

ceasing in that instant to follow the consequence of what is — that is, of that which can be determined by science or consciousness — and thereby *frees itself* (this is what is called freedom), by the act of its act, of what is therefore heterogeneous to it, that is, knowledge. *In sum, a decision is unconscious* — insane as that may seem, it involves the unconscious and nevertheless remains responsible. . . . It is this act of the act that we are attempting here to think: "passive," delivered over to the other.<sup>21</sup>

In other words, the force of materiality is nothing other than the constitutive exposure of (the subject of) power to the other. For if the freedom of the rational subject comes in or as its response to the other, then decision is prompted by and also comes from the other. It is therefore in the original instance passive and unconscious, not active and conscious, unlike the sovereign decision of exception (Schmitt) and the deliberation of public reason (Habermas). The force in question is not a counterpower that can be deployed against a given state of power. It is not the dispersal of power into a mobile field of relations between micropowers (Foucault). It is instead the constitutive exposure of power as such, which has been conventionally thought in terms of the circular economy of appropriation or the return-to-self of self-mastery, to what makes it vulnerable and defenseless. As the undoing of the power of the subject, the force of materiality cannot lead to a political program. Indeed, it is what resists and confounds any teleology such as that of Marxism and even any purposive or end-oriented action that is based on rational calculations or the projection of an ideal end. But as that which opens power up unconditionally to the other, this force also has a messianic dimension. It aporetically implies an absolute or incalculable hospitality to the other that demands a response in which we calculate with given conditions in order to act in a responsible manner.

## 2. Material Forces of Nonorganic Life (Deleuze)

Derrida's understanding of the force of materiality is very close to but also very far from Gilles Deleuze's account of matter as the power of nonorganic life. This concluding section briefly discusses various points of touching and three areas of divergence between their conceptions of mate-

rality. Deleuze's account of matter arises from a trenchant critique of the Hegelian reduction of difference to dialectical negation and contradiction. Deleuze argues that if we understand being and the genesis of the world in terms of negativity, we have fundamentally misunderstood the nature of thought and its relation to being by fettering both within the prison of consciousness. We take consciousness as a starting-point and regard thought as an attribute or power that consciousness deploys in its encounter with what is outside it. The outside is what is different from and opposed to consciousness. By means of propositions, consciousness duplicates, represents, or mediates the outside so that it can resolve this difference. By negating the outside, it can grasp it with apodictic certainty. Deleuze argues that viewing the difference between consciousness and the outside in terms of opposition and negation begs the question of the genesis of both consciousness and the outside by an affirmative power of difference. This affirmative difference cannot be reduced to negation because it is prior to consciousness and the objects and things consciousness confronts. In Deleuze's words,

Negation is difference, but difference seen from its underside, seen from below. Seen the right way up, from top to bottom, difference is affirmation. . . . It is not the negative which is the motor. . . . Negation results from affirmation: this means that negation arises in the wake of affirmation or beside it, but only as the shadow of the more profound genetic element — of that power or 'will' which engenders the affirmation and the difference in the affirmation. Those who bear the negative know not what they do: they take the shadow for the reality, they encourage phantoms, they uncouple consequences from premises and they give epiphenomena the value of phenomena and essences.<sup>22</sup>

This affirmative power of difference is the key principle of Deleuze's ontology of chance. Being, Deleuze suggests, is a matter of absolute chance because we do not know what it is and why there is being. Being is repeatedly constituted each and every time by events of chance (the fiat of creation) that are projectiles of being, throws of the dice that give rise to different singularities or commencements. These events of chance have the form of questions and imperatives. Ideas or problems arise in response to this clamor of Being. An idea or problem is an infinite field of continuity that is opened up by a specific projectile of being. Hence, instead of being

an attribute of a thinking substance, ideas are the neuralgic points where the I is fractured.

The imperatives of and questions with which we are infused do not emanate from the I: it is not even there to hear them. The imperatives are those of being, while every question is ontological and distributes "that which is" among problems. Ontology is the dice throw, the chaosmos from which the cosmos emerges. If the imperatives of Being have a relation with the I, it is with the fractured I in which, every time, they displace and reconstitute the fracture according to the order of time. . . . Consequently, far from being the properties or attributes of a thinking substance, the Ideas which derive from imperatives enter and leave only by that fracture in the I, which means that another always thinks in me, another who must also be thought. (199–200)

Put another way, ideas do not emanate from us. They are responses to Being. But since Being is absolute chance, it cannot be a simple origin or individuality from which the singularities of being issue through repeated throws. Instead, one must think Being itself as a repetition of singularities, the reprise or recommencement of being. The difference that characterizes being qua singularity would then issue from or be emitted by an originary repetition or difference (200–201). This movement of originary repetition and difference is not (yet) a being or an existent. But this nonbeing is not negative since this would imply something derived from a prior being. Nonbeing corresponds instead to the continuous field of an idea. When we define this nonbeing as a negative, we reduce it to the propositional language of consciousness and obscure the complexity of the problem as a field formed from an imperative of Being. In Deleuze's words, "the negative is an illusion, no more than the shadow of problems. . . . [T]he form of negation appears with propositions which express the problem on which they depend only by distorting it and obscuring its real structure" (202). This originary difference is positive but its positivity is not a simple unity. It is a multiplicity that escapes the opposition between the One and the many because the multiple is not the mere fragmentation of the One into the many.

As we have seen, Derrida also broke away from dialectical negation through the thought of an originary movement of difference (iterability/*différance*). But whereas for Derrida originary difference intimates a radi-

cal alterity that is not of the order of presence and actuality and, thus, is neither negative nor positive, Deleuze characterizes the movement of originary difference as a transcendental field, or which is the same thing, a plane of immanence that generates actuality. An idea denotes a continuous field or plane that contains all ideal distinctions that is the positive "ground" of any actual concrete being. To understand any specific emission of singular being, we must refer first of all to this field of ideal differentiations, "all the varieties of differential relations and all the distributions of singular points coexisting in diverse orders "perpllicated" in one another" (206). It is important to emphasize here that these ideal differentiations are not imposed by human rational consciousness. They precede consciousness but also any concrete phenomenon or object of appearance. Actualization is the process by which objects are formed from these differential relations. Here, the differentiations become concretely specified and are "incarnated in distinct species while the singular points which correspond to the values of one variety are incarnated in the distinct parts characteristic of this or that species" (206). In other words, actualization is the cutting up of this continuous field by real relations and concrete settings such that the ideal differentiations are further determined. This *coupure* generates an actual being or given object. As Deleuze puts it, actualization is "the production of finite engendered affirmations which bear upon the actual terms which occupy these places and positions, and upon the real relations which incarnate these relations and these functions" (207). In a strictly Kantian terminology, this plane of originary difference is noumenal insofar as it is the "ground" that generates all appearances or phenomena, all things that are given to us. But unlike noumenality in the Kantian sense, namely the thing-in-itself that is merely possible and thinkable, difference is a structure, a real field of relations. Hence, difference, Deleuze points out, "is that by which the given is given . . . as diverse. Difference is not phenomenon but the noumenon closest to the phenomenon" (222).

This field of differences is transcendental in the sense that it is the ground of genesis and the real "condition of possibility" of the actual. However, this transcendental field, Deleuze argues, cannot be defined in terms of a subject or even a pure stream of immediate consciousness because the intentional subject (and any object it intends) is not foundational. The subject is generated from this transcendental field, which is

made up of pre-individual and impersonal singularities. "Singularities," he notes, "are the true transcendental events. . . . Far from being individual or personal, singularities preside over the genesis of individuals and persons; they are distributed in a 'potential' which admits neither Self nor I, but which produces them by actualizing or realizing itself, although the figures of this actualization do not at all resemble the realized potential."<sup>23</sup> Because the transcendental is now no longer connected to the subject or person, or even to a pure stream of an immediate consciousness, it is also a plane of immanence. Deleuze uses this phrase to denote a limitless field that cannot be contained or conditioned by something else. First, the plane of immanence is immanent because it is coextensive with actual existence. But it is not contained within or reducible to actual existence because it generates it. But second, and more important, instead of being an attribute of some other thing that is transcendent, immanence as a plane is *absolute*. It is always implicated in or inheres only in itself. Deleuze notes that it is only when immanence is "no longer immanence to anything other than itself that we can speak of a plane of immanence."<sup>24</sup>

We saw earlier that Derrida characterized materiality as a weak messianic force that exceeds the potentiality/actuality, possible/real oppositions and that renders power defenseless. Deleuze's account of originary difference as a plane of immanence leads to a different account of the virtual/ideal. He distinguishes the virtual/ideal from the merely possible by arguing that the idea as a field of differential relations is real and determined and not merely abstract and potential.<sup>25</sup> The reality of the virtual is that of a completely determined structure that is formed from genetic differential elements and relations and the singular points corresponding to these relations.<sup>26</sup> Every real object has a virtual content. The process of actualization further "differentiates" and determines this virtual content according to actual conditions. "The virtual must be defined as strictly a part of the real object — as though the object had one part of itself in the virtual into which it is plunged as though into an objective dimension" (209). We can understand the virtual as the set of speeds and intensities that generate an actual object. The relation between the actual object and the virtual is therefore twofold. On the one hand, the actual object is the accomplished absorption and destruction of the virtuals that surround it. On the other hand, the actual object also emits or creates virtuals since the process of actualization brings the object back into relation with the

field of differential relations in which it can always be dissolved and become actualized otherwise, as something else, by being linked through other differential relations to other particles.<sup>27</sup>

Deleuze's distinction of reality into actual and virtual parts foregrounds the fundamental play of chance and difference in the actualization of an object. In the classical distinctions between the possible and the real, and the ideal and concrete existence, the real or the concretely existing is in a relation of resemblance to the possible or the ideal. The real is a mere duplication of the ideal, and, indeed, a deficient copy. Or the possible is regarded as defective because its actualization requires a leap into existence. In contradistinction, the power of the virtual is not merely that of a preexisting possibility whose actualization is predetermined and limited by the process of duplication or resemblance. The actualization of the virtual is instead a genuine creation of something that corresponds to singularities and differential relations but does not resemble the virtual. As Deleuze puts it, "the actualization of the virtual . . . always takes place by difference, divergence or differentiation. Actualization breaks with resemblance as a process no less than it does with identity as a principle. Actual terms never resemble the singularities they incarnate. . . . [Actualization] creates divergent lines which correspond to — without resembling — a virtual multiplicity."<sup>28</sup>

In actualization, the relation between the actual object and the virtual is that of an immersion or propulsion from a field of differential relations. Deleuze's favorite image for this generative propulsion from the transcendental field or plane of immanence is that of a falling fruit. "The actualization of the virtual is singularity whereas the actual itself is individuality constituted. The actual falls from the plane like a fruit, whilst actualization relates it back to the plane as if to that which turns the object back into a subject."<sup>29</sup> To relate the fruit back to its ground of genesis is to acknowledge that each constituted individuality is composed of multiple singularities and is therefore always subject to a radical movement of becoming deconstituted and reconstituted differently. Otherwise, individuality would become petrified and frozen into a transcendent object that is eternally the same, either a nondynamic thing that is unchanging, or something that only changes according to an internally programmed telos.

For Deleuze, materiality is nothing other than the plane of immanence. In his collaborative work with Guattari, he suggests that we must "try to

conceive of this world in which a single fixed plane . . . is traversed by nonformal elements of relative speed that enter this or that individuated assemblage depending on their degrees of speed and slowness. A plane of consistency peopled by anonymous matter, by infinite bits of matter entering into varying connections."<sup>30</sup> Unlike dialectical materialism, the dynamism of matter does not derive from the negativity of human creative labor as it shapes and changes the form of (that is, trans-forms) the inert matter of pre-given objects. It is an inhuman dynamism consisting of speeds and intensities that open up the composition of any individual being, putting it into different connections with other particles, thereby leading to its recomposition.

The radical nature of Deleuze's materialism lies in its overturning of the central principle of dialectical materialism: organization. In dialectical materialism, the dynamism of matter comes from the activity or process of organization, the ordering of things through dialectical relations of mutual interdependence such that they become parts or members of a whole, where each part is an organ with its designated function within an integrated or systemic totality. The template of this kind of causality is the organism, a being that is able to spontaneously generate itself by virtue of its capacity for self-organization. This is why I suggested earlier that Marxism is an organismic vitalism. For Deleuze, however, matter as the plane of immanence is a dynamism of the differentiations, speeds, and flows of particles that are prior to any organized form. Following Hjelmslev, Deleuze and Guattari define matter as "the unformed, unorganized, nonstratified, or destratified body and all its flows: subatomic and submolecular particles, pure intensities, pre-vital and prephysical free singularities" (43). The *truly* material body is the body that subsists in the plane of immanence. It is not an organized system but "an aggregate whose elements vary according to its connections, its relations of movement and rest, the different individuated assemblages it enters" (256). Hence, the material body is not an organism but a body without organs.

Here, we touch on a third difference between the materialisms of Derrida and Deleuze. Unlike Derrida, what is affirmed is not a form of haunting or afterliving (*sur-vie*) that interrupts and dislocates the organic form of a living being but the pulsing force of a nonorganic and impersonal life that has infinitely greater vitality than any organism. Indeed, Deleuze suggests that organisms do not genuinely embody life but trap and im-

prison it within an organized form. Organic life is only a form that actualizes the virtual singularities of the plane of immanence by stratifying the flow of forces and constraining singularities in individuals. But organisms can die whereas the plane of immanence in which organized forms are composed is where life itself is liberated from these limited forms. "If everything is alive, it is not because everything is organic or organized but, on the contrary, because the organism is a diversion of life. In short, the life in question is inorganic, germinal, and intensive, a powerful life without organs, a Body that is all the more alive for having no organs, everything that passes *between* organisms" (499).

Inorganic life is the movement at the membrane of the organism, where it begins to quiver with virtuality, decomposes, and is recombined again. It is a life that exceeds the life and death of individual forms: "there is a moment that is only that of a life playing with death. The life of the individual gives way to an impersonal and yet singular life that releases a pure event freed from the accidents of internal and external life, that is, from the subjectivity and objectivity of what happens. . . . A singular essence, a life."<sup>31</sup> The indefinite article of a life indexes virtual singularities prior to their actualization as forms, *and* to the in-between of already actualized forms that are always pulsing with singularity and virtual force. The generative and constitutive relation between inorganic life or the body without organs and the organism always involves force. "The body without organs is . . . a living body all the more alive and teeming once it has blown apart the organism and its organization."<sup>32</sup> But this force is not destructive. Deleuze's privileged figure for inorganic life is the child or the baby. The baby's generative power, he suggests, is emphatically not the destructive force of war. "Combat . . . is a powerful, nonorganic vitality that supplements force with force, and enriches whatever it takes hold of. A baby vividly displays this vitality, this obstinate, stubborn, and indomitable will to live that differs from all organic life."<sup>33</sup>

It is difficult to elaborate on the political implications of Deleuze's understanding of materiality as the power of inorganic life. This is partly because the various figures he employs to characterize this power do not translate easily into our conventional vocabularies of political discourse and institutional practices. Indeed, Deleuze understands institutionalized forms of power as molar forms of organization that stratify and constrain life and counterposes to these forms of organization a micropolitics of

becoming that releases the germinal forces or multiple singularities that make up organic forms.

The more general issue that needs to be raised about the materialisms of Derrida and Deleuze is the following: given that their respective views of the force of materiality derive from a radical ontology (in Deleuze's case) and a delimitation of ontology as such (Derrida), what is the bearing of their materialisms on the political sphere, political institutions, and concrete politics? In dialectical materialism, materiality is connected to concrete politics because material life is defined in terms of creative labor qua negativity and labor is embodied in the proletariat as a sociohistorical subject. In contradistinction, because Derrida understands material force as the reference to the impossible other and because Deleuze views materiality in terms of impersonal and preindividual forces, materiality, even if it is not unfigurable as such, is not easily instantiated by concrete figures that are recognizable by political discourse. In political theory, there has been very little productive engagement with Derrida's attempts to delineate ethicopolitical figures of materiality such as hospitality and forgiveness in his final writings. In Deleuze's case, the use of his concept of multiplicity by Michael Hardt and Antonio Negri, who attempt to embody the multiple in the multitude as a sociohistorical subject that replaces the proletariat in contemporary globalization, requires creative appropriation.<sup>34</sup>

But perhaps the better question to ask is not that of the relevance of these new materialisms to political thought and their implications for concrete politics but how they radically put into question the fundamental categories of political theory including the concept of the political itself. For what we consider as concrete political forms, institutions, practices, and activities, and the discourses that irrigate them such as rational choice theory, positivism, empiricism, and dialectical materialism are underwritten by ontologies of matter and life that the materialisms of Derrida and Deleuze put into question. It is important to note here that although their accounts of materiality concern the coming of the new — the advent of the entirely other that disrupts presence or the opening of actuality to multiple becomings — the force of materiality is not "new." It is a (quasi-)transcendental ground that has been obscured by traditional ontologies. The effectivity of these materialisms lies in the urgency of rethinking the ontological bases of current languages and vocabularies of politics and political thought, beginning, for example, with the very idea of political organiza-



tion. In other words, what is the matter of the political and what is the matter of politics? This may very well open up new domains of the political and lines of political activity that have not been visible before.<sup>35</sup>

## Notes

- 1 See Plekhanov, "The Materialist Conception of History," 20: "By entirely eliminating teleology from social science and explaining the activity of social man by his needs and by the means and methods of satisfying them, prevailing at the given time, dialectical materialism for the first time imparts to this science the 'strictness' of which her sister—the science of nature—would often boast over her. It may be said that the science of society is itself becoming a *natural science*: 'notre doctrine naturaliste d'histoire', as Labriola justly says."
- 2 Engels, "Socialism," 698.
- 3 Ibid., 699.
- 4 See Althusser, "Contradiction and Overdetermination," 93–94: "If the Marxist dialectic is 'in principle' the opposite of the Hegelian dialectic, if it is rational and not mystical-mystified-mystificatory, this radical distinction must be manifest in its essence, that is, in its characteristic determinations and structures. To be clear, this means that basic structures of the Hegelian dialectic such as negation, the negation of the negation, the identity of opposites, 'supersession', the transformation of quantity into quality, contradiction, etc., *have for Marx . . . a structure different from the structure they have for Hegel.*"
- 5 On the epigenetic character of labor as it generates an objective dialectical system, see Marx and Engels, *The German Ideology*, ed. C. J. Arthur, 55–56: "Individuals certainly make *one another*, physically and mentally, but they do not make themselves." Compare Marx, *The Eighteenth Brumaire of Louis Bonaparte*, 146: "Men make their own history, but not of their own free will; not under circumstances they themselves have chosen but under the given and inherited circumstances with which they are directly confronted."
- 6 See Cheah, *Spectral Nationality*, chap. 4.
- 7 Marcuse, *One-Dimensional Man*, 63.
- 8 Derrida, *Specters of Marx*, 168–69.
- 9 Derrida, *Positions*, 64.
- 10 Derrida, *Positions*, 95–96: "I would even say that the alterity of the other *inscribes* in this relationship that which in no case can be 'posed.' Inscription . . . is not a simple position: it is rather that by means of which every position is *of itself confounded (différance)*: inscription, mark, text and not only *thesis or theme* — inscription of the *thesis*."
- 11 Derrida, "As If It Were Possible," 367, translation modified.
- 12 Derrida, "Not Utopia, the Im-possible," 131.

- 13 Derrida, *Specters of Marx*, 75.
- 14 Derrida, "Typewriter Ribbon," 136.
- 15 Derrida, *Specters of Marx*, 153.
- 16 Derrida, "Typewriter Ribbon," 75–76.
- 17 For a fuller discussion of the connections and differences between deconstruction and Althusser's attempt to break away from dialectical materialism in his aleatory materialism or the materialism of the encounter, see Balibar, "Eschatology versus Teleology."
- 18 Derrida, *Specters of Marx*, 63.
- 19 Derrida, "As If It Were Possible," 360.
- 20 Derrida, *Rogues*, 84.
- 21 Derrida, *Politics of Friendship*, 68–69.
- 22 Deleuze, *Difference and Repetition*, 55. Deleuze derives this affirmative conception of difference in part from Nietzsche's concept of the eternal return.
- 23 For Deleuze's account of the transcendental field and his dissociation of the transcendental from consciousness, as well as his critique of the entire tradition of German idealism including Husserlian phenomenology, see *The Logic of Sense*, 98–110, 343–44, n. 5, and "Immanence," 25–28. The quoted passage is from *The Logic of Sense*, 103.
- 24 Deleuze, "Immanence," 26.
- 25 Note that in German idealism, the virtual or ideal is seen as synonymous with what is merely possible since ideas are principles of reason rather than objects. The idea is then opposed to the actual, which is synonymous with the real. Deleuze loosens the identification of the actual with the real and expands the real to include the virtual as a power.
- 26 Deleuze, *Difference and Repetition*, 209.
- 27 For a fuller elaboration of the relation between the virtual and the actual, see Deleuze, "The Actual and the Virtual."
- 28 Deleuze, *Difference and Repetition*, 212.
- 29 Deleuze and Parnet, "The Actual and the Virtual," 149–50.
- 30 Deleuze and Guattari, *A Thousand Plateaus* (Minneapolis, 1987), 255.
- 31 Deleuze, "Immanence," 28–29.
- 32 Deleuze and Guattari, *A Thousand Plateaus* (Minneapolis, 1987), 30.
- 33 Gilles Deleuze, *Essays Critical and Clinical*, 133.
- 34 Hardt and Negri, *Empire*.
- 35 I have attempted a critical assessment of Derrida's idea of democracy to come in "The Untimely Secret of Democracy."

*Diana Coole*

## The Inertia of Matter and the Generativity of Flesh

The predominant sense of matter in modern Western culture has been that it is essentially passive stuff, set in motion by human agents who use it as a means of survival, modify it as a vehicle of aesthetic expression, and impose subjective meanings upon it. This view of inert matter as inherently devoid of agency or meaning and as heterogeneous to consciousness has an elaborate provenance in classical science and philosophy, but it also seems congruent with, and indeed presupposes, a commonsense, naturalistic attitude which takes for granted a natural world "out there" as an essentially given collection of objects. Yet is it not possible to imagine matter quite differently: as perhaps a lively materiality that is self-transformative and already saturated with the agentic capacities and existential significance that are typically located in a separate, ideal, and subjectivist, realm? If so, what kind of conceptual or metaphorical resources might help us moderns evoke this immanent generativity? Is it possible to understand a process of materialization and the nature of its fecundity, to grasp matter's dynamic and sometimes resistant capacities, without relying upon mysticisms derived from animism, religion, or romanticism?

In this essay I draw on elements of Maurice Merleau-Ponty's pursuit of a new ontology as a way to approach such questions, albeit with some additional help from

Cézanne, Leibniz, and Deleuze. Since Merleau-Ponty did not explicitly pose his research in quite these terms, and his later writings remain very much works in progress, it has been necessary to reconstruct and develop some of the tantalizingly sketchy yet provocative overtures which suggest that the French phenomenologist was envisaging a radically new materialism. This is already implicit in early work on the primacy of perception, and it is this primacy, together with the consequent emphasis on corporeality as productive negativity, that remains at the heart of Merleau-Ponty's account of material existence as folded flesh.<sup>1</sup>

The aim of existential phenomenology as Merleau-Ponty understood it is to return to lived experience before it is written over and objectified by theory. "The first philosophical act would appear to be to return to the world of actual experience which is prior to the objective world" in order to "restore to things their concrete physiognomy" and thereby to undertake a "genealogy of being."<sup>2</sup> For him, this meant suspending our habitual assumptions about the visible realm in order to look afresh at the genesis of the perceptual world. Empiricism, Merleau-Ponty complains, robs sense experience of all mystery by reducing it to physico-chemical processes and causal relationships of stimulus and response. In modernity, only romantics like Herder retained a richer appreciation of a sense experience that yields "not 'dead' qualities, but active ones" (52). The task of a phenomenology of perception is accordingly to rediscover that "vital communication with the world" which precedes yet is taken for granted by the physicist's "freezing of being." "We must rediscover the origin of the object at the very core of our experience; we must describe the emergence of being" and with it, a "certain energy in the pulsation of existence" (71, 80). This is what is achieved by recognizing the body as "the pivot of the world" and nature as a phenomenal field inhabited by bodies as beings-in-the-world. Merleau-Ponty's aim, as I see it, is to explain a generative, self-transformative, and creative materiality without relying on any metaphysical invocation of mysterious, immaterial forces or agencies.

### The Death of Nature / Matter

In order to appreciate the novelty of this approach to matter, it is helpful to reconstruct some relevant aspects of the Cartesian view that is Merleau-Ponty's principal target. Descartes had rejected materialist arguments that

everything is matter. His approach is that of the rationalist, who deduces the coordinates of materiality rather than constructing it from sensuous experience or empirical observation.<sup>3</sup> Ontologically dualist, he distinguishes between thinking substance, *res cogitans*, and extended substance, *res extensa*, the latter being a single but infinitely modifiable substance of matter in extension. There are local velocities and vortices that individuate matter into particles, here, but its separate parts are simply juxtaposed, *partes extra partes*, like grains of sand. According to this Cartesian account, matter and space are inseparable. Matter occupies space and inversely, whatever occupies space is matter, whose sole irreducible property is extension. Its coordinates yield the kind of grid-like arrangement one finds in many American cities and they render matter a fundamentally quantitative phenomenon, amenable to precise measurement and, in particular, to the sort of calculations facilitated by Euclidian geometry, which for Descartes was the science of matter par excellence. Despite subjecting its existence to methodical doubt, Descartes concluded that matter does exist in the sort of mechanical, mathematical way he describes. This is quite antithetical to the phenomenological understanding of its perceptual emergence, for which "Nature is not in itself geometrical."<sup>4</sup>

Some of the more interesting aspects of the Cartesian understanding of matter are indeed what it excludes. As sheer exteriority, matter is devoid of interiority or ontological depth. It is without qualities like color or smell, which are relegated to secondary qualities and classified as unreliable, unstable sensations that are attributed by thought rather than being intrinsic to matter. Matter's geography is one of straight lines and rectangles rather than a topography of curves or labyrinths. As such, it is laid out before the searchlight of reason, the *lumen naturale*, without dark recesses, crevices, or hollows. Cartesian matter is unaffected by time or negativity, although it does obey laws of cause and effect. It is inert stuff emptied of all immanent vitality: Descartes's work is resolutely antivitalist. On the one hand, his philosophy is radically subjectivist. The thinking subject (*cogito*) is able to understand matter by deploying the correct, deductive method. Because, moreover, matter is without value or internal qualities or significance, it is not forbidden for this subject to control the material domain that is, for Descartes, synonymous with nature (including animals, whose lack of a soul or self-awareness renders them mere automata). Subjectivity is from this rationalist perspective immaterial (disembod-

ied), potentially omniscient, and legitimately omnipotent. On the other hand, although Descartes's account is anthropocentric inasmuch as it depends on deductions made by the thinking subject, it is not humanist because it relies ultimately on God who is, strictly speaking, the only Substance and the One on which all else depends. It is God who guarantees the correspondence between exterior nature and mind and who finally therefore lays to rest the specter of skepticism. Having deduced that God must have created and set in motion the great cosmic machine, however, Descartes concludes that its divine creator thence vacated it, leaving behind a mechanism that is amenable to the calculations and deductions of reason.

In summary, Cartesian matter is as intrinsically empty of metaphysical purposes or ends as it is devoid of animistic or human spirit. This is what sets it free for modernity's secular and technoindustrial projects, thereby granting to Cartesian discourse an efficacy in regard to matter's subsequent adventures that would have been inconceivable in the seventeenth century. It is this apparently postmetaphysical sense of the material realm that would pave the way for Newtonian mechanics and provide the foundation for classical physics until the late nineteenth century, whence it would be modified by a language of fields and forces and, in the twentieth, by theories of relativity and elementary particles. Merleau-Ponty contends that it is impossible to reappraise humanism until the Cartesian perspective that "still overhangs ideas about nature" has been laid to rest since "an ontology which leaves nature in silence shuts itself in the incorporeal and for this very reason gives a fantastic image of man, spirit and history."<sup>5</sup> This is why nature's internal productivity needs to be "understood in some other way."

What Cartesianism most explicitly broke away from was the prevailing Aristotelianism, which had itself understood natural productivity in another way. For Aristotle, nature (*physis*) was not coextensive with matter (*hulē*) because, although natural objects are composed of matter, they have an actuality that matter has merely the potential to achieve. As such, matter acquires its full meaning or form only relative to nature, which is in turn characterized by its immanent, formative efficacy. The survival of some of Aristotle's main terms — *physis* (nature; in Latin, *natura*), *morphe* and *eidos* (shape and form), *telos* (end; in Latin, *finis*), *enteleখেia* (actuality, completeness), *energeia* (activity) — within subsequent philosophies

of nature is testimony to his ideas' enduring legacy. Aristotle's account of nature's generative immanence, as *sui generis*, serves as a counterpoint to Descartes's unproductive alternative, but it also remains saturated with metaphysical, teleological assumptions.

### Rethinking Nature: Beyond Mechanism and Mysticism

Debates about matter and its relationship with consciousness or qualitative meaningfulness are often still conducted in terms of the very oppositions Descartes proposed: between subject and object, or mind and body. Merleau-Ponty's critique, too, is often conducted as a rejection of such *binary* oppositions. He shows how these reify and separate processes that are irreducibly interwoven within the perceptual lifeworld. But in his later writings there sometimes surfaces an intriguing additional challenge to a *triadic* classification whose vestiges he finds still suffusing modern thinking.<sup>6</sup> Planning a return to ontology, he now determines that his project "must be presented without any compromise with humanism, nor moreover with naturalism, nor finally with theology . . . to show that philosophy can no longer think according to the cleavage: God, man, creatures."<sup>7</sup> This is echoed in his lectures on Nature, where he claims that there is "a unique theme of philosophy: the *nexus*, the *vinculum* 'Nature'-'Man'-'God?'"<sup>8</sup> What are we to make of this cryptic assertion? It surely encapsulates his realization that what is at stake in reconceptualizing materiality is how to describe an emergent, internally productive materiality without recourse to mechanistic or mystical assumptions or to the notions of causality and finalism (teleology) that are respectively associated with them. His account of folded, reversible flesh will be his way of finessing this nexus so as to avoid both unwarranted ontological distinctions and the naturalist, humanist, and theological presuppositions associated with them. Nature, Merleau-Ponty suggests, is an ontological leaf "divided into folds, doubled, even tripled. . . . There are no substantial differences between physical Nature, life, and mind" (212). To be faithful to it, one must pursue an ontology that "defines being from within and not from without," where "Nature, life, Man" are understood as manifestations of diverse folds rather than as essentially separate categories (220).

That Merleau-Ponty was considering a return to ontology in these terms has only become clear since the publication of three lecture courses

he delivered between 1956 and 1960, collectively entitled *Nature*. One function of these lectures was evidently to help him work through issues he would need to address in the ontology that emerges in the unfinished chapters and working notes of *The Visible and the Invisible* (in process between 1959 and his death in 1961). The lectures offer critical reflections on philosophical and scientific accounts of nature, but they also invoke a primordial, "prehuman" realm of wild Being. If they elicit the theological and rationalist presuppositions that cover over this emergent, existential realm, they also show how entangled these apparently antithetical approaches to nature remain. Far from displacing metaphysics, Merleau-Ponty shows, scientific categories of space, time, matter, causality, and agency are legacies of a theological affirmation of Substance qua God as Unity, and they need to be rethought in their entirety (88, 112). Elsewhere he surmises that modernity's conceptions of acts or states of consciousness, as well as its understanding of form, perception, and matter, all require a fundamental reconfiguration.<sup>9</sup>

Examining philosophies of nature since the ancients, the first lecture course recognizes that these inevitably entail ontological claims about Being. It identifies an enduring tension between accounts of nature's auto-productive genesis and those of its mechanical repetition. Merleau-Ponty addresses this tension by invoking a distinction between *natura naturans* and *natura naturata* that he traces to the twelfth-century Andalusian-Arab philosopher, Averroës.<sup>10</sup> The first term may be literally translated as "nature naturing," that is, as producing itself, while the second may be translated as "nature natured," that is, created forms. The former is thus a verb, intrinsically and internally dynamic; the second, a noun, suggesting greater inertia and heteronomy. Much depends on their relationship, in particular whether the producing and the produced are aspects of a single process that is immanently generative of its own forms or assemblages — as Spinoza (*conatus*), Nietzsche (*will to power*), Bergson (*élan vital*), or Deleuze (*difference*) generally suggest and as Merleau-Ponty's ontology of flesh entails — or whether these are distinct terms whose linkage is more or less contingent: for example, as cause and effect, maker and machine, force and form, subject and object. A good deal also hinges on the kind of agency that is bestowed on the "naturing" force (the *naturans*) regarding its efficacy or pedigree and whether it is internal or external to materialization. What is at issue, then, is whether nature is internally productive of

itself—such that there is an immanent and irreducible relationship between creating and created that renders matter a lively process of self-formation—or whether matter is inert stuff that is worked upon by some immaterial force or agency external to it, such as God or the subject. If such concerns seem rather arcane, it is germane to anticipate Merleau-Ponty's demonstration of their continuing salience for postclassical physics and the "new biology."

In pre-Socratic thought, Merleau-Ponty explains, nature had remained enigmatic; it was considered inhuman yet fecund. Already in Aristotelian and Stoic thinking, however, this primordial ground was being covered over and imbued with finalist notions of destiny. But if finalism and causality would subsequently emerge as opposing ways of setting matter in motion, Merleau-Ponty's critique of Descartes suggests that they are not after all entirely antithetical since they share certain metaphysical assumptions. Despite the new understanding of nature that emerged with Descartes and the transition to science, he contends, Descartes and Newton did not reject the idea of finality associated with an end or the perfectibility of nature; they merely sublimated it in an idea of God as infinity, derived from the Judeo-Christian tradition.<sup>11</sup>

Merleau-Ponty argues that, although it was the way Descartes interpreted God's role that paved the way for his sense of nature as infinitely extended matter, this also infused modern science with vestiges of religion. "The concept of Nature is mixed with the concepts of God and human being in Cartesian thinking" (131). Indeed, the scientific conception of nature often, he claims, remains "entirely theological in its infrastructure" because it is still informed by a philosophy of Substance (88). Where Descartes was nevertheless original was in "doubling" or differentiating nature, "as *naturans* and as *naturata*," which had the effect of separating its interiority and exteriority. The productivity that had for the ancients been internal to and of nature was now located in a God whose agency was external to it, with nature persisting as a mechanical system that nevertheless manifests His perfect laws inasmuch as like Him, it is an infinite, homogenous positivity.<sup>12</sup> "*Meaning finds its refuge in the naturans; naturata becomes product, pure exteriority*" (9). This view of nature/matter as self-identical positivity is criticized by Merleau-Ponty because the absence of any temporality, lack, or weakness in its fabric,

inherited from theological ideas of God's perfection, means that it is without negativity or difference to set it in motion. It is therefore bereft of contingency or possibility for self-transformation, too: there is no "scope for any difference between actual and possible beings." This is why Cartesian matter is dead and anathema to the phenomenologist: what Descartes describes is a uniform, static world regulated by necessity and devoid of generativity, virtuality, or vitality. Descartes "undoes the unreflected communication with the world" (126) with which phenomenology begins.

Kant, by contrast, humanized the *naturans* by identifying it with human consciousness (the "return to human being appears as the return to a *naturans* that operates in us" [22]). But Merleau-Ponty insists that this destroys the interiority and productive immanence of matter as thoroughly as do mechanistic accounts since it similarly entails a migration of nature's self-transformative powers into an external agency. In both cases, productivity vacates nature and is ascribed to an external, idealized authority. The reproduction of universal laws is a poor substitute for nature's contingent exuberance.

It is because they endeavor to retain this inherent exuberance that Merleau-Ponty is sympathetic to romantic and vitalist efforts that he interprets as trying to reunite *natura naturans* and *natura naturata*. He is nevertheless concerned that in (re)turning to philosophies of immanence, they risk reviving the theological and teleological senses of internal productivity that render such approaches vulnerable to mysticism. Schelling, for example, is accorded an important role in the lectures (although not in Merleau-Ponty's published work) inasmuch as he sought a "phenomenology of prereflexive Being" (41) that anticipates later efforts by Bergson, Husserl, and Merleau-Ponty himself. Schelling is credited with trying to reunite *naturans* and *naturata* by describing a "sort of pure, unmotivated surging-forth" where nature is productivity anterior to reflection: a terrifying and barbaric excess that is the fundamental stuff of life (37). There is no essential difference between organic and inorganic nature in this account; they are merely potencies with different powers of organization such that inanimate matter becomes living being through its internal development. This already anticipates a common thread running through many new vitalisms and materialisms.

In Schelling's romantic version it is because there is no rupture that

nature remains intuitively accessible to us through perception or poetry. He had wanted to live and feel this productivity. Yet this is where his romanticism failed him in Merleau-Ponty's opinion. For while he held on to a certain obstinacy of nature as irreducible to reflection and recognized the creativity required to access it, Schelling presented art as an experience of subject-object identity, thereby reestablishing the indivisibility of consciousness and nature broken by reflection. Merleau-Ponty detects an element of mysticism in this desire for unmediated fusion, where according to Schelling we become one with nature in order to think it. The fact that Merleau-Ponty's criticism is largely delivered by way of proxies, that is, via critiques of Hegel and Lukács, suggests that a broader issue is at stake here. Subject-object identity and a romantic or teleological view of non-alienated nature (as origin and telos) portend a violent political legacy, as Merleau-Ponty had shown in his critique of Marxism in the more or less contemporaneous *Adventures of the Dialectic*. The ambition of intuitive coincidence is sheer mysticism, he concludes, just as the illusion of representational correspondence is confused positivism.

Merleau-Ponty's excursus through philosophy's conceptions of nature ends with Husserl, a thinker to whose later work he owed a considerable debt. This is the Husserl who renounced transcendental idealism once he realized that the "role of phenomenology is not so much to break the bond that unites us with the world as to reveal it to us and explicate it" (71), and who had referred to the lifeworld (*Lebenswelt*) as a "new" or "third" dimension of previously unknown phenomena that unfolds between and beneath the oppositions presupposed by common sense, philosophy, and science.<sup>13</sup> In alluding to this third, existential dimension, Merleau-Ponty claims, Husserl glimpsed the enigma of sensible things plus the virtual, thereby suggesting a postdualist ontology of "wild-flowering world and mind"; a "jointing and framing of Being" wherein there is "a *genesis of sense*."<sup>14</sup> From the perspective of the lectures, it is apparent why this phenomenological project of returning to the lifeworld would have commended itself both as a resolution to the separation of *natura naturans* and *natura naturata* and as an account of the productivity of the *naturans* as inherent in corporeal, existential processes that are irreducible to mechanism, subjectivity, or mysticism. It is from this perspective that modernity's untenable triad of naturalism, humanism, and theology is to be overcome.

### The Phenomenological Return to the Lifeworld

If for Merleau-Ponty it is corporeality that introduces meaning or structure into matter, this is because the body literally incarnates material capacities for agency. Existence is for him an internally productive, *formative* process wherein meaning and matter are irreducibly interwoven: "the very process whereby the hitherto meaningless takes on meaning."<sup>15</sup> The phenomenological task is to show how consciousness emerges from, yet remains enmeshed in, this material world. To remain faithful to its own insights here, it "must plunge into the world instead of surveying it."<sup>16</sup> Crucially, this does not entail a precritical return to the immediately given or the sort of intuitive coincidence Merleau-Ponty criticizes in Schelling (and Bergson). He never forgets that "our idea of nature is impregnated with artifice."<sup>17</sup> Our apprehending nature/matter entails a raft of bodily accomplishments, linguistic practices, and cultural assumptions that are integral to nature's unfurling and to our own place within it. Reversals, lines of force, and folds ripple across the phenomenal field to render its materiality multidimensional, contingent, and overdetermined. For the phenomenologist there is a critical obligation to interrogate every presupposition, including the one that assumes some pristine material reality awaiting discovery beneath our constructions. When phenomenology strives to describe the presubjective, primordial processes that yield and sustain reflective consciousness, it also participates in a creative disclosing of "*Lebenswelt* as universal Being," whence "all the particular analyses concerning Nature, life, the human body, language will make us progressively enter into the *Lebenswelt* and the 'wild being.'"<sup>18</sup> Making "a philosophy of the *Lebenswelt*" thus proceeds as an interrogative, iterative, creative process. For the "brute or wild Being (= the perceived world)" to which it returns "is at bottom Being in Heidegger's sense, which . . . appears as containing everything that will ever be said, and yet leaving us to create it" (170). This is why Merleau-Ponty maintains that phenomenology's target is not, "like Bergsonian intuition, that of a reality of which we are ignorant and leading to which there is no methodical bridge."<sup>19</sup> The folded, indeterminate field of existence defies all attempts at intuitive coincidence or absolute knowledge. But one can "plunge" into it, watching with wonder as new meanings emerge and striving creatively to express, indeed to

emulate, the *formative* process before it is overwritten by reifying discourses and performances.

For Merleau-Ponty, references to an essential consciousness, subjectivity, or mind are but reifications of contingent, disparate capacities to structure and stylize the world that emerge hazardingly through and within corporeal practices. It is therefore corporeality that is privileged as *naturans* in this account, inasmuch as it is here that productive difference and agentic capacity emerge through being-in-the-world. The qualities Descartes designated as secondary and external now lend to objects a sensuous unity that is meaningful for the body because it has existential familiarity as a style of being — “a certain rhythm of existence” — that is recognized as a variant of the body’s own and thereby delivered to it “in the flesh” (212, 319, 320). The antithesis between matter and ideality, or between materialism and idealism, is thus overcome at both the corporeal level (by perception) and the philosophical level (by phenomenological interrogation). The body knows the world “laterally, by the *style*.”<sup>20</sup> For the phenomenal body “is *not* a mass of matter, it is rather a standard of things,” a level around which divergences form, a “measurant of the things” that thereby brings “an ideality that is not alien to the flesh” and which grants it “its axes, its depth, its dimensions.”<sup>21</sup> The body is accordingly “a frontier which ordinary spatial relations do not cross.”<sup>22</sup> Corporeal space is lived spatiality, oriented to a situation wherein the lived/living/lively body embarks on an architectural dance that actively spatializes (and temporalizes) through its movements, activities, and gestures. The body introduces patterns, intervals, duration, and affects into Cartesian or Euclidian space from within it, and it continuously reconfigures its own corporeal schema in responding to and recomposing its milieu (*Umwelt*).

It becomes clear on reading the *Nature* lectures how important this last term, developed by Jacob von Uexküll, was to Merleau-Ponty’s sense of a body enveloped in its environment. Giorgio Agamben will later refer to Uexküll as one of the twentieth-century’s greatest zoologists and credit him with the “unreserved abandonment of every anthropocentric perspective.”<sup>23</sup> It was partly thanks to Uexküll’s work that Merleau-Ponty was able to conclude in the late 1950s that the quarrel between (mechanistic) materialists and vitalists had been resolved through their mutual appreciation of form (*Gestalt*).<sup>24</sup> Uexküll’s sense of *Umwelt* as an “intermediary reality” (167), the between, serves here as the animal equivalent to Husserl’s

*Lebenswelt*. Already operative at the organic and embryonic levels, the *Umwelt* is the environment to which behavior is practically oriented through experiencing stimuli as meaningful signs. For lower animals, according to Uexküll, their *Umwelt* operates as a closure that allows entry only to those stimuli that are immediately relevant to their lives. But for higher animals, it operates as an opening wherein behavior and perception “deposit a surplus of signification on the surface of objects” and life is understood as “the opening of a field of action” (171, 173). It was on this basis that the new biology understood animal cells and even the human species as particular modes of “conrescence” within the natural process, and the body as a behavioral Gestalt situated within an environment (*Umwelt*). In particular, it rejected the model of the organism as a physical machine animated by consciousness or by some vital spark, describing instead an emergent, future-oriented but open organization that is immanent to the organism (“the spirit is not what descends into the body in order to organize it, but is what emerges from it” [140]). The animal is accordingly conceptualized as a field rather than a machine, its behavior being produced from a system of emergent motor powers. While Merleau-Ponty warns against importing finalist assumptions into this process, he applauded this new biological sense of life as a contingent unfurling of possibilities whose development is not predetermined and whose vitality is strictly immanent. “It is not that life is a power of being or a spirit, but rather, that we install ourselves in perceived being/brute being, in the sensible, in the flesh” (210).

### Painting “Inhuman Nature”

In trying to glimpse the lifeworld as it unfolds, the phenomenologist “steps back to watch the forms of transcendence fly up like sparks from a fire.”<sup>25</sup> Because of a tendency for language to reify meaning, however, Merleau-Ponty suggests that the painter is in some ways more adept at the process of inventive disclosure than the thinker. His exemplar here is Cézanne, whom he credits with being a phenomenologist *avant la lettre*. By suspending our everyday, anthropocentric assumptions about familiar objects, Cézanne’s painting draws attention to their precarious perceptual emergence, while his reflections on his experience of painting also reveal something of the creative engagement with the world that effaces any rigid distinction between creator and created. “We live in the midst of

man-made objects, among tools, in houses, streets, cities, and most of the time we see them only through the human actions which put them to use. We become used to thinking that all of this exists necessarily and unshakably. Cézanne's painting suspends these habits of thought and reveals the base of inhuman nature upon which man has installed himself.<sup>26</sup> Human artifacts and natural objects are generally just treated as the taken-for-granted material background and paraphernalia of our everyday lives. We rarely pause to consider the contingent processes through which our familiar, visible world comes into being, not only through the hard labor of production and the economic hierarchies that structure it, but also via the creative contingencies of perception. Art can help us suspend these naturalistic and humanistic habits by encouraging us to observe the very "fabric of brute meaning" as it takes shape.<sup>27</sup> Like philosophy or the body, painting is also a fold; it expresses the "reflexivity of the sensible" whereby it becomes "impossible to distinguish between what sees and what is seen, what paints and what is painted."<sup>28</sup> When Merleau-Ponty quotes Cézanne — "The landscape thinks itself in me and I am its consciousness"<sup>29</sup> — it is to draw attention to the way the artist's body poses a question to a world whose vectors seem in response to "emanate from the things themselves, like the patterns of the constellations."<sup>30</sup> This, too, is congruent with a description of folded flesh as immanently generative. "There is no break at all in this circuit; it is impossible to say that nature ends here and that man or expression starts here. It is, therefore, mute Being which itself comes to show forth its own meaning."<sup>31</sup> This is not an act of mastery, but the self-disclosing of matter that is "'pregnant' with its form" and "that poses itself by its own means."<sup>32</sup>

For the rationalist, depth is deduced from two-dimensional height and length; for the phenomenologist, it is integral to the embodied experience of living among things. When the body moves around in space, it does not perceive things with the relative sizes objective calculation would predict. It does not inhabit a flat, geometrical, fully determinate plane but a milieu, an *Umwelt* that remains ambiguous, indeterminate, and resonant with an expressive significance that affects the body's perception of spatial relations. Merleau-Ponty discerns Cézanne as trying to capture these perspectival distortions as they occur in perception, in order to convey "an emerging order;" where the object is "in the act of appearing, organizing itself before our eyes."<sup>33</sup> In his Cubist phase he shattered things' spatial shells as

he struggled to convey depth by expressing their "voluminosity," with all perspectives and dimensions coexisting. But later he recognized the inadequacy of pure forms because it was inside them that "the things began to move, color against color; they began to modulate in instability."<sup>34</sup> Color seems to catch this internal generativity of visibility so much better than shape or line because it creates subtle identities and differences that allow a painting to break the "skin of things" and show them emerging into visibility. During his impressionist phase Cézanne thus tried to capture "the very way in which objects strike our eyes and attack our senses. Objects are depicted as they appear to instantaneous perception, without fixed contours, bound together by light and air." He wanted, Merleau-Ponty comments, "to depict matter as it takes form, the birth of order through spontaneous organization."<sup>35</sup>

As opposed to rationalism's objects, petrified in space and time, or its formal calculation of perspective, Cézanne's painting brings the material world alive; it does not measure or represent reality but emulates the way it materializes in perception. A formal focus on contours that define objects or calculation that places them correctly in their relative spatial relations, in order to achieve perspectival depth, is recognized by Merleau-Ponty as the artistic equivalent of the physicists' Euclidian coordinates: the space that is "positive, a network of straight lines" and appropriate to classical ontology. For Descartes in his *Optics*, art was a representation of extension, and perspective was crucial for portraying the right order of things, while color was mere ornamentation.<sup>36</sup> This Cartesian metaphysics in turn informed those classical artists who calculated perspective in the belief that it would allow them to present nature more accurately. For Merleau-Ponty, this ostensible realism is however but one possible artistic style and an impoverished one at that. "I say that Renaissance perspective is a cultural fact, that perception itself is polymorphic and that if it becomes Euclidian, this is because it allows itself to be oriented by the system." The challenge is to suspend this culturally fashioned perception in order to uncover the "vertical" world of "brute" or "wild" perception as it emerges.<sup>37</sup>

This emphasis on perspective has broader ramifications inasmuch as perspective presumes an idealized observer from whom vision emanates. The body-subject must have a perspective because it is situated, enveloped in space and time. This is why Merleau-Ponty rejects the conceit of the



bird's-eye view that surveys a material plane laid out before its gaze or understanding. In moving to an antihumanist ontology of flesh, he would therefore need to maintain this sense of perspective yet eschew its subjectivist or anthropocentric implications. He did so, I suggest, by *multiplying* perspectives, a move made feasible by the recognition that bodies and objects are simultaneously seeing and seen, such that the rays or arcs of vision/visibility that crisscross the visual field emanate simultaneously from each profile of every object, all jostling together and intersecting to gestate and agitate the dense tissue of relationships that constitute the flesh and to place the philosopher everywhere and nowhere. This image of coexistence as an intercorporeal field then suggests a pre- or postclassical "topographical space": a "milieu in which are circumscribed relations of proximity, or envelopment."<sup>38</sup>

There are many places, too — such as when he defines the perceptual Gestalt as "a diacritical, oppositional, relative system," or perception as being "structured as a language," or life as "the establishment of a level" around which divergences form, a "system of oppositions"<sup>39</sup> — where the influence of structural linguistics is apparent in helping Merleau-Ponty to conceptualize a productivity that is attributable solely to differentiation and relationality. It is this kind of shifting differentiation that breaks up the positivity of nature to yield its contingent, febrile productivity. But unlike the unhinged, linguistic plays of *différance*, existence has its gravitational points that lend it meaning and direction (*sens*), and these are bodies. They coexist within a relational field that loops and effervesces around and through them, where flesh folds over itself to engender, traverse, and "animate other bodies as well as my own."<sup>40</sup> All are caught in the pell-mell of an anonymous, prepersonal visibility with whose "modulations" and "reliefs" they enjoy existential contact, whence they are caught in the circuitry of a world whose intercorporeal, "intermundane space" they inhabit.<sup>41</sup> Such is the immanent generativity of existence.

### Folded Matter

I have suggested that corporeality, painting, and philosophy all exemplify folds within existence. I end this essay by exploring this notion of folded matter a little further, by suggesting Merleau-Ponty's possible indebtedness to Leibniz. In his *Phenomenology of Perception*, Merleau-Ponty writes

of the body-subject that "I am not, therefore, in Hegel's phrase, 'a hole in being,' but a hollow, a fold, which has been made and which can be unmade."<sup>42</sup> The emergence of living being from physical matter is later described as a surging forth that opens a spatiotemporal field, with life itself now being described as "a fold."<sup>43</sup> Nature's capacity for productive relationality and reflexivity is derived by Merleau-Ponty from Husserl's account of two hands touching: "When I touch my right hand with my left, my right hand, as an object, has the strange property of being able to feel too."<sup>44</sup> In the flesh of my fingers, each digit is both objective and phenomenal: "outside and inside of the finger in reciprocity, in chiasm, activity and passivity, coupled," mutually encroaching, with things touching me as I touch them and myself.<sup>45</sup> This reversibility is nonetheless an "ambiguous set-up" because the reversal between touching and touched "always miscarries at the last moment," such that there is a "shift" or "spread" (*écart*) between them (9, 138, 147f., 254). Indeed, if this slippage or noncoincidence did not occur there would be only inert repetition rather than the "dehiscence" that "opens my body in two" as a productive "difference between the identicals" (263). Merleau-Ponty is explicit that "*reversibility* is not actual *identity*" but equally that "this divergence is not a *void*, it is filled precisely by the flesh as the emergence of a vision, a passivity that bears an activity — and so also the divergence between the exterior visible and the body which forms the upholstery [*capitonnage*] of the world" (272). It is this chiasm — between touching and touched, activity and passivity, phenomenal and objective being — that grants the body its capacity for "double sensations" and which opens it onto a world or, to express it more ontologically, this is Being, flesh, existence, opening itself to contingency, meaning, and self-transformation; a hollowing out whereby interiority, dimensionality, and productive differentiation occur.

It is in this context that the terminology of the fold proliferates in the later ontological writings. "The only 'place' where the negative would really be is the fold, the application of the inside and the outside to one another, the turning point" (264). It is due to this folding that "the body is not an empirical fact" but the reverse or other dimension of sensible being (255), yielding a body "of two leaves" (137), an agentic thing among things: a "*sensible for itself*" (135), an "exemplar sensible" (135), a "sensible sentient" (136), a "two-dimensional being" (136), "subject-object."<sup>46</sup> Such is the "realization of life as a fold or a singularity of physiochemistry

— or structure.<sup>247</sup> There is no external or mystical power at work here, no subject or God, no new force; there is merely existence and corporeity enfolded along a spatiotemporal shift. Merleau-Ponty is adamant that there is no teleological presumption. Rather, there are folds, deferrals and reversals that render flesh productive and emergent yet contingent. This notion of folding is sometimes used in conjunction with that of envelopment (*Ineinander*), as when Merleau-Ponty refers to “the wrapping of the body-object around itself.”<sup>248</sup>

Deleuze will acknowledge that “it was Merleau-Ponty who showed us how a radical, ‘vertical’ visibility was folded into a self-seeing.” He explains that it “is as though there were an ‘opening,’ a ‘gap,’ an ontological ‘fold’ which relates being and the question to one another. In this relation, being is difference itself.”<sup>249</sup> This sense of opening is related by Deleuze to an antihumanist, Heideggerian sense of *Dasein* (being-there) that he thinks Merleau-Ponty appreciated (as distinct from Sartre, who erroneously humanized it as human subjectivity). He also notes Foucault’s indebtedness to Merleau-Ponty as Foucault eventually understood subjectivization as a fold, with moving matter replete with an interiority constituted by its folding, such that it “resembles exactly the invagination of a tissue in embryology.”<sup>250</sup> The advantage of this imagery of folding is that it allows a sense of matter as pleated, creased, rippled, hollowed, and reflexive without ascribing its interiority to any essentialist notion of consciousness. It is where, following Merleau-Ponty, one can identify immanent agentic capacities in Being’s creative effulgence.

Merleau-Ponty was nonetheless still dissatisfied with the language he was deploying to describe the reversibility of flesh. Perhaps this is because it is tempting when one thinks of a fold to imagine a piece of cloth neatly, if not quite perfectly, laid over itself. Although this is suggestive of a certain difference, it surely does not capture the density or hollowing that he wanted to evoke. He urges himself, moreover, to avoid “thinking by planes and perspectives,” cognizant no doubt that an imagery of layers, dimensions, vectors, and rays is still reminiscent of the Euclidian geometry he eschews. He therefore considers substituting a more curvilinear terminology, where the body’s reversibility might be better described as “two circles, or two vortices, or two spheres, concentric when I live them naively, and as soon as I question myself, the one slightly decentered with respect to the other.”<sup>251</sup> This is surely more congruent with the topographi-

cal space he cites as the milieu of envelopment and where there are — as Cézanne had shown — primordial relations of proximity irreducible to matter as extension.<sup>52</sup> It is also more consonant with life understood not as “a hard nucleus of being, but the softness of the flesh” qua an investment, installation, relief, or “watermark” in Being.<sup>53</sup> Inasmuch as the fold is imagined as a two-dimensional folding back or folding over of two planes, it is not therefore quite satisfactory. I would like, however, to suggest that Merleau-Ponty also entertained a rather richer sense of the fold, which is indicated by the references to coiling, labyrinths, hollows, watermarks, soft flesh, and vortices, and for which his inspiration may have been Leibniz.

This connection is not simply fanciful. Although he never wrote in detail about Leibniz, Merleau-Ponty refers to him on enough occasions to show familiarity with his work. In his *Phenomenology*, for example, he associates Leibniz with a way of describing the visual field from the sort of nonanthropocentric, “perspectiveless position” that he will aspire to in his own ontology.<sup>54</sup> Elsewhere he includes Leibniz among those thinkers of the Baroque age who still recognized “beneath the chain of causal relations, another type of being which sustains that chain without breaking it. Being is not completely reduced or flattened out upon the level of external Being. It still has interiority.”<sup>55</sup> Sometimes he refers to politics as a labyrinth, which is, as Deleuze explains, a multiplicity of folds.<sup>56</sup> Finally, there are twelve references to Leibniz in the final working notes, with Merleau-Ponty stating that “I clarify my philosophical project by recourse to Descartes and Leibniz” and several times repeating his intention to explore Leibniz’s ontology, where he will substitute being-in-the-world for Leibniz’s God but will in other respects maintain “entirely” certain of Leibniz’s descriptions, only ridding them of their substantialist and onto-theological elaborations in order to apply them to wild Being.<sup>57</sup>

So Merleau-Ponty was certainly intrigued by Leibniz. But if his allusions to folding do incorporate a Leibnizean sense, what might the implications have been for his description of emergent materialization? One advantage would have been the radically anti-Cartesian, anti-Newtonian rhythms of matter it suggests. Thus David Harvey associates Leibniz with a “relational concept of space,” which “holds that there is no such thing as space or time outside of the processes that define them.” Processes accordingly define their own spatial frame, with an event or object depending on

the multiplicity of disparate influences swirling and congealing around it.<sup>58</sup> Deleuze aptly mentions that the exemplary science of the fold is not Euclidian geometry but origami. He notes anticipations of Leibnizean folding among those pre-Socratics whose enigmatic philosophies of nature fascinated Merleau-Ponty, but he also finds it echoing within post-classical physics (as in Merleau-Ponty's *Nature* lectures, the work of A.N. Whitehead plays a significant role here). Although the flows of matter Deleuze invokes resemble the movement of elementary particles rather than Cartesian or Newtonian objects, it is in the folded proteins of microbiology that he finds the most contemporary affinity with Leibniz. Of course, there are significant differences between Merleau-Ponty, Leibniz, and Deleuze, particularly regarding ontology, but I am more interested in this context in the provocative resonances and intersections that emerge from their descriptions of the rhythms and images of Being's immanent unfolding.

If Deleuze is a helpful source for clues that link Merleau-Ponty to Leibniz, it is because he wrote a book about the latter called *The Fold (Le pli)*. Earlier I noted his association of Merleau-Ponty's sense of the fold with Heideggerian opening, but Heidegger's sense of folding and unfolding is elaborated here as "a coextensive unveiling and veiling of Being" that is indebted to Leibniz (albeit mistakenly interpreting Leibniz's being-for-the-world as being-in-the-world).<sup>59</sup> Deleuze's account of the Leibnizean fold resonates with Merleau-Ponty's sense of Being as "between." Organic folding is described by Deleuze not as a "fold in two" but as a "fold-of-two," an *entre-deux*; as differentiation of difference, where the "fold is always between two folds" and "the between-two-folds seems to move about everywhere" (11, 14). Heidegger, too, is found subscribing to this Leibnizean sense of "Difference that endlessly unfolds and folds over each of its two sides" (33). In conjunction with the anti-Euclidian geometries it suggests, this sense of folding as an active, extremely lively verb helps to overcome the sometimes more static sense of the fold as passive or as a noun or as two-dimensional in some of Merleau-Ponty's invocations of folded flesh. It is more appropriate for suggesting the volatility and complexity of the immanent, relational field of the visible and invisible. If the organism is conceived here as an "originary folding and creasing," there is no fundamental distinction for Leibniz between organic

and inorganic matter, while the Baroque "soul entertains a complex relation with the body" that defies mind-body dualism (8f., 12).

Leibnizean folding would surely, then, have been evocative for the kind of wild being Merleau-Ponty was trying to describe as sensuous, visual/tactile, pluri-dimensional flesh, where matter is a fabric coiled over and over in its more material or ethereal layerings and gatherings. Like this dense flesh, Leibniz's articulated matter is without voids. "Folds replace holes." "Matter thus offers," as Deleuze glosses him, "an infinitely porous, spongy, or cavernous texture without emptiness," with each body being elastic, "pierced with irregular passages" and dependent for its cohesion on the pressure of external forces (5, 30). These Leibnizean modes of expression could surely have helped the phenomenologist to evoke the twisted coils that texture materiality and that challenge the subject-centered formula of perceptual perspective in favor of a dense field traversed by multiple perspectives that subtend and emanate from manifold points. For Deleuze/Leibniz this teeming, turbulent, convoluted world suggests an infinity of folded matter which, like time and space, is continuously folding and unfolding. As matter swirls and metamorphoses, its modulations do yield provisional forms as styles of existing. But these also subdivide into increasingly tiny folds that sustain their internal integrity across a continuous fabric of folds within folds. They are folded, Deleuze suggests, in order to be enveloped and wrapped in something else (23).

It is perhaps in examples of Baroque art that this folding and enveloping seems most redolent of Merleau-Ponty's visual/tactile field, where sensuous images portray matter as a richly pleated cloth, a tactile textile. Deleuze observes that Descartes mistakenly tried to move through this labyrinth along rectilinear tracks and thus failed to grasp the curvature of matter. In place of the latter's physics of light, he invokes the Baroque art of Caravaggio or Tintoretto, for whom contours are effaced by a chiar-oscuro where clarity "endlessly plunges into obscurity" (rather like perception for Merleau-Ponty, provided one adds: and vice versa). Sometimes, Deleuze adds, "light vibrates color in the pleats and crannies of matter, sometimes light vibrates in the folds of an immaterial surface" (36, 40). Sometimes, too, Leibnizean matter resists.

Tom Conley's foreword to *The Fold* is helpful in itemizing some of the folded things that populate the Baroque imaginary: draperies, tresses,

tessellated fabrics, dermal surfaces of the body, domestic architecture, novels with an “invaginated” narrative, complex harmonics with multiple rhythms and tempos, philosophies that “resolve Cartesian distinctions of mind and matter through physical means . . . grasped as foldings,” and painterly styles that hide shapely forms within billowing fabrics or that confuse the viewer through artifice about space, surface, and perspective (xii).<sup>60</sup> Merleau-Ponty’s description of the color red (which occurs, significantly, in the only relatively complete chapter of *The Visible and the Invisible*: “The Intertwining—The Chiasm”) as a “concretion” of visibility rather than a discrete atom, where any particular shade of red forms a “constellation” with other reds through its real and imaginary relations of similarity and difference with them, surely evokes a congruent materialist imaginary. Color is defined here not as “a chunk of absolutely hard, indivisible being, offered all naked to a vision,” but rather as “a sort of straights between exterior horizons and interior horizons ever gaping open”; “an ephemeral modulation of the world” and of that “tissue” of differences and possibilities that lines and nourishes all visible forms.<sup>61</sup>

The red dress a fortiori holds with all its fibers onto the fabric of the visible, and thereby onto a fabric of invisible being. A punctuation in the field of red things, which includes the tiles of roof tops, the flags of gatekeepers and of the Revolution, certain terrains near Aix or in Madagascar, it is also a punctuation in the field of red garments, which includes, along with the dresses of women, robes of professors, bishops, and advocate generals, and also in the field of adornments and that of uniforms.<sup>62</sup>

## Conclusion

Reading Merleau-Ponty’s oeuvre overall, it is clear that he envisaged his return to ontology as a detour back to politics. He knew that one must avoid moving too swiftly from ontology to its political implications, but he was also profoundly aware that the way we think about matter and the images we use to do so have far-reaching implications for the way we think about ourselves as human as well as for the way we treat nature and other embodied selves. We accordingly find in his work some timely suggestions as to how an anti- or posthumanist philosophy might proceed by concep-

tualizing an embodied humanity enveloped in nature, rather than as external to inert stuff it dominates. As a corollary, Merleau-Ponty also helps us to rethink agency: not as an essential characteristic of the rational subject, a deity or some vital force, but as those contingent capacities for reflexivity, creative disclosure, and transformation that emerge hazardingly within the folds and reversals of material/meaningful flesh.<sup>63</sup> In conjunction with the imagery of collective life as a complex relational field that emerges in an intercorporeal, intersubjective “between,” such an approach to agency has significant implications for the way we interpret the political, as well as for how we go about making sense of the situations we inhabit and engender at any particular time. Merleau-Ponty’s abiding image of the political was drawn not from the Baroque but from the Renaissance. It is Machiavelli whom he credits with recognizing the “milieu proper to politics”:<sup>64</sup> a politics that is not a transparent realm to be surveyed and controlled by the light of reason or the power of a state external to society, but a politics that is a field of competing forces, strategies, reversals, and subterfuges that have incessantly to be finessed, interpreted, and negotiated from within. Perhaps, nonetheless, it was the imagery of Leibniz’s folds that alerted him to the way a world devoid of transcendental mysteries is still nonetheless rippled with hidden recesses, shadows and shade, secrets and anonymity; with an obstinate resistance to the *lumen naturale* whose obscurity or veiling is inseparable from forming and disclosing but which is confused with transcendent forces or certainty at our peril.

## Notes

- 1 I explore Merleau-Ponty’s conception of negativity as productive difference in more detail in my *Negativity and Politics* (2000), chap. 4, and in *Merleau-Ponty and Modern Politics after Anti-Humanism* (2007). It is only subsequently that I have, however, come to appreciate the significance of the framework he developed in his lectures on nature.
- 2 Merleau-Ponty, *Phenomenology of Perception*, 54, 57.
- 3 See Descartes, *Principles of Philosophy*, book 1.
- 4 Merleau-Ponty, *Phenomenology of Perception*, 56f.
- 5 Merleau-Ponty, *In Praise of Philosophy*, 130.
- 6 Merleau-Ponty, *Nature*.
- 7 Merleau-Ponty, *The Visible and the Invisible*, 274.

- 8 Merleau-Ponty, *Nature*, 204.
- 9 Merleau-Ponty, *The Visible and the Invisible*, 158.
- 10 Although he does not explicitly discuss its use by Spinoza, it is in the context of Spinoza's pantheistic, radical monism and his "complex, layered materialism" that the terms are currently better known. See Williams, "Thinking the Political in the Wake of Spinoza," 353.
- 11 Merleau-Ponty, *Nature*, 7f.
- 12 "The Cartesians see Nature as the manifestation of an infinite being that posits itself" and whose production enjoys the same quality of necessity as the mechanistic laws with which Cartesian nature is more commonly associated (83).
- 13 Merleau-Ponty, *Signs*, 162; *In Praise of Philosophy*, 183; Husserl, *The Crisis of the European Sciences and Transcendental Phenomenology*, 112, 123.
- 14 Merleau-Ponty, *Signs*, 165, 172, 181; *Adventures of the Dialectic*, 138n.
- 15 Merleau-Ponty, *Phenomenology of Perception*, 169.
- 16 Merleau-Ponty, *The Visible and the Invisible*, 38–39.
- 17 Merleau-Ponty, *Nature*, 86.
- 18 Merleau-Ponty, *The Visible and the Invisible*, 167.
- 19 Merleau-Ponty, *Phenomenology of Perception*, 58.
- 20 Merleau-Ponty, *The Visible and the Invisible*, 188.
- 21 Merleau-Ponty, *Nature*, 238; *The Visible and the Invisible*, 152.
- 22 Merleau-Ponty, *Phenomenology of Perception*, 98.
- 23 Agamben, *The Open*, 39.
- 24 Merleau-Ponty, *Nature*, 139.
- 25 Merleau-Ponty, *Phenomenology of Perception*, xiii.
- 26 Merleau-Ponty, *Sense and Non-Sense*, 16.
- 27 Merleau-Ponty, *The Primacy of Perception*, 161.
- 28 *Ibid.*, 167f.
- 29 Merleau-Ponty, *Sense and Non-Sense*, 17.
- 30 Merleau-Ponty, *The Primacy of Perception*, 167.
- 31 *Ibid.*, 188.
- 32 Merleau-Ponty, *The Primacy of Perception*, 12, 15; *The Visible and the Invisible*, 208, 216.
- 33 Merleau-Ponty, *Sense and Non-Sense*, 13ff.
- 34 Merleau-Ponty, *The Primacy of Perception*, 180.
- 35 Merleau-Ponty, *Sense and Non-Sense*, 11.
- 36 Merleau-Ponty, *The Primacy of Perception*, 171f; *The Visible and the Invisible*, 210.
- 37 Merleau-Ponty, *The Visible and the Invisible*, 212f.
- 38 *Ibid.*, 210f.
- 39 Merleau-Ponty, *Nature*, 238; *The Visible and the Invisible*, 126, 206.
- 40 Merleau-Ponty, *The Visible and the Invisible*, 140.
- 41 *Ibid.*, 143, 269.

- 42 Merleau-Ponty, *Phenomenology of Perception*, 215.
- 43 Merleau-Ponty, *Nature*, 157.
- 44 Merleau-Ponty, *Phenomenology of Perception*, 93.
- 45 Merleau-Ponty, *The Visible and the Invisible*, 261.
- 46 Merleau-Ponty, *Signs*, 166. See also *Phenomenology of Perception*, 237; *The Primacy of Perception*, 162; *Nature*, 209f.
- 47 Merleau-Ponty, *Nature*, 208.
- 48 *Ibid.*, 209.
- 49 Deleuze, *Foucault*, 110; Deleuze, *Difference and Repetition*, 64–65.
- 50 Deleuze, *Foucault*, 96ff. It is to the unpublished fourth volume of *The History of Sexuality*, *Les Aveux de la Chair* (*Confessions of the Flesh*) that Deleuze refers here.
- 51 Merleau-Ponty, *The Visible and the Invisible*, 138.
- 52 *Ibid.*, 210f.
- 53 Merleau-Ponty, *Nature*, 210, 238.
- 54 Merleau-Ponty, *Phenomenology of Perception*, 67.
- 55 Merleau-Ponty, *Signs*, 148.
- 56 Deleuze, *The Fold*, 3.
- 57 Merleau-Ponty, *The Visible and the Invisible*, 166, 176, 177, 185, 222f.
- 58 Harvey, *Spaces of Global Capitalism*, 124.
- 59 Deleuze, *The Fold*, 28, 34.
- 60 See Panagia, "The Effects of Viewing," for an intriguing account of "haptic vision" as immersion that is more attuned to the mystical experience invoked by the Baroque and developed by Deleuze.
- 61 Merleau-Ponty, *The Visible and the Invisible*, 132f.
- 62 *Ibid.*, 132.
- 63 I develop some of these implications further in "Rethinking Agency."
- 64 Merleau-Ponty, *Signs*, 214.

Melissa A. Orlie

## Impersonal Matter

Whenever the world is not good  
enough, one has a mind instead.

ADAM PHILLIPS, *Terrors and Experts*

We, whose task is wakefulness itself . . .

NIETZSCHE, *Beyond Good and Evil*

Conventionally, we think of our lives and activities as our own. But can we rightly call our thoughts, words, and deeds our own once we acknowledge the degree to which the material conditions of our social and psychic lives are created neither by nor for us? If all we are is matter, and if the matter of which we are made is neither originated nor controlled by us—as persons or as a species—then what sense can it make to speak of human beings as critical, creative, or free? In this essay, I outline an answer to this question by sketching an impersonal materialism of which I take Nietzsche to be a founding figure.

### The Problem of Creative Subjectivity

Let us cast this existential issue in more theoretical terms. It is commonly believed that materialist understandings of subjectivity challenge our presumption that human beings are capable of creative action and critical judgment. Thus, predominant accounts of thinking, judging, and willing remain “idealist” in some measure. Despite some of the most influential thinkers of the nineteenth and twentieth centuries—Marx, Nietzsche, Freud, and Darwin—being avowed materialists or naturalists, reasons for

a reluctance to embrace materialism are not difficult to surmise. For, insofar as accounts of human nature and behavior acknowledge that we are formed by material conditions not of our own making, they may struggle to explain how our values and views are not simply determined by forces outside our control. If nature is in accord with neither divine nor human purposes, it seems that creative and critical minds must somehow rise above matter. It is not therefore surprising that predominant accounts of subjectivity should still tend to assume that mental capacities are distinct from physical bodies since it is difficult to make sense of thinking, judging, and acting if they are not somehow distinctly our own, human in a way that differentiates them from the matter that makes up the rest of nature. Even some materialist accounts of subjectivity, such as more ego-oriented modes of psychoanalysis, insist on preserving a sense of personal individuality by emphasizing the irreducibly singular quality of subjective experience. Yet such accounts struggle to explain not only how that experience becomes consciously available to “us” but also how in its idiosyncrasy it can prove to be anything but meaningless to others. An impersonal materialism, I suggest, can circumvent these difficulties by affording a post-Darwinian, naturalist but not reductionist account of creative subjectivity.

### Will to Power as Impersonal Matter

Nietzsche’s work may seem an unpropitious place to begin searching for an account of critical judgment and creative action that would avoid the problems which have bedeviled materialist accounts of subjectivity. To be sure, Nietzsche’s critique of theories predicated on the subject as a “doer behind the deed,” like his insistence that the “deed is everything,” suggests an impersonal understanding of subjectivity by emphasizing the action rather than the actor.<sup>1</sup> Equally, his insistence that the “soul is only a word for something about the body” exemplifies his materialism.<sup>2</sup> But Nietzsche can also be read as an example of the difficulties inherent in impersonal and materialist accounts of action or judgment and as an example of the performative contradiction to which such approaches may be prone. Consider, then, two apparently countervailing tendencies in his thought. On the one hand, there is Nietzsche’s notion of will to power, commonly taken to maintain that every event in the organic world is a subduing and hence that something subdues while something else is subdued. On

the other hand, Nietzsche explicitly rejects the philosophy of substances: he denies that there are discrete subjugating or subjugated phenomena.<sup>3</sup> Since it is hard to see how both views can be held simultaneously, interpreters of Nietzsche tend to emphasize one or the other of these doctrines. Some conclude that his insistence on speaking of “genuine activity” and being “truly creative” is wedded to a notion of becoming master over and subduing things, but this then betrays what they take to be his greater insight regarding the absence of discrete, permanent, and definable substances. For others, the apparent recourse to doers behind deeds is evidence that Nietzsche was unable after all to avoid resorting to the notion of discrete personal identity, even as he pronounced the death of the subject. Still others take the presence of two such apparently contradictory ideas as confirmation that Nietzsche was simply an incoherent thinker.

There are undoubtedly many passages in Nietzsche’s texts that associate creativity with the image of a sovereign individual who is strong enough to create on her own terms, free from the influence of others.<sup>4</sup> But Nietzsche’s better insights offer a rather different understanding of the aim and practice of creativity. Crucial to this alternative account is an understanding of will to power as an impersonal force within our lives rather than as a personal one that is a property of individuals. In other words, there is only a contradiction between Nietzsche’s denial of substances and his hypothesis of will to power if the latter is conceived as something that is personally ours rather than as impersonal matter from which we arise. Impersonal matter from this perspective consists of something that is both more and other than that which I think of as me and mine. The relations and causes it implies defy mapping; they are possibly infinite and certainly ever-changing and unmasterable. Inasmuch as will to power refers to these impersonal energies that constitute our lives, then the doctrine of will to power is perfectly consistent with Nietzsche’s denial of substances. Indeed, such an impersonal rendering of will to power is a most apt characterization of the denial of discrete substances.

It is tempting, while reading Nietzsche, to imagine this will to power as a single, overriding drive. Nietzsche himself, however, refers to it as a complex of competing drives and passions, consonant with his insight that willing is “above all something complicated” and “a unit only as a word.”<sup>5</sup> When he speaks of the body as a “social structure composed of many souls,” and refers to the multiple souls within subjects as “under-

souls” or “under-wills,” he does so as part of his effort at explaining the complexity of willing (sec. 19). It is true that in such passages Nietzsche relies upon more conventional associations of willing with commanding, subduing, and making something obey; with the expression of power and the discharge of strength; with overcoming and, sometimes, destroying that which is not commanding. But when he speaks of the multiplicity which is each person, Nietzsche is clear that there is no one drive but multiple drives. These sometimes compete and sometimes collaborate to produce affective states; in short, they both conflict and cooperate to engender the perceptions and interpretations that arise within individuals at any given moment. Mental activity, whether conscious or not, is an activity of the body and an outcome of the relationships between the “under-wills” and “under-souls” that make up each of us. As Nietzsche says, thinking “is merely a relation of these drives to each other” and the “will to overcome an affect is ultimately only the will of another, or of several other, affects” (secs. 36, 117). For the “will is not only a complex of sensation and thinking, but it is above all an affect, and specifically an affect of a command” (sec. 19).

According to this account, what is conventionally called a self is actually a complex of competing drives, each with its own philosophy and each seeking to become master on its own terms (sec. 6). All such drives are evaluative in the sense that they have a sense of what is good for the body, and they strive to achieve it. This is a more affirmative way of saying that each of the diverse drives seeks to become master; to remake the world according to the needs and health of the body as it interprets them; to overcome resistance from competing forces or interpretations. If a self is the totality of such drives, then who we are at any moment encompasses the order of rank among them (sec. 6). In sum, when I refer to the impersonality of will to power, I mean precisely this: at the heart of who we are there are multiple, conflicting drives that represent different senses of the good and aspirations toward the better.

To say that a particular drive or affect has a sense of the good and strives to achieve its sense of the better is not, of course, to say that this would be the view of other affective states or persons, or even the perspective of what we conventionally call our selves. As both Nietzsche and Freud so vividly convey, our psychic life is a war of competing passions and wishes without a sovereign to bring permanent order or to pass final judgment. It is our

abyssal freedom — perhaps our misfortune — to have to achieve some rank order among these drives and the various satisfactions they seek. For Nietzsche, as for Freud, whatever humanity we have achieved or may become capable of involves bringing to awareness some of what has hitherto been unconscious. We do so by subjecting to reflection, yet thereby transfiguring, what had heretofore been accidental, partial, and error-ridden in our psychic life. The practice of understanding that Nietzsche invokes as “wakefulness itself” suggests how we might become disposed to affirm the earth, life, even the self as impersonal yet productive matter.

Before considering the qualities of such wakefulness, we need to consider why, if this sketch of will to power as impersonal matter is plausible, we remain attached to a sovereign conception of subjectivity. Why are we so wedded to this personal perspective on selves and world that precludes our hearing and seeing, let alone digesting, Nietzsche’s understanding of will to power as impersonal matter? The answer seems evident: we are positively averse to the experience of impersonality; hostile to the claim that neither the matter of our selves nor that of the world is me or mine, ours or yours. Indeed, most of our mental activity, as well as the content of the dominant ego psychology, is constructed as a defense against experiencing or acknowledging the impersonal forces that compose us. The building of personal and interpersonal bulwarks against the impersonal is the preoccupation and content of most lives, or at least of those lives that lack the quality of wakefulness which Nietzsche summons or the capacity for eliciting unconscious relationships through free association that Freud would have us cultivate. Because we are neither awake in Nietzsche’s sense nor open to our uncanniness in Freud’s, we remain ignorant of the extent to which our daily lives are composed of endless and ultimately fruitless measures to remain unaware of the body’s vulnerability and of the imminent death that portends our return to nature, whence fantasies of personal identity are swallowed up by omnipotent, if purposeless, matter.

### A Sovereign Fantasy

To say that the mind is embodied does not adequately convey what Nietzsche means when he says that soul, mind, or ego are different names for aspects of the body. For him, mind *is* body. This is not to say that mind or

mindedness can be reduced to some particular physical location or organ, such as the brain; rather, it is to claim that various forms of mental activity are aspects or manifestations of matter. All mental activity, from the so-called highest states of consciousness to what Freudians call primary process and refer to as unconscious, arises, according to this view, from the same basic material elements that compose the physical body. That human beings can think, read, and write, that they can give and receive instruction from one another and sometimes be changed by it, are capacities that are integral to the developmental trajectory of matter. Nietzsche’s judgment is indeed that consciousness is the weakest, last, and least developed of our instincts.<sup>6</sup> In his view all of our affects, from the most immediate physical sensations of pleasure and pain to the most refined aesthetic and moral judgments, grow from and change with our *physis*. He does not believe that moral and aesthetic judgments are reducible to basic sensory sensations and reactions — indeed, he designates these more mindful judgments as some of the “subtlest nuances” of *physis* (sec. 39) — but he does insist that critical judgment and creative deeds are born of, and known only by and as, matter.

If this is the case, why do we associate thinking, willing, and acting with something immaterial, with “spirit” rather than matter? How do we arrive at the idea and experience of ourselves as having a mind that is distinct from, indeed master of, the body? From Nietzsche’s perspective, when we observe philosophy abandoning the body for the sake of an immaterial soul, we must ask why and how the body despairs of the body.<sup>7</sup> The short answer is that the body despairs of the body when it cannot bear its own experience or digest its suffering. An aspect of the body — what we come to know as mind or call an ego — refuses to accept its limited mastery over what arises within experience as a consequence of events that befall it. This aspect has a fantasy of itself as master of its experience, although ironically such fantasies of sovereignty arise at just those moments when mastery is most foreclosed. What happens to and within a self occurs without its choice or knowledge, a sure sign of its constitutive weakness and symptomatic of the profound impersonality of ourselves. Weakness is constitutive of who we are because our capacity to give shape to the world or to our selves is always limited; we are not sovereign. The stuff of which selves are made is impersonal because the matter of which they are born and



made does not begin with us nor is it ever possessed or controlled by us. In sum, each of us is not only matter but impersonal matter; made of stuff over which nothing is master and whose entirety no one is in a position to know. It is precisely when this unpalatable fact is glimpsed that the ego is most likely to submit to delusions of sovereignty.

We begin life rather like the camel in Nietzsche's "Three Metamorphoses": we are made to bear much.<sup>8</sup> It may well be, as he says, that only the "lucky ones" are capable of becoming like children again, able to say yes to life on terms that are made our own. But who are these lucky ones? In the fifth book that was added to the second edition of *The Gay Science*, Nietzsche suggests that they are the ones who suffer an "overfullness of life," whereas the unlucky ones suffer from the "impoverishment of life." If we have faith in substances and subjects, we may be inclined to think that we are born one way or the other: some being abundant and strong, others impoverished and weak. Yet it seems to me more probable that Nietzsche wanted to claim that overfullness of life arises among sufferers who do not flee but experience the full range and depth of the suffering that is the lot of embodied selves. Inversely, the impoverishment of life arises among sufferers who have "a certain warm narrowness that keeps away fear and encloses one in optimistic horizons."<sup>9</sup> In short, we are *strong* to the extent that we undergo the suffering which arises from our basic weakness, while we are *weak* to the extent that we flee from experiencing the impersonal chaos that sustains the self. We are *strong* inasmuch as we are wakeful to the full range of experience, to what is unbidden as well as bidden, but we are *weak* inasmuch as our experience of our selves and of the world is limited by a traumatic fixation of otherwise ceaselessly changing, never fully knowable or graspable experience.

In the first part of *Thus Spoke Zarathustra*, Nietzsche endeavors to describe how, although we are entirely body, we come to experience certain aspects of the body as not-body.

Your self laughs at your ego and at its bold leaps. "What are these leaps and flights of thought to me?" it says to itself. "A detour to my end. I am the leading strings of the ego and the prompter of its concepts."

The self says to the ego, "Feel pain here!" Then the ego suffers and thinks how it might suffer no more — and that is why it is made to think.

The self says to the ego, "Feel pleasure here!" Then the ego is pleased and thinks how it might often be pleased again — and that is why it is made to think.<sup>10</sup>

In this passage, Nietzsche suggests that in those moments when something happens to the body that challenges its powers, an aspect of the body generates a defensive fantasy of its autonomy from and power over the body. The ego that says "I think" emerges in response to experiences of either pain or pleasure because both are always to some degree beyond its control. The "mind" is the means by which the body imagines itself as master of the conditions of its experience but at exactly those moments when the body actually feels the limits of its strength and suffers under these conditions. This experience of vulnerability and the emergence of "mind" as a response to suffering to which it attests is the very process of the body despairing at and of itself.

To be cut off from life and the range of experience it entails, to lose a visceral sense of the matter that composes us, is our human affliction. The body despairing of itself is our affliction because we become fixated by an image of our experience and a false impression of a self. As a result, our selves and our experience are limited by this image, typically in the form of a perception of the past joined to a projection about the future. In this way, paradoxically, we suffer from our experience and are victims of it precisely because we do not actually undergo or experience our suffering with any intensity. Given the modern Western preoccupation with reducing suffering, such efforts may seem commendable and their achievement no basis for regret. Yet by failing to work through the inevitable suffering of mortal, material beings whose being is in question, Nietzsche maintains that we remove ourselves from the energy needed to affirm life. We are cut off from precisely the resources we need to discern what is worthy of esteem.

Broadly speaking, there are two responses of mindful matter to the experience of impersonality: receptive and reactive. A receptive response is awake to the fullest range of experience, moment by moment, aware of variation and dissonance among perceptions, feelings, thoughts, drives, and their passions. A reactive response to impersonality refuses this variation and dissonance within experience and does so by means of techniques

that generate fixated ideas about self and world (hence Freud's sense of repression and of neurotic symptoms such as the compulsion to repeat and, ultimately, the death drive itself). Yet primary among these techniques is the generation of mind as distinct from body. Nietzsche sees promise as well as danger in this reaction to a world that is not deemed good enough. The danger in the birth of an ego that says "I think" is a fixation of self and the loss of a fuller range of experience: the very experiences that are prime sources of energy and resources for critical, creative subjectivity. But the promise in the birth of the ego is that this reactive creation bears witness to, and traces of, another experience of mindful matter. This is why Nietzsche says that our affliction is the way to our selves, through the recovery of an "instinct for freedom" inherent in aspects of will to power "forcibly made latent."<sup>11</sup> This recovery of freedom is not however achieved through the assertion of a fixated, already delimited self; rather, it is gained through receptivity and wakefulness to the fullest range of experience we can muster moment by moment.

### Creatures without a Creator

Nietzsche repeatedly associates creativity with strength of will and lack of creativity with weakness. But we do not need to have recourse to the idea of a subject as a doer behind deeds in order to speak of the strength or weakness of willing. Whether willing is strong or weak need not be understood as a question of given character, physiological stature, or unchanging nature. Rather, our capacity to experience the purposeless necessity of impersonal matter as the condition of our creative freedom depends upon the accessibility of our bodily drives and passions. Paradoxically, the degree to which will to power can become what Nietzsche calls an instinct for freedom increases as we acknowledge and experience the impersonality of our selves, as we accept that the conditions of our drives and passions are not of our own making and are not therefore sources for personal merit or blame. Drives and passions are merely effects of the conditions in which we find ourselves. As such, the strength or weakness of our willing is not an index of what is actually "firm and settled" within, qua physiological stature, character, or psychological diagnosis.<sup>12</sup> Instead, the strength or weakness of the ego's willing depends upon the degree to which it can acknowledge and accept that what is firm and settled within it emerges

from what is at first perceived as outside or overpowering. That is to say, acknowledging and accepting the impersonality of our selves is a necessary condition for experiencing a full range of drives and passions and, thus, of recovering what Nietzsche calls our creative body. Strength or weakness of willing is not measured by the degree to which we can remake what he says is at "the bottom of us, 'right deep down.'" Rather, willing is strong or weak to the extent that it acknowledges and feels "something unteachable, a granite stratum of spiritual fate, of predetermined decisions and answers to predetermined selected questions" (sec. 231).

This "spiritual fate" is not the essence or the truth of who we are: Nietzsche would rather have us take our spiritual fate as the throw of the dice that poses for us the problem of who we are. Convictions that we feel are deeply embedded in who we are may inspire a strong belief in our own selfhood, its desires, and sense of truth. But Nietzsche would have us use signs of our "spiritual fate" differently: not to discern the truth of who we are but rather as "footsteps to self-knowledge, signposts of the problem which we are" (sec. 231). Such mindful awareness of the impersonal experience that we routinely take personally is captured with brilliant simplicity in Freud's description of Leonardo da Vinci as one who "did not love and hate, but asked himself about the origin and significance of what he was to love and hate."<sup>13</sup> Likewise for Nietzsche, our freedom and creativity are exercised when we "learn more fully" what is "firm and settled" and recognize it as the accidental, meaningless, raw material out of which we can make virtues and values. Only then may we truly come to call these our own, through accepting that they were not our own to begin with nor will they ever fully become so.<sup>14</sup>

By contrast, the personal self and what we are most readily conscious of thinking and feeling are products of fixation and of ideas born of defensive reaction to what makes us suffer, what overpowers or humiliates us. Accordingly, these fixed ideas about ourselves and what we value are always partial rather than fully representative of the experience we are undergoing at any given moment. Self-trust is difficult precisely because what is most readily available to us is what D. W. Winnicott calls a false self. Winnicott's false self feels neither fully alive nor creative or real. Such feelings, for Winnicott as for Nietzsche, are a psychological achievement predicated on the dissolution of the ego and yielding a capacity for spontaneous experience that Winnicott calls unintegration. To become increasingly awake to

all that is, is to wake up to the impersonality of matter which is nature; it is to live with a joyousness that arises only when we are able to cease holding the self together without at the same time falling apart.<sup>15</sup>

### Wakefulness Itself

Nietzsche's notion of will to power remains for him a working hypothesis rather than an article of faith or uncontested presumption. How does he arrive at this hypothesis? He suggests that his conjecture arises from what is possibly the only thing "given" to us as real, namely, "our world of desires and passions," what he calls "the reality of our drives."<sup>16</sup> Now clearly, the reality of our drives is available to us only through interpretation since the "human intellect cannot avoid seeing itself in its own perspectives, and only in these."<sup>17</sup> Our "affects" grow from and change with bodily drives and passions, running the gamut from immediate physical sensations of pleasure and pain to aesthetic and moral judgments. We habitually fail to see (even as we may theoretically acknowledge) that a particular affective state fosters specific perceptions and interpretations of events, while another affective state may foster entirely different perceptions and interpretations. When we do acknowledge variation in perspective, it is more commonly thought about as an occurrence *between* persons. But Nietzsche insists that this waxing and waning of affective states and the shifting perceptions and interpretations associated with them operates *within* persons. According to an impersonal understanding of will to power, this often dissonant fluctuation of *physis*, affect, perception, and interpretation is the effect of impersonal energies rather than a matter of personal choice alone, when it is a matter of choice at all. There is a point beyond which it ceases to make sense to speak of the fluctuations of *physis* that occur within the person as belonging to that person. It is more apt to describe an impersonal flow of affective states.<sup>18</sup> In short, what we feel, perceive, and think "comes upon us" as much as, and probably more than, we craft or control it.<sup>19</sup>

Although Nietzsche's readers often highlight agonistic contest among persons,<sup>20</sup> it is self-overcoming rather than overcoming others that he emphasizes. Despite his insistence on the impersonality of selves, he regards agonistic contest within the self as primary. It is quite usual for us to experi-

ence a particular affective state as definitive of who we are or to regard the perceptions and interpretations that arise within that state as definitive of the way things are. If we experience a similar fixation during another moment of time, we typically neglect any dissonance within the moments or between them. This is in part why Nietzsche speaks of consciousness as the weakest, last, and least developed of our instincts.<sup>21</sup> We simply are not very aware of our experience, of what is taking place within and about this body, on this earth, at any moment. So, Nietzsche declares us to be asleep, while calling upon us to assume the task of "wakefulness itself."<sup>22</sup> Our stupor begins with the misapprehension of our own experience. We can awaken from this delusion only by transforming our reception of the perceptions and interpretations that arise within that experience.

Understanding, as Nietzsche says, is a certain behavior of drives or instincts toward one another. He contrasts his views with those of Spinoza on this score. Understanding is achieved not when I overcome what makes me laugh, lament, or curse (a view Nietzsche attributes to Spinoza in the quotation below). Rather, we achieve understanding when we come to *feel* what makes us laugh, lament, and curse all at once. In other words, understanding is the conflict among these affects in some measure sustained and brought to awareness rather than resolved and forgotten. This is what Nietzsche means by wakefulness itself. He explains his meaning in the following terms:

Before knowledge is possible, each of these instincts must first have presented its one-sided view of the thing or event; after this comes the fight of these one-sided views, and occasionally this results in a mean, one grows calm, one finds all three sides right, and there is a kind of justice and a contract; for by virtue of justice and a contract all these instincts can maintain their existence and assert their rights against each other. Since only the last scenes of reconciliation and the final accounting at the end of this long process rise to our consciousness, we suppose that *intelligere* must be something conciliatory, just, and good—something that stands essentially opposed to the instincts, while it is actually nothing but a certain behavior of the instincts toward one another. (sec. 333)

Nietzsche suggests that we begin to understand more truly who we are when we can do justice to all that makes us laugh, lament, and curse. This

means sustaining the conflict among all these elements rather than imagining that we can somehow rise above or judge them in a way that is independent of the conflict among them. If there is a hero in our psychic life, it is “certainly nothing divine that eternally rests in itself”; rather, it is a “concealed heroism in our warring depths” (sec. 333). Nietzsche does not bar access to what he calls drives and instincts but only access to anything other than drives and instincts. We are capable of achieving a different, more just relationship among these drives and instincts and their warring conceptions of the good and better. Indeed, this just war could become our experience of self.

Nietzsche maintains that “the greatest part of our spirit’s activity remains unconscious and unfelt” (sec. 333). Few have yet achieved this experience of themselves, as a battlefield in a contest over the good. “Believing that they possess consciousness, men have not exerted themselves very much to acquire it; and things haven’t changed much in this respect. To this day the task of incorporating knowledge and making it instinctive is only beginning to dawn on the human eye and is not yet clearly discernible; it is a task that is seen only by those who have comprehended that so far we have incorporated only our errors and that all our consciousness relates to errors” (sec. 11). Until now, then, we have mainly incorporated errors rather than knowledge because we have taken a portion of our experience — particular affective states, perceptions, and interpretations — as its entirety. By contrast, Nietzsche advocates incorporating the full range of experience, not only what makes us laugh (for which we would expect praise from the advocate of joyful wisdom) but also what makes us lament and curse. We should not grant our drives and instincts any more than their due, but they all require their due, and it is our freedom and fate to determine what that is.

Why should the conflict among our instincts and their senses of the good and better be internalized and sustained? It seems, at the very least, that we need to do this for pragmatic reasons of health. If the rightful claims of an instinct are not consciously sustained, Nietzsche contends, then its claim may be unfelt, yet its repression is not the end of its effects. Instead, obscure impulses which are not given their due and incorporated into conscious awareness seek to undermine other instincts and diminish the energy of the “social structure composed of many souls” which we

conventionally call our self. Although they may remain “unfelt” from the perspective of our conscious mind, these instincts can therefore have decisive and potentially debilitating effects. “But I suppose that these instincts which are here contending with one another understand very well how to make themselves felt by, and how to hurt, one another. This may well be the source of that sudden and violent exhaustion that afflicts all thinkers (it is exhaustion on a battlefield)” (sec. 333). In Nietzsche’s view, it seems, each instinct has some rightful claim to be experienced in awareness and, if that claim is denied, it will work efficaciously to undermine the claims of competing drives.

More important, from the perspective of creative subjectivity, when our access to some drives and instincts is barred, we lose aspects of experience as well as energy and resources for creative and critical activity. Each affective state fosters certain perceptions and interpretations and bars others. Nietzsche maintains that we tend to be unconscious regarding the nature of our experience in any particular moment, let alone between moments. His concern is not that the result of such inhibition and exclusion is untruthful: this would hardly be a decisive argument for a thinker for whom untruth is a condition of life.<sup>23</sup> The trouble with the narrowing of our experience is that it blocks energy for evaluation and action and thereby restricts our capacity to judge and act. And sustaining the capacity for judgment and action in the face of nihilism is the main problem Nietzsche sees confronting us. Nietzsche is not as explicit and detailed as Freud in accounting for the effects of repression, but he is clear that the aims of drives of which we are unconscious do have effects. Like Freud, he offers no guarantee of liberation or greater health if we bring the conflict among our instincts and their sense of the good to awareness and allow each to make its case for the rightness of its view in an open conflict. We might yet die of exhaustion or be torn asunder. But the health of all the drives and instincts that make up the social structure which is our soul does depend upon achieving a just rank order among them. This means becoming conscious of what sense of the good animates each instinct; how it strives after what it takes to be better and what effects this has upon the other instincts and the whole (the “whole” of which we are born being the entirety of nature as all of impersonal matter). We must become inter-

preters of our experience, asking questions of it such as: "What did I really experience?" and "What happened in me and around me at that time?"<sup>24</sup> Becoming interpreters of our experience means that we must learn to see as we do not yet see; we must practice material sensitivity as well as reflective judgment.

Learning to see—accustoming the eye to calmness, to patience, to letting things come up to it; postponing judgment, learning to go around and grasp each individual case from all sides. That is the first preliminary schooling for spirituality: not to react at once to stimulus, but to gain control of all the inhibiting, excluding instincts. Learning to see, as I understand it, is almost what, unphilosophically speaking, is called a strong will: the essential feature is precisely not to "will" — to be able to suspend decision.<sup>25</sup>

In this and other passages like it, we hear a Nietzsche for whom the way to a freer experience of will to power is achieved by receptivity rather than masterful assertion. Learning to see involves experiencing the impersonality of ourselves rather than affirming who we already believe ourselves to be. It is a condition of creativity that we should learn to appreciate our instincts and their aims as they become manifest in our experience. If Nietzsche's primary concern is self-overcoming, then this requires the cultivation of a receptivity that is aesthetic in the sense of being sensually, viscerally sensitive to flows of generative matter. It depends upon capacities that are alien to the sort of rational cognition that is usually taken to be the sum of reflection. Learning to see in this way is the condition of self-overcoming, but such "seeing" of experience requires control over those drives that would block its full range. It is only by opening the self in this way that we might hope to achieve some just and orderly behavior of the drives in relation to one another.

### Creativity and Impersonal Matter

The primary way we make the impersonality of our world and selves socially and psychically manageable is to imagine them being ruled by an order that issues from and is amenable to sovereign commands. Like Jacques Lacan, Nietzsche documents the force of this fantasy of sovereignty even as he seeks to debunk it. Like Lacan, he tries to help us see how

we are ruled by our sense that there is something to know and someone who knows it; by our sense that there is something to achieve or prove and someone who judges whether it is achieved or proven.

Before the death of God, Adam Phillips argues, we take what is and what comes to us as if they were commands. After the death of God, what is and what comes to us are more aptly taken to be hints, inasmuch as "hints . . . can be made something of; orders can only be submitted to or rejected." But as Phillips himself acknowledges, declaration of the death of God is no guarantee of the end of our feeling commanded. Indeed, such loss may heighten our inclination to feel commanded since fear of the unknown can most readily be "cured through flight into the intelligible." From the earliest age, we receive and exert pressure upon ourselves "to make something easily shareable, to produce the consensual object — the acceptable phrase, the reassuring drawing — rather than the ambiguous or enigmatic object."<sup>26</sup> And as we feel commanded to make ourselves intelligible to others, so too do we feel compelled to read the order of the social and natural world as if it necessarily issues purposeful and meaningful events and opportunities.

For the tradition of impersonal materialism arising from Nietzsche and Freud, however, both worldly events and ruptures in mental life are ripe with possibility precisely because they are devoid of determined purpose. Jonathan Lear offers a picture of mind functioning with an inherent tendency toward disruption. Mindful matter tends toward disruption simply by virtue of the fact that life is lived under pressure: life is simply "too much." We are helpless and sometimes consciously humbled whenever we catch a glimpse of the impersonal energies that we ordinarily reify into definitive ideas of selves and world. Such disruptive, impersonal energies are at once intimately present but neither identifiable as completely our own nor controllable by us. In response we make every effort to personalize the impersonal, to make it our own by projecting meaning upon it. Yet our efforts are doomed since the excess before which we tremble and waver is quantitative energy with its intensities and flows. The repetition of human helplessness, Lear stresses, is a repetition of something without content. The helplessness that breaks out over and over again derives from an experience of too much energy; an irruption of quantity without quality.

If there is actual repetition, then it inheres in our attempts at infusing this breakthrough of energy and disruption into ordinary life with meaning.<sup>27</sup>

Inasmuch as we are deeply influenced by American ego psychology, it is easy to miss Freud's own profoundly impersonal understanding of human psychic life where what is unconscious holds sway. In the opening section of *Civilization and Its Discontents*, Freud writes that "originally the ego includes everything, later it separates off an external world from itself."<sup>28</sup> In the beginning the ego is one with all of matter and experiences its impersonal unity. Freud doubts our capacity to recover this sense of unity or the desirability of doing so. In fact, he associates desire for such unity with the illusions of religion and nonproductive or even dangerous forms of regression. In Hans Loewald's view, however, the aim of sublimation is to achieve *differentiated* unity, which amounts to a reversal with a difference of the ego's developmental trend.<sup>29</sup> More specifically, sublimation in this account involves forms of regression that yield satisfaction through attaining more complex, differentiated unities whose internal tensions are not eliminated but "bound."<sup>30</sup> In the opening arguments of *Civilization and Its Discontents*, Freud seems disinclined to imagine such productive achievements emerging from regressive moments. But for Loewald (following arguments similar to those of Marcuse in his *Eros and Civilization*), it is only open receptivity to regressive energies and experiences that can issue in the truly creative inventions of sublimation. Indeed, Loewald thinks his account is more faithful here to Freud's logic than was Freud's. According to Loewald's nondefensive concept of healthy sublimation, the higher, more differentiated achievements of Eros (invoked favorably by Freud in later passages of *Civilization and Its Discontents*) arise from an open receptivity to unconscious and primary processes, from a return (although not an entire regression) to that sense of unity with nature as all of matter which Freud denigrates in the opening pages and claims himself not to have experienced. My concern here is not to demonstrate that Loewald is right about Freud's deeper understanding, although I think he is, but to draw upon his understanding of sublimation because I believe it illuminates, at least as well as any discussion I have yet found, an impersonal materialist understanding of creativity.

One of the vicissitudes of our development of a fantasy of ourselves as distinct persons is a sense of alienation from all of nature of which we are

actually part and parcel. But when *physis* assumes the form of individual mentation, whereby we have the impression that we are each an individual subject confronting a world of objects, the sense of lost union is a prelude to the possibility of higher, more differentiated forms of union: the subtler forms of *physis* that both Nietzsche and Freud desire. "In genuine sublimation," Loewald writes, "this alienating differentiation is being reversed in such a way that a fresh unity is created by an act of uniting. In this reversal—a restoration of unity—there comes into being a differentiated unity (a manifold) that captures separateness in the act of uniting, and unity in the act of separating."<sup>31</sup> This is why for Loewald, sublimation is not a defense against, but a reconciliation of, disjunctures that civilization requires or of renunciations that are required in the first adulthood phases of the false self.<sup>32</sup> Genuine sublimation achieves reconciliation of the conventional divisions of the divine and the sexual, nature and human, subject and object, unconscious and conscious, primary and secondary process thinking. Following Darwin, we are true to Freud's best insights, Loewald concludes, when we refrain from saying higher or lower in selecting among forms of *physis*.<sup>33</sup>

In a more technical language, Loewald's account entails that sublimation arises from a change of object libido into narcissistic libido, that is, from a transformation of object relations into *intrapsychic* relations (19). In the terms of this essay, I would describe the process as a double movement. First, what was presumed to be personal or one's own is acknowledged as profoundly impersonal, as neither me nor mine. But this first movement of defamiliarization is then followed by a second task: of achieving a distinct, singular relationship to what is impersonal and thus to what is only conventionally located within one's person but which is actually not yet personal because it is not differentiated by means of awareness. I may feel love or hatred, but as in Freud's understanding of Leonardo, I do not take these expressions of desire as straightforward truths of my self or the world. Rather, seeing that these loves and hates are neither me nor mine, I am finally poised to seek a singular relationship to impersonal matter. A singular relationship to impersonal matter cannot take its loves and hates at face value since this would be to treat accidental necessities to which I have been subject as if they had been freely chosen by me. Our freedom is manifest in the order of rank we are able to achieve among all that drives us, as a result of conditions which may be full of necessity

but which nonetheless serve no given purpose or meaning. Our freedom is manifest in actions which bespeak what we value, actions which show whether and how we are creative or mere creatures of the conditions from which we arise.

What does creative subjectivity look like when it is not a defensive maneuver against our experience of impersonal matter? Nondefensive sublimation is simply experiential acknowledgment and symbolic articulation of and by impersonal matter. According to this impersonal materialist understanding, subjectivity is nature's activity: the creative-destructive power of nature itself (78–81). Nietzsche's sense of learning to see, as expansion of moment-by-moment awareness of nature as all of matter, is sublimation in action when it issues in symbolizations that manifest a singular relationship to impersonal matter. What we conventionally call mind is, in short, matter working upon matter. Creative subjectivity is *not*, then, human action *with* or *against* nature. Creative subjectivity is quite literally a manifestation of natural selection, where those subtle forms of *physis* by which Nietzsche designates ethical or aesthetic judgment work through and select among other forms of *physis*. Once we acknowledge that we are nature, that we are only in and of nature, then we see that there is no longer any question of what is natural *or* human. The question for each moment is only for "what parts of nature do we show a preference by our words and deeds?"<sup>34</sup> What "rank order of drives and passions do we select for with our attention?" From this perspective, as Loewald notes, sublimation entails invention rather than discovery of something already given or created *ex nihilo*. The articulations of subtler nuances of *physis* form combinations which were previously unknown, yet which bring to expression what has always existed but has been absent of consciousness. Nondefensive sublimations are intimations of the all-embracing and all-embraced unity of impersonal matter.<sup>35</sup> The ego development of the initial stages of life, of the false self, requires us to renounce the all-embracing unity of nature as all of impersonal matter. But, if we are among the lucky ones, later stages of ego development may issue in singular, differentiated symbolizations of impersonal matter.<sup>36</sup> We have always existed as impersonal matter. But we come to experience and symbolize this nature only by emerging from *and* toward its more differentiated forms. Perhaps this is why Nietzsche has Zarathustra declare that "this most honest being, the ego, speaks of the body and still wants the body, even when it poetizes and

raves and flutters with broken wings. It learns to speak ever more honestly, this ego; and the more it learns, the more words and honors it finds for body and earth."<sup>37</sup>

## Notes

- 1 Nietzsche, *On the Genealogy of Morals*, essay I, sec. 13.
- 2 Nietzsche, *Thus Spoke Zarathustra*, part I, "Despisers of the Body."
- 3 See a helpful discussion by Bittner, "Masters without Substance."
- 4 For instance, this sovereign imagination of subjectivity resonates with the most literal interpretations of Nietzsche's distinction between what is noble and what is slavish. I criticize this reading of the noble and slave as it appears in *On the Genealogy of Morals* and offer an alternative in Orlie, "The Art of Despising Oneself."
- 5 Nietzsche, *Beyond Good and Evil*, sec. 19.
- 6 Nietzsche, *The Gay Science*, sec. 11.
- 7 Nietzsche, *Thus Spoke Zarathustra*, part I, "Afterworldly."
- 8 *Ibid.*, preface, "On the Three Metamorphoses."
- 9 Nietzsche, *The Gay Science*, sec. 370.
- 10 Nietzsche, *Thus Spoke Zarathustra*, part I, "Despisers of the Body."
- 11 Nietzsche, *On the Genealogy of Morals*, essay 2, sec. 18.
- 12 Nietzsche, *Beyond Good and Evil*, sec. 233.
- 13 I arrived at the significance of Freud's passage for the first time while reading Loewald, *Sublimation*, 9.
- 14 Nietzsche, *Beyond Good and Evil*, sec. 231.
- 15 See Adam Phillips's helpful survey of Winnicott's papers on the false self in *Winnicott*, 98–137. On Winnicott's notion of unintegration, see Phillips, *Winnicott*, 79–97, as well as Epstein, *Going to Pieces without Falling Apart*, 36–48.
- 16 Nietzsche, *Beyond Good and Evil*, sec. 36.
- 17 Nietzsche, *The Gay Science*, sec. 374.
- 18 Compare Brennan, *The Transmission of Affect*.
- 19 Nietzsche, *Beyond Good and Evil*, sec. 17.
- 20 For this typical formulation in an otherwise excellent book, see Cox, *Nietzsche*, 229–35.
- 21 Nietzsche, *The Gay Science*, sec. 11.
- 22 *Ibid.*, "Preface."
- 23 Nietzsche, *Beyond Good and Evil*, sec. 4.
- 24 Nietzsche, *The Gay Science*, sec. 319.
- 25 Nietzsche, *Twilight of the Idols*, "What the Germans Lack," sec. 6.
- 26 Phillips, *The Beast in the Nursery*, 111, 101.
- 27 Lear, *Happiness, Death, and the Remainders of Life*, 108–9.

- 28 Freud, *The Standard Edition of the Complete Psychological Works*, vol. 21, p. 68.
- 29 Loewald, *Sublimation*, 24.
- 30 Loewald, *Sublimation*, 27. On parallels between mystic and analytic experience and the importance of regression as a condition of further differentiation, see Fingarette, "The Ego and Mystic Selflessness." Thanks to George Shulman for the Fingarette reference and for our ongoing conversations about these matters.
- 31 Loewald, *Sublimation*, 24.
- 32 For the notions of the first adulthood of the false self and the second adulthood, see Hollis, *The Middle Passage*; and *Swamplands of the Soul*. Thanks to Martin Srajek for introducing me to Hollis's work.
- 33 Loewald, *Sublimation*, 12-13.
- 34 Phillips, *Darwin's Worms*, 6. See also pp. 3-63.
- 35 Loewald, *Sublimation*, 76.
- 36 See note 32.
- 37 Nietzsche, *Thus Spoke Zarathustra*, part 1, "Despisers of the Body."

## POLITICAL MATTERS



*Elizabeth Grosz*

## Feminism, Materialism, and Freedom

Concepts of autonomy, agency, and freedom—the central terms by which subjectivity has been understood in the twentieth century and beyond—have been central to feminist politics since its theoretical reeruption in the writings of Simone de Beauvoir. While these concepts are continually evoked in feminist theory, however, they have been rarely defined, explained, or analyzed. Instead they have functioned as a kind of mantra of liberation, a given ideal, not only for a politics directed purely to feminist questions but to any politics directed to class, race, or national and ethnic struggles. I propose in this essay to provide an opening up of these terms that are so commonly used to define subjectivity or identity, a problematization of their common usage in feminist and other political discourses, and their recasting in the terms of a philosophical tradition which is rarely used by feminists but which may dynamize and make such concepts ontological conditions rather than moral ideals.

Instead of turning to those philosophical traditions in which the questions of freedom and autonomy are irremediably tied to the functioning and deprivatory power of the (oppressive or dominant) other—that is, the tradition of dialectical phenomenology that dates from Hegel, through Marxism, and influences and inflects existentialism, structuralism, and poststructuralism, which in turn

have so heavily influenced most contemporary forms of feminist thought regarding the subject — I want to turn to a more archaic tradition but also a more modernist one that feminists have tended to avoid — the philosophy of life, the philosophy of biology, the philosophy of nature, initiated to some extent by the pre-Socratics, but fully elaborated primarily in the nineteenth century through the texts of Darwin, Nietzsche, and Bergson and flourishing well into the earliest decades of the twentieth century.

I will attempt here to rethink concepts like freedom, autonomy, and even subjectivity in ontological, even metaphysical terms rather than what has been more common over the last century and well before, namely, through the discourses of political philosophy and the debates between liberalism, historical materialism, and postmodernism regarding the sovereignty and rights of subjects and social groups. In doing so, I hope to provide new resources, new concepts, and new questions for feminist thought in reconsidering subjectivity beyond the constraints of the paradigm of recognition that have marked it since Beauvoir. In elaborating the centrality of matter to any understanding of subjectivity or consciousness as free or autonomous, we need to look outside the traditions of thought that have considered subjectivity as the realm of agency and freedom only through the attainment of reason, rights, and recognition: that is, only through the operation of forces — social, cultural, or identificatory — outside the subject.

Thus, instead of linking the question of freedom to the concept of emancipation or to some understanding of liberation from, or removal of, an oppressive or unfair form of constraint or limitation, as is most common in feminist and other antioppressive struggles and discourses, I develop a concept of life, bare life, where freedom is conceived not only or primarily as the elimination of constraint or coercion but more positively as the condition of, or capacity for, action in life. In doing so, I hope to elaborate and explain my understanding of freedom, agency, and autonomy not in terms of a concept of “freedom from,” where freedom is conceived negatively, as the elimination of constraint, but in terms of a “freedom to,” a positive understanding of freedom as the capacity for action. I do not believe that this is a depoliticization of the concept but rather its reframing in a different context that may provide it with other, different political affiliations and associations and a different understanding of subjectivity.

The difference between “freedom from” and “freedom to” has of course a long and illustrious history. It perhaps finds its most recent expression in the genealogical writings of Michel Foucault, who, in distinguishing the negative or repressive hypothesis of power from the positive understanding of power as that which produces or enables, relies heavily on Nietzsche’s distinction between the other-directedness of a reactive herd morality and the self-affirmation of an active or noble morality, unconcerned with the other and its constraints, directed only to its own powers and to the fullest affirmation of its own forces. The distinction between a freedom from and a freedom to is, to a large extent, correlated with a conception of freedom that is bound up with a shared existence with the other and the other’s powers over the subject, on the one hand, and a freedom directed only to one’s actions and their conditions and consequences, on the other. Is feminist theory best served through its traditional focus on women’s attainment of a freedom from patriarchal, racist, colonialist, and heteronormative constraint? Or by exploring what the female — or feminist — subject is and is capable of making and doing? It is this broad and overarching question — one of the imponderable dilemmas facing contemporary politics well beyond feminism — that is at stake here in exploring the subject’s freedom through its immersion in materiality.

I have no intention of presenting a critique of the notion of “freedom from,” for it clearly has a certain political relevance;<sup>1</sup> but its relevance should not be overstated, and if freedom remains tied to only this negative concept of liberty, it remains tied to the options or alternatives provided by the present and its prevailing and admittedly limiting forces, instead of accessing and opening up the present to the invention of the new. In other words, a “freedom from,” while arguably necessary for understanding concepts like subjectivity, agency, and autonomy, is not sufficient for at best it addresses and attempts to redress wrongs of the past without providing any positive direction for action in the future. It entails that once the subject has had restraints and inhibitions, the negative limitations, to freedom removed, a natural or given autonomy is somehow preserved. If external interference can be minimized, the subject can be (or rather become) itself, can be left to itself and as itself, can enact its given freedom. Freedom is attained through rights, laws, and rules that minimize negative interference rather than affirm positive actions.

I want to focus on the tradition of “freedom to” which has tended to be

neglected in feminist and other radical political struggles, though it may make more explicit and clear what is at stake in feminist notions of subjectivity, agency, and autonomy. But rather than turning to Nietzsche and Foucault to articulate this network of connections (as I have done elsewhere)<sup>2</sup>—for they are the most obvious and explicit proponents of a positive conception of freedom, freedom as the ability to act and in acting to make oneself even as one is made by external forces—I will look at the work of someone more or less entirely neglected in feminist and much of postmodern literature, Henri Bergson, whose understanding of freedom is remarkably subtle and complex and may provide new ways of understanding both the openness of subjectivity and politics as well as their integration and cohesion with their respective pasts or history.<sup>3</sup> I believe that Bergson may help us to articulate an understanding of subjectivity, agency, and freedom that is more consonant with a feminism of difference than with an egalitarian feminism, which more clearly finds its support in various projects centered around the struggles for rights and recognition. In this sense, although there may be no direct connection between the writings of Irigaray and those of Bergson, nevertheless, some Bergsonian conceptions may serve to explain Irigaray's understanding of what autonomy might be for a subject only in the process of coming into existence, a subject-to-be (a female subject).<sup>4</sup> Bergson might help to rethink how subjectivity and freedom are always and only enacted within and through the materiality that life and the nonliving share, a materiality not adequately addressed in alternative traditions that have until now remained so influential in feminist thought.

### Bergson and Freedom

Bergson's understanding of freedom and its links to subjectivity is initially articulated in his first major publication, *Time and Free Will*, which not only outlines his conceptions of duration and space (which will become the centerpiece of his analyses in *Matter and Memory* and *Creative Evolution*) but also embeds his work in the traditional metaphysical opposition between free will and determinism, an ancient debate, still articulating itself with great insistence, ironically, even within contemporary feminism. His understanding of freedom, as with his notions of perception,

life, and intuition, lies outside and beyond the traditional binary distinctions that characterize so much of Western thought.

Bergson argues that in traditional debates regarding free will and determinism, both sides share a number of problematic commitments: both presume the separation or discontinuity of the subject from the range of available options or alternatives and from the subject's own ongoing self-identity; a fundamental continuity between present causes and future effects (whether causes are regarded as internal to the subject or as external tends to define the positions of the determinist and the libertarian respectively); and an atomistic separation or logical division between cause and effect. In other words, as in all oppositional or dichotomized divisions, both sides of the free will/determinism debate are problematic and share founding assumptions that enable them to regard themselves as opposites.<sup>5</sup> As with all oppositional structures, we need to find something that articulates what both views, in spite of their contradictions, share in common and what exceeds their terms and functions outside their constraints.

For the hard-core determinist, if one had an adequately detailed knowledge of antecedent events, that is, causes, one could predict with absolute certainty what their effects would be, whether these causes are material and external, or psychological and internal. In its most recent incarnations, determinism has affirmed that causes may lodge themselves within the living organism, as effects of an en masse conditioning of the body and its behavior, or as a consequence of the more microscopic molecular movements and structure of the brain or the even more minuscule chromosomal structure of each cell. (Recent discourses on "the gay brain,"<sup>6</sup> the "gay gene," or the construction of queer through too close a "contamination" by queer lifestyles are merely contemporary versions of this ancient debate.) What lies behind each variation of this position is the belief that, if one could know the brain structure or genetic or behavioral patterns intimately enough, one could predict future behavior, whether criminal, sexual, or cultural.

On the other side is the libertarian or free will position which asserts that even if determinism regulates the material order, in the realm of the human subject, there is an inherent unpredictability of effects from given causes. Given a variety of options or alternatives, it is unpredictable which one will be chosen: it is an open or free act. Freedom is understood, on the

antideterminist position, as the performance of an act that could have been done otherwise, even under the same exact conditions. Both libertarians and determinists share the belief that the subject is the same subject, the same entity, before and after the alternatives have been posed and one chosen; the subject, even after choosing a particular course, could review that course and either would make the same choice again in precisely the same way (the determinist position) or could make a different choice, even in the same circumstances (the libertarian position). For both, the choice of one of the options does not annihilate the existence of the others but leaves them intact, capable of being chosen (or not) again.

Bergson's position on the question of freedom is more complex than either the determinist or the libertarian view. For him, it is not so much that subjects are free or not free: rather, it is *acts* that, in expressing a consonance (or not) with their agent, are free (or automatized), have (or lack) the qualitative character of free acts. An act is free to the extent that "the self alone will have been the author of it, and . . . it will express the whole of the self."<sup>7</sup> Bergson's position is both alluringly and nostalgically metaphysical and strikingly simple: free acts are those that spring from the subject alone (and not from any psychological state of the subject or any manipulated behavior around the subject); they not only originate in or through a subject, they express *all* of that subject. In other words, they are integral to who or what the subject is.

In this understanding, the question whether the subject would or would not make the same choice again is ill posed: such a situation is unrealistic and impossible. The precise circumstances cannot be repeated, at the very least, because the subject is not the same: the subject has inevitably changed, grown older, been affected by earlier decisions, is aware of the previous choice, and so on. If the subject were absolutely identical in the replaying of a particular choice, neither the determinist's nor the libertarian's position would be affirmed. All one could say is that the subject is the self-same subject. Yet even in the case of an example favored by the determinist—the subject under hypnosis—there is a measure of freedom insofar as the act performed through suggestion must still be rationalized, integrated in the agent's life history, given a history, qualitatively inserted into all the agent's other acts in order to be performed or undertaken.<sup>8</sup>

With even the most constrained and manipulated of circumstances, when one person's will is imposed on another's without his or her con-

scious awareness, Bergson argues that there must nevertheless be a retrospective cohesion between the subject's current act and the previous chain of connections that prepared for and made it possible. Even in this case, it is only retroactively, after the act is completed, that we can discern or mark the distinction between a cause and an effect for in psychological life there cannot be the logical separation of cause from effect that characterizes material objects in their external relations to each other. What characterizes psychological life, Bergson insists, is not the capacity to lay parts (in this case, psychological states) side by side for this accomplishes a certain spatial ordering that is not possible for, or lived by, the living being but the inherent immersion and coherence of a being in time. Psychological states are not like objects for they have no parts, cannot be directly compared, and admit of no magnitude or degree.

Psychological states have three relevant characteristics: (*a*) they are always qualitative, and thus incapable of measurement without the imposition of an external grid (this already makes psychological determinism an incoherent position—if causes cannot be measured and precisely calculated, then even if determinism is in principle correct, ironically it remains unable to attain its most explicit goal—prediction);<sup>9</sup> (*b*) they function not through distinction, opposition, categories, or identities but through "fusion or interpenetration,"<sup>10</sup> through an immersion or permeation that generates a continuity between states or processes and makes their juxtaposition impossible (this is the basis of Bergson's critique of associationism);<sup>11</sup> and (*c*) they emerge or can be understood only in duration rather than through the conventional modes of spatialization that generally regulate thought, especially scientific or instrumental thought, that is to say, any mode of analysis or division into parts. Parts, elements, and states are discernible only as spatial categories or terms. While these attributes or divisions may be imposed on the continuity of life and consciousness, they do not arise from them for life is as much becoming as it is being; it is durational as much as it is spatial, though we are less able to see or comprehend the durational flux than the mappable geometries of spatial organization.

For Bergson, then, at least in his earlier works, free acts erupt from the subject insofar as they express the whole of that subject even when they are unexpected and unprepared for: "we are free when our acts spring from our whole personality, when they express it, when they have that indefin-

- insignificant, that the associationist theory is applicable. They are, taken all together, the substratum of our free activity, and with respect to this activity they play the same part as our organic functions in relation to the whole of our conscious life. Moreover we will grant to determinism that we often resign our freedom in more serious circumstances, and that, by sluggishness or indolence, we allow this same local process to run its course when our whole personality ought, so to speak, to vibrate." Ibid., 169.
- 17 Most notably in, *Matter and Memory*; *The Creative Mind*; *Mind-Energy*; and *Creative Evolution*.
- 18 "Theoretically, then, everything living must be conscious. In principle, consciousness is co-extensive with life." Bergson, *Mind-Energy*, 8.
- 19 "Even in the vegetable world, where the organism is generally fixed to the soil, the faculty of movement is dormant rather than absent: it awakens when it can be of use. . . . It appears to me therefore extremely likely that consciousness, originally immanent in all that lives, is dormant where there is no longer spontaneous movement." Ibid., 10-11.
- 20 "The amoeba . . . when in the presence of a substance which can be made food, pushes out towards it filaments able to seize and enfold foreign bodies. These pseudopodia are real organs and therefore mechanisms; but they are only temporary organs created for the particular purpose, and it seems they still show the rudiments of a choice. From top to bottom, therefore, of the scale of animal life we see being exercised, though the form is ever vaguer as we descend, the faculty of choice, that is, the responding to a definite stimulus of movements more or less unforeseen." Ibid., 9-10.
- 21 See in particular Uexküll, *Theoretical Biology*; Uexküll, *Instinctive Behavior*; Raymond Ruyer, *Néo-finalisme*; and Simondon, "The Genesis of the Individual."
- 22 Bergson, *Matter and Memory*, 31.
- 23 "Matter is inertia, geometry, necessity. But with life there appears free, predictable, movement. The living being chooses or tends to choose. Its role is to create. In a world where everything else is determined, a zone of indetermina- tion surrounds it. To create the future requires preparatory action in the present, to prepare what will be is to utilize what has been; life therefore is employed from its start in conserving the past and anticipating the future in a duration in which past, present and future tread one on another, forming an indivisible continuity. Such memory, such anticipation, are consciousness itself. This is why, in right if not in fact, consciousness is coextensive with life." Bergson, *Mind-Energy*, 13.
- 24 Bergson, *Creative Evolution*, 114.
- 25 "This is precisely what life is, — freedom inserting itself into necessity, turning it to its profit. Life would be an impossibility were the determinism of matter so absolute as to admit no relaxation. Suppose, however, that at particular points matter shows a certain elasticity, then and there will be opportunity for

- consciousness to install itself. It will have to humble itself at first; yet, once installed, it will dilate, it will spread from its point of entry and not rest till it has conquered the whole, for time is at its disposal and the slightest quantity of indetermina- tion, by continually adding to itself, will make up as much freedom as you like." Bergson, *Mind-Energy*, 13-14.
- 26 It is primarily Irigaray's earlier works — *Speculum of the Other Woman*; *This Sex Which is Not One*; *Marine Lover*; and *An Ethics of Sexual Difference* that outline her understanding of autonomy and identity and a project of becoming, a project of the future that overcomes the sexual indifference of the past and present.
- 27 See in particular, Irigaray, "Is the Subject of Science Sexed?"

able resemblance to it which one sometimes finds between the artist and his work" (172). Acts are free insofar as they express and resemble the subject, not insofar as the subject is always the same, an essence, an identity but insofar as the subject is transformed by and engaged through its acts, becomes through its acts: "Those who ask whether we are free to alter our character lay themselves open to [this] objection. Certainly our character is altering imperceptibly every day, and our freedom would suffer if these new acquisitions were grafted on to our self and not blended with it. But, as soon as this blending takes place, it must be admitted that the change which has supervened in our character belongs to us, that we have appropriated it" (172).

Bergson's point is that free acts come from or even through us (it is not clear if it matters where the impetus of the act originates — what matters is how it is retroactively integrated into the subject's history and continuity). More significantly, if this subject from which acts spring is never the same, never self-identical, always and imperceptibly becoming other than what it once was and is now, then free acts, having been undertaken, are those which transform us, which we can incorporate into our becomings in the very process of their changing us. Free acts are those which both express us and which transform us, which express our transforming.

What both the determinists and the libertarians misunderstand is the very notion of *possibility*: the determinist assumes that there is only one possible act that can occur from given conditions or antecedents for any given subject, whereas the libertarian assumes that there could be several different acts that could ensue from given conditions or antecedents. Given two possible outcomes, X and Y (and fixing the antecedent conditions), the determinist assumes that only one was ever in fact possible; in contrast the libertarian assumes that both were equally possible. Neither understands that the two options were never of equal value because neither exists in itself as an abstract possibility. If we follow Bergson's famous distinction between the possible and the virtual,<sup>12</sup> the possible is at best the retrospective projection of a real that wishes to conceive itself as eternally, always, possible but which becomes actual only through an unpredictable labor and effort of differentiation, an epigenesis that exceeds its preconditions. It is only after a work of art, a concept, formula, or act exists, is real, and has had some actuality that we can say that it must have been possible, that it was one of the available options. Its possibility can be

gleaned only from its actuality for the possible never prefigures the real, it simply accompanies it as its post facto shadow. So although we can posit that X and Y are equally possible (or not equally possible), it is only after one of them has been actualized or chosen that we can see the path of reasons, causes, or explanations which made it desirable.<sup>13</sup> Only after one of the options has been chosen can we see that the unchosen option is not preserved there in its possibility but entirely dissolves, becoming simply a reminiscence or projection.

Bergson has provided an understanding of freedom that is not fundamentally linked to the question of choice, to the operations of alternatives, to the selection of options outside the subject and independently available to him or her. It is not a freedom of selection, of consumption, a freedom linked to the acquisition of objects but a freedom of action that is above all connected to an active self, an embodied being, a being who acts in a world of other beings and objects. Acts, having been undertaken, transform their agent so that the paths that the agent took to the act are no longer available to him or her except abstractly or in reconstruction. Indeed, there are no paths to any possible action (that is why an action remains possible but not real) until the action is acted, and then the path exists only in reconstruction not in actuality. The path can be drawn only after the movement is completed. Once the act is performed, we can divide, analyze, assess, and treat as necessary what in the process of its performance remains undivided, unanalyzable, surprising, and utterly contingent. The act, once performed, once actualized, is different from the indeterminacy of its performance.

Moreover, Bergson's understanding of freedom dissolves the intimate connection between freedom and the subject's internal constitution or pre-given right. Freedom is not a quality or property of the human subject, as implied within the phenomenological tradition, but can only characterize a process, an action, a movement that has no particular qualities. Freedom has no given content; it cannot be defined. "Any positive definition of freedom will ensure the victory of determinism."<sup>14</sup> This is in part because it is not an attribute, quality, or capacity that exists independent of its exercise. It is not that subjects are or are not free; rather, actions, those undertaken by living beings, may sometimes express such freedom. Freedom is a matter of degree and characterizes only those acts in which one acts with all of one's being, and in the process those acts become capable of

transforming that being. It is rare that our actions express with such intimate intensity the uniqueness of our situation and our own position within it.<sup>15</sup> But it is at these moments that freedom at its most intense is expressed.

Freedom is thus the exception rather than the rule in the sense that it can function only through the "autonomy" of the living being against a background of routinized or habituated activity. It is only insofar as most of everyday life is accommodated through automatism, by a kind of reflex or habit, that free acts have their energetic and aesthetico-moral force and their effects on their author or agent. Associationism and determinism have their relevance in conscious life: they provide an explanation of the automatized substrate of daily behavior that provides a probabilistic guarantee of accomplished action. It is only against this assumed or taken-for-granted background economy of details that free acts may erupt.<sup>16</sup> In place of either a rigid determinism or the pointless and undirected openness of libertarianism, Bergson poses indeterminacy as the defining characteristic of life and the condition for freedom: "It is at the great and solemn crisis, decisive in our reputation with others, and yet more with ourselves, that we choose in defiance of what is conventionally called a motive, and this absence of any tangible reason is the more striking the deeper our freedom goes" (170).

### Freedom and Materiality

In his later works, Bergson focuses less on freedom as the exclusive attribute of a self, concentrated on only the one, conscious side of the distinction between the organic and the inorganic, as he did in his earlier *Time and Free Will*, and more on the relations between the organic and the inorganic, the internal constitution of freedom through its encounters with the resistance of matter.<sup>17</sup> If freedom is located in acts rather than in subjects, then the capacity to act and the effectivity of action is to a large extent structured by the ability to harness and utilize matter for one's own purposes and interests. Freedom is not a transcendent quality inherent in subjects but is immanent in the relations that the living has with the material world, including other forms of life.

As the correlate of life itself, whose accompaniment is consciousness in a more or less dormant or active state, freedom is not a transcendental

property of the human but an immanent and sometimes latent capacity in life in all its complexity. Life is consciousness, though not always an active consciousness. Consciousness is the projection onto materiality of the possibility of a choice, a decision whose outcome is not given in advance, which is to say, a mode of simplifying or skeletalizing matter so that it affords us materials on and with which to act.<sup>18</sup> It is linked to the capacity for choice, for freedom. It is not tied to the emergence of reason, to the capacity for reflection, or to some inherent quality of the human. Life in its evolutionary forms expresses various degrees of freedom, correlated with the extent and range of consciousness, which is itself correlated with the various possibilities of action. The torpor or unconsciousness that characterizes most plant life makes the concept of freedom largely irrelevant or operational only at its most minimal level insofar as "choice" or action is not generally available to vegetal existence.<sup>19</sup>

Yet the most elementary forms of mobile life, animal existence from the protozoa upward, exhibit a kind of incipient freedom in some of their most significant actions. The capacity for "choice" — even if reduced to the choice of when and where to contract or expand, when and what to eat, and so forth — expresses both the particularity of each species and the specificity of individuals within them.<sup>20</sup> Each species, Bergson suggests, has the consciousness precisely appropriate to the range of actions available to it: each species, and here Bergson anticipates the work of some of the theoretical biologists to follow,<sup>21</sup> has a world opened up to it within which its organs have, through natural selection, the capacity to extract for it what it needs for its ongoing existence. Each animal species, whether regulated by instinct as are the social insects or by intelligence as occurs in gradations through the vertebrates, has a world in which it can act, in which it requires a certain consciousness and in which there is for it a "fringe" of freedom, a zone of indetermination that elevates it above mere automated responses to given stimuli.

It is this "zone of indetermination" that for Bergson characterizes both the freedom representative of life and the capacity for being otherwise that life can bestow on (elements or factors of) material organization. Indetermination is the "true principle" of life, the condition for the open-ended action of living beings, the ways in which living bodies are mobilized for action that cannot be specified in advance.<sup>22</sup> The degrees of indetermination are the degrees of freedom. Living bodies act not simply or mainly

through deliberation or conscious decision but through indetermination, through the capacity they bring to the material world and objects to make them useful for life in ways that cannot be specified in advance.<sup>23</sup>

Indetermination spreads from the living to the nonliving through the virtuality that the living brings to the inorganic, the potential for the inorganic to be otherwise, to lend itself to incorporation, transformation, and energetic protraction in the life and activities of species and individuals: "At the root of life there is an effort to engraft on to the necessity of physical forces the largest possible amount of *indetermination*."<sup>24</sup> Life opens the universe to becoming more than it is.

But equally, Bergson argues, matter as a whole, the material universe, must contain within itself the very conditions for the indeterminacy of the life which it generated. Those mixtures or compounds may yield memory, history, and the past and make them linger, press on, and remain relevant to the present and future. Matter must contain as its most latent principle, its most virtual recess, the same indeterminacy that life returns to it. This is the common point of binary terms (matter and memory, extension and consciousness, space and duration) and that which exceeds them—the fundamental interimplications of mind and matter, of life and the inorganic, as well as their origins in the indeterminacy of the universe itself, the point of their endosmosis, where matter expands into life and life contracts into matter in pure duration. Life, and its growing complications through the evolutionary elaboration, generates a "reservoir of indetermination" (126) that it returns to the inorganic universe to expand it and make it amenable to, and the resource for, life in its multiple becomings; and matter in turn, while providing the resources and objects of living activity, is also the internal condition of freedom as well as its external limit or constraint. "[The evolution of life] is at the mercy of the materiality which it has had to assume. It is what each of us may experience in himself. Our freedom, in the very movements by which it is affirmed, creates the growing habits that will stifle it if it fails to renew itself by a constant effort: it is dogged by automatism" (127).

Materiality tends to determination; it gives itself up to calculation, precision, and spatialization. But at the same time, it is also the field in and through which free acts are generated through the encounter of life with matter and the capacity of each to yield to the other its forms and forces, both its inertia and its dynamism. Matter, inorganic matter, is both the

contracting condition of determination and the dilating expression of indetermination, and these two possibilities characterize both matter in its inorganic forms and those organized material bodies that are living. Immersed in matter and an eruption from it, life is the continuous negotiation with matter that creates the conditions for its own expansion and the opening up of matter to its own virtualities: "[Life] was to create with matter, which is necessity itself, an instrument of freedom, to make a machine which should triumph over mechanism, and to use the determinism of nature to pass through the meshes of the net which this very determinism had spread" (264).

As isolatable systems, fixed entities, objects with extrinsic relations to each other, the material universe is the very source of regularity, predictability, and determination that enables a perceiving being to perform habitual actions with a measure of some guarantee of efficacy. Yet as an interconnected whole, the universe itself exhibits hesitation, uncertainty, and the openness to evolutionary emergence, that is, the very indetermination that characterizes life. At its most contracted, the material universe is regular, reborn at each moment, fully actual and in the present. But at its most expansive, it is part of the flow of pure duration, carrying along the past with the present, the virtual with the actual, and enabling them to give way to a future they do not contain. The universe has this expansive possibility, the possibility of being otherwise not because life recognizes it as such but because life can exist only because of the simultaneity of the past with the present that matter affords it.<sup>25</sup>

### Feminism and Freedom

Feminists have long assumed that, as a coercive form of constraint, it is patriarchy and patriarchal power relations that have limited women's freedom by not making available to women the full range of options for action that it affords men. And it is certainly true that the range of "choices" available to women as a group is smaller and more restricted than that available to men as a group. But the question of freedom for women, or for any oppressed social group, is never simply a question of expanding the range of available options so much as it is about transforming the quality and activity of the subjects who choose and who make themselves through how and what they do. Freedom is not so much linked to choice



(a selection from pre-given options or commodities) as it is to autonomy, and autonomy is linked to the ability to make (or refuse to make) activities (including language and systems of representation and value) one's own, that is, to integrate the activities one undertakes into one's history, one's becoming. It is my claim that something like a Bergsonian understanding of freedom coheres more readily with an Irigarayan conception of sexual autonomy than with a feminist egalitarianism that is necessarily rooted in sexual indifference. Although of course Bergson was not interested in and predates the paradigm of sexual difference posed by Irigaray, his conception of freedom links actions to a process of self-making that closely anticipates Irigaray's understanding of sexual difference, the autonomy and dual symmetry of the two sexes, as that which is virtual and that which is in the process of becoming.<sup>26</sup>

Bergson has elucidated a concept of freedom that links it not to choice but to innovation and invention. Freedom pertains to the realm of actions, processes, and events that are not contained within, or predictable from, the present; it is that which emerges, surprises, and cannot be entirely anticipated in advance. It is not a state one is in or a quality that one has, but it resides in the activities one undertakes that transform oneself and (a part of) the world. It is not a property or right bestowed on, or removed from, individuals by others but a capacity or potentiality to act both in accordance with one's past as well as "out of character," in a manner that surprises.

Freedom is thus not primarily a capacity of mind but of body: it is linked to the body's capacity for movement, and thus its multiple possibilities of action. Freedom is not an accomplishment granted by the grace or good will of the other but is attained only through the struggle with matter, the struggle of bodies to become more than they are, a struggle that occurs not only on the level of the individual but also of the species.

Freedom is the consequence of indetermination, the very indetermination that characterizes both consciousness and perception. It is this indetermination — the discriminations of the real based on perception, the discriminations of interest that consciousness performs on material objects, including other bodies — that liberates life from the immediacy and givenness of objects but also from the immediacy and givenness of the past. Life is not the coincidence of the present with its past, its history, it is also the forward thrust of a direction whose path is clear only in retro-

spect. Indetermination liberates life from the constraints of the present. Life is the protraction of the past into the present, the suffusing of matter with memory, which is the capacity to contract matter into what is useful for future action and to make matter function differently in the future than in the past. The spark of indetermination that made life possible spreads through matter by means of the activities that life performs on matter. As a result, the world itself comes to vibrate with its possibilities for being otherwise.

So what does Bergsonism, or the philosophy of life, offer to feminist theory over and above the liberal and Marxist, empiricist or phenomenological conceptions of freedom? If we rely on a conception of freedom that is linked to the controlling power of the other, the socially dominant others, whether a class, a sex, a race, or groups and individuals — a view which all these conceptions in some way share — we abandon in advance the concept of autonomy. If freedom is that which is bestowed on us by others, it cannot be lodged in autonomy, in the individual's inner cohesion and historical continuity: it comes from outside, from rights granted to us rather than capacities inherent in us. Freedom becomes transcendental rather than immanent, other oriented rather than autonomous, linked to being rather than to doing. Such an understanding of freedom, at least from the point of view of a philosophy of life, is reactive, secondary, peripheral, outside of life instead of being seen as the very (inalienable) condition of life. Freedom is a question of degree rather than an absolute right. It is attained rather than bestowed, and it functions through activity rather than waiting passively for its moment. Being gay or straight, for example, is not a question of choice (of options already given in their independent neutrality — men or women as sexual objects, or masculine or feminine as modes of identification) but an expression of who one is and what one enjoys doing, of one's being. It is an expression of freedom without necessarily constraining itself to options already laid out. Gayness (or straightness) is neither produced from causes — whether physiological, genetic, neurological, or sociological — nor is it the consequence of a free choice among equally appealing given alternatives. It is the enactment of a freedom that can refuse to constrain sexuality and sexual partners to any given function, purpose, or activity and that makes sexuality an open invention even as it carries the burden of biological, cultural, and individual construction.

The problem of feminism is not the problem of women's lack of freedom, or simply the constraints that patriarchal power relations impose on women and their identities. If women are not, in some sense, free, feminism could not be possible. The problem, rather, is how to expand the variety of activities, including the activities of knowledge-production,<sup>27</sup> so that women and men may be able to act differently and open up activities to new interests, perspectives, and frameworks hitherto not adequately explored or invented. The problem is not how to give women more adequate recognition (who is it that women require recognition from?), more rights, or more of a voice but how to enable more action, more making and doing, more difference. That is, the challenge facing feminism today is no longer only how to give women a more equal place within existing social networks and relations but how to enable women to partake in the creation of a future unlike the present.

## Notes

- 1 It is perfectly obvious that a freedom to create, to make, or to produce is a luxury that can be attained only with a certain level of the absence of constraint. However, even in the most extreme cases of slavery and in situations of political or natural catastrophe of the kinds globally experienced in recent years, there is always a small space for innovation and not simply reaction. What remains remarkable about genocidal struggles, the horrors of long-term incarceration, concentration camps, prisoner of war camps, and the prospects of long-term social coexistence in situations of natural and social catastrophe is the inventiveness of the activities of the constrained — the flourishing of minor and hidden arts and literature, technologies and instruments, networks of communication, and the transmission of information. What is most striking about the extreme situations of constraint, those which require a “freedom from,” is that they do not eliminate a “freedom to” but only complicate it.
- 2 In *The Nick of Time* (2004) as well as in *Volatile Bodies* (1994).
- 3 There have been some, a few, feminist texts on Bergson. See, in particular, Olkowski, “The End of Phenomenology”; and Hill, “Interval, Sexual Difference.”
- 4 Irigaray articulates her objections to, and her differences from, the feminist egalitarian project in “Equal to Whom?”
- 5 At bottom, Bergson argues, both the libertarian and the determinist are committed to a tautology, in fact to complementary tautologies: “The argument of the determinists assumes this puerile form: ‘The act, once performed, is

performed,’ and . . . their opponents reply: ‘The act, before being performed, was not yet performed.’ In other words, the question of freedom remains after this discussion exactly where it was to begin with; nor must we be surprised at it, since freedom must be sought in a certain shade or quality of the action itself and not in the relation of this act to what it is not or to what it might have been.” Bergson, *Time and Free Will*, 182.

- 6 See LeVay, *Queer Science*.
- 7 Bergson, *Time and Free Will*, 165–66.
- 8 “For it is by no means the case that all conscious states blend with one another as raindrops with the water of a lake. The self, in so far as it has to do with a homogeneous space, develops on a kind of surface, and on this surface independent growths may form and float. Thus a suggestion received in the hypnotic state is not incorporated in the mass of conscious states, but, endowed with a life of its own, it will usurp the whole personality when its time comes. A violent anger roused by some accidental circumstance, a hereditary vice suddenly emerged from the obscure depths of the organism to the surface of consciousness, will act almost like a hypnotic suggestion.” *Ibid.*, 166.
- 9 “The causes here, unique in their kind, are part of the effect, have come into existence with it and are determined by it as much as they determine it.” Bergson, *Creative Evolution*, 164.
- 10 Bergson, *Time and Free Will*, 163.
- 11 “In proportion as we dig below the surface and get to the real self, do its states of consciousness cease to stand in juxtaposition and begin to permeate and melt into one another, and each to be tinged with the colouring of the others. Thus each of us has his own way of loving and hating; and this love or hatred reflects his whole personality.” *Ibid.*, 164.
- 12 See Bergson, *The Creative Mind*, “The Possible and the Real.”
- 13 “As reality is created as something unforeseeable and new, its image is reflected behind into the indefinite past; thus it finds that it has from all time been possible, but it is at this precise moment that it begins to have been always possible, and that is why I said that it’s possible, but it is at this precise moment that it begins to have been always possible, and that is why I said that its possibility, which does not precede its reality, will have preceded it once the reality has appeared. The possible is therefore the mirage of the present in the past.” Bergson, *The Creative Mind*, 119.
- 14 Bergson, *Time and Free Will*, 220.
- 15 “It is the whole soul, in fact, which gives rise to the free decision: and the act will be so much the freer the more the dynamic series with which it is connected tends to be the fundamental self. Thus understood, free acts are exceptional, even on the part of those who are most given to controlling and reasoning out what they do.” *Ibid.*, 167.
- 16 “It is to this these acts, which are very numerous but for the most part

*Samantha Frost*

## Fear and the Illusion of Autonomy

Thomas Hobbes is notorious for his conjunction of fear and politics. Yet, despite this notoriety, we do not often give him credit for having a sophisticated and well-thought-out account of just what fear is. The accounts of fear that are often attributed to Hobbes mirror more common understandings of fear: Fear is the screaming physical response to the threat of injury or to threats to survival. Fear is a response to the limits of epistemology, which is to say that it is a response to the obscurity of the unknown.<sup>1</sup> Or, fear is an ideological formation, an affect we learn in response to cultural and political prompts.<sup>2</sup> Although each of these renditions differs in its presumptions about the roots of fear, in each it is figured as a powerful motivator for action. Indeed, the common textbook version of Hobbes's politics combines all three accounts of fear to foreground Hobbes's statement that, in politics, "the Passion to be reckoned upon, is Fear."<sup>3</sup> According to this tale, fear arises organically and inevitably from the competitiveness and contentiousness of individuals' pursuits of their desires. Although fear is primal—a kind of animal instinct for survival—its imperatives nevertheless can coincide with the demands of reason, which is to say that fear compels us to see the wisdom of leaving the uncertainties and violence of the natural condition by setting up a sovereign to rule over us.<sup>4</sup> Through the mecha-

nism of the covenant, we leave the "warre of every one against every one,"<sup>5</sup> in which each fears every other, and we install a supremely powerful sovereign our common fear of whom impels us to obedience and orderliness. Here, then, fear is conceived as the catalyst and precipitate of social antagonism as well as the foundation for political order.

In reconsidering Hobbes's account of fear, I do not want to discount altogether such treatments for each captures important elements of the passions we group under the rubric of fear. But through his materialist metaphysics—and its account of the subject—Hobbes gives us a way to think about fear that is not purely animalistic, is not fundamentally epistemological, and does not position us as so completely saturated by culture that we cannot but be the dupes of political manipulation. If we trace Hobbes's materialist account of the profound complexity of causation along with his analysis of the way in which fear orients the subject in time, we see that fear is both a response to, and a disavowal of, the impossibility of self-sovereignty. That is, the movements of memory and anticipation that Hobbes depicts as central to the passion of fear transform a complicated causal field for the subject in such a way as to give her a sense of possible mastery both over herself and over the world around her. In showing us how fear fosters an illusion of autonomous agency in individuals, Hobbes points to the possibility that the immense and fearsome power attributed to the sovereign is not simply a response to the need to quell unruliness and disorder but is also the condition for each individual's sense of her own self-sovereignty.

## Heteronomy

Hobbes's arguments about the impossibility of self-sovereignty rest on the account of complex causation that is at the center of his materialist metaphysics. In Hobbes's view, everything is matter or material. As he puts it, "The Universe, that is, the whole masse of all things that are" is "Corpo-reall, that is to say, Body."<sup>6</sup> What is particularly interesting in Hobbes's materialism is his conception of matter itself. As the philosopher who penned the Third Set of Objections to René Descartes's *Meditations*, Hobbes vehemently rejected not only the latter's dualist configuration of the subject but also the conception of matter that is integral to the Cartesian dualist framework. Against Descartes's conception of matter as in itself and es-

essentially incapable of thinking, Hobbes forwarded what I call a “variegated materialism,” in which some forms of matter are conceived as alive or thoughtful without the liveliness or capacity for thought somehow “added” onto an inert substrate.<sup>7</sup> That is to say, for Hobbes, some matter is simply alive or capable of thought as such. Accordingly, he proposes that we conceive of people as “thinking-bodies.”<sup>8</sup>

Of course, to figure people as thinking-bodies—as bodies with the capacity to think—is to raise a host of questions about the nature of self-consciousness, cognition, freedom, and determinism that I cannot address fully in this context. But a brief sketch of some of the concerns raised by materialist understandings of the self runs as follows. To portray people as wholly embodied—and to refuse philosophically to preserve some non-physical or nonbodily element that can serve as the agent or mechanism that sets the body apart from its physical environment—is to risk dissolving the self into the world. That is, the figure of a wholly embodied subject elicits the concern that such a body could do nothing but reproduce mechanically the causal movements and trajectories at play in the context in which it exists. In evoking the specter of a subject that is not much more than a vehicle for the causal forces around it, Hobbes’s materialism seemingly presents itself as the antithesis of a theory of autonomous agency: his materialism seems to promise nothing more than a reductive mechanistic determinism. Hobbes’s materialist account of causation does indeed call into question the possibility of autonomous agency—autonomy here conceived not in the strict Kantian sense of the will adhering to naught but rational principle but rather in the more general sense of independent, self-conscious self-determination. But his denial of the individual’s self-sovereignty as an actor does not amount to the denial of human agency altogether. In addition to proposing that our interdependence is the condition for our effective actions, Hobbes also suggests that in spite of the fact of heteronomy—or perhaps in the need to deny it—we actively foster an illusion of autonomy so that we can *feel* effective when we act.<sup>9</sup> Indeed, in this essay, I want to argue that fear is a passion among whose effects is the illusion of individual autonomous agency.

According to Hobbes, all events and actions are caused, and each has a broad array of causal antecedents that are related to one another in a complex, nonlinear fashion. As he explains it, each event or act is produced or determined by not just one or two causal factors but rather by

“the sum of all things.”<sup>10</sup> Hobbes even grants that astrological factors may have some (impossible to calculate) causal weight (246). However, the immense range of causal factors that contribute to determining an act are not connected in a unilinear fashion, as if one thing leads to the next which leads to the next. Rejecting a unilinear and cumulative conception of causality, Hobbes explains that the “sum of all things” is not “one simple *chain* or concatenation, but an innumerable number of chains, joined together . . . and consequently the whole cause of an event, doth not always depend on one single chain, but on many together” (246–47).

Importantly, Hobbes’s sense of the complexity of the causal determination of events and actions is not captured in toto by the image of a network of bodies whose motile forces move inexorably in a particular direction to produce an inevitable effect. For in addition to pointing to the manifold causes whose trajectories coincide to produce an event, Hobbes reminds us that the fields or contexts in which events and actions occur are equally causes of the events and actions. In his discussion of cause and effect in *De Corpore*, he analytically resolves events or acts into two distinguishable elements. On the one hand, there is the body whose movement “generates motion” in another body.<sup>11</sup> This “generative” body is what Hobbes calls the agent of an act; its motion is “action.” On the other hand, there is the body in which the movement is generated. This moved body is what Hobbes calls the patient; its motion is “passion.” For any act to occur, there must be both agent and patient. Or to say the same thing in terms of the movement involved: every act requires both action and passion. Of course, we are well accustomed to thinking about acts in terms of agents and action. We are not so used to thinking about the patient of, and the passion in, an act, that which is moved and the being-moved movement that is a constitutive part of every act. But in Hobbes’s analysis, without passion, that is, without a patient, an act might be initiated but it will not occur. So, in considering the causes that coalesce to produce an act, we must think of the complex of contextual passive causes as well as the complex of active causes.

To make matters even more complicated, Hobbes argues that the causes of specifically human actions are likewise determined. In other words, he extends his account of complex causation to our thoughts and passions to claim that we must conceive of our actions as produced by the coalescence of numerous causes, internal and external, that are related to one another

in a complex, nonlinear fashion. To put the point succinctly, Hobbes's materialist claim that "nothing taketh beginning from *itself*" entails that human actions must be considered heteronomous.<sup>12</sup>

For Hobbes, neither our thoughts nor our passions have their origin in us. According to his materialism, our thoughts are caused rather than being the intuited product of our self-conscious effort and rational direction.<sup>13</sup> Each thought or "imagination" is a composite of sensory percepts and memories that arise and resound as the body ages, moves, and encounters and responds to the context of its action.<sup>14</sup> Likewise, Hobbes claims, our passions are not born with us but rather are constituted through a variable configuration and confluence of bodily constitution, experience, cultural norms, material opportunity, and dumb luck.<sup>15</sup> Since we cannot direct ourselves to feel any particular one or other of the passions, we are not the original and singular source of the will that is the motive force in our actions.<sup>16</sup> In short, the thoughts and desires that propel and occasion our actions have as complex a causal history as any event.<sup>17</sup> As a result, Hobbes claims, the subject cannot be taken to be the *single origin* of an act.<sup>18</sup>

Importantly, however, the claim that an individual is not the single origin of her act is not the claim that her actions are simply the result of her passive absorption and transmission of the extant ambient causal forces. Hobbes contends that thinking-bodies can and do in fact act in contradistinction to the determinations of the contexts of their actions. In his analysis, distinctive or innovative actions are possible because there is a temporal disjuncture between the determination of the subject's imagination and desires and the determinants of the causal context which provokes and is the condition of the subject's actions.

According to Hobbes, "the Imagination is the first *internall* beginning of all Voluntary motion."<sup>19</sup> The imagination can be conceived as the first internal beginning of action because the thoughts that constitute the imagination are not a simple and direct imprint of the perceptual objects immediately before the subject. Rather, as noted above, the imagination is a form of memory that comprises past perceptual experience, past affective responses, as well as current perceptual and physiological stimuli. In other words, each thinking-body carries its own history as memory and that ever-changing collection of memories is the basis of both perception and imagination. Accordingly, the mutual transfiguration of memory, af-

fect, and percept that together constitute particular thoughts and passions is unique to the singular history that is each individual's life. So, while thoughts and passions are indeed caused, the chains of their causation are nonsynchronous and noncontemporaneous with the causal determinations of the context. That is, because of what Hobbes describes as the internal causal history of the imagination, the causes of the imagination and the passions do not coincide with, and are not comprehended by, the environmental stimuli that provoke them.

As is no doubt clear in even this brief excursus into his philosophy of causation, Hobbes's materialism calls into question our status as masterful, self-sovereign subjects. Although we are not mere puppets of the causal forces in the field of our action, neither are we completely self-determining agents. Likewise, many among the vast and complicated range of contextual causes that coalesce to produce an event are beyond our ken and control, which is to say that we cannot unflinchingly regulate or direct the future course of events. Yet, while the complexity of causation makes it close to impossible definitively to single out a particular patchwork of causes and effects and from within that to identify one cause as decisive for a particular act or event, Hobbes says we isolate causes in this way all the time. In fact, we are driven to do so.

As Hobbes explains, "Anxiety for the future time, disposeth men to enquire into the causes of things: because the knowledge of them, maketh men the better able to order the present to their best advantage."<sup>20</sup> In other words, because we want to be more rather than less happy and successful, we try to discern why good and bad things happen to us and, following that, what we should do. But of course, for all our researches into causes and consequences, what we can come up with is just "conjecture" whose insights are often "very fallacious" (chap. 3, 97). In the best of circumstances, those with a lot of experience can act with some certainty of what consequences will come "but not with certainty enough" (97). Hobbes points out that even when "the Event answereth our Expectation," even when a prediction turns out to be correct, the foresight is "in its own nature . . . but Presumption" (97), which is to say that it is good guesswork. And in situations in which we cannot find "the true causes of things," we are compelled to "suppose causes," fabricating them "either such as [our] own fancy suggesteth; or trusteth to the Authority of other men" (chap. 12, 168–69). And in fact, the propensity to select and identify

causes is especially pronounced in the experience of fear. As we shall see, below, according to Hobbes's analysis, the identification of causes in fear can be seen as an effort to produce the illusion of autonomy under conditions of heteronomy.

## Fear

As mentioned above, for Hobbes, the passions have a temporal depth that makes them more than an immediate reaction to stimulation. As their name might suggest, the passions are a form of "being-moved" provoked by stimuli. Yet, the provocation is not the only causal force at play: the various textures and gravity of the passions derive from the play of memory, evaluation, and anticipation that is a part of perception itself. Indeed, in Hobbes's elaboration of the passions, each has its own peculiar temporality. I am interested in the temporality of fear in particular not simply because Hobbes says that fear is the most compelling of the passions in politics. I want to focus on Hobbes's account of fear because there is a recursive temporal movement in fear that simplifies the causal field and that, in so simplifying, grants to the subject the possibility of effective agency. The fact that fear is implicated in the aspiration to autonomy means that its place and significance in politics is more complicated and productive than its figuration as a motivation has led us to believe.

To be clear, to say that fear has a temporality to it is not the same as to say it has a history. Certainly, Hobbes's materialist account of the subject does entail that fear has a history. Contrary to the common view that for Hobbes individuals' desires and fears are "intrinsic" to each person, he claims in *Leviathan* that the passions "proceed from Experience, and triall of their effects upon themselves, or other men" (chap. 6, 120).<sup>21</sup> In fact, in *De Homine* he gives a broader account of the extrinsic or cultural factors that constitute the passions. He writes there that "men's inclinations toward certain things, arise from a six-fold source: namely from the constitution of the body, from experience, from habit, from the goods of fortune, from the opinion one hath of oneself, and from authorities" (chap. 13, 63). In other words, rather than being original to ourselves, our dispositions and desires arise through the complex interaction of physiology, personal history, and historical, cultural, and political context, and they change as these factors change over time (63). If we take Hobbes's notion

of inclinations to include *disinclinations*—just as he includes fears and aversions as well as desires and appetites in his account of the passions—we can see him pointing here to as complex a history for individuals' fears as there is for their desires. To insist, as Hobbes does, that fear has a history is to give it a richness and texture that is both socially and historically recognizable as well as specific to the particular individual experiencing it. But this anchoring of the subject's particularity in his or her historical context is not what I am after in specifying fear's temporality. By "temporality," I mean to highlight the way in which the feeling of fear orients the subject in time: forward-looking, backward-looking, or some combination of these.<sup>22</sup> Of course, as we shall see, the temporality of fear is intimately linked to its historicity. But what I am particularly interested in is how the movements of memory and anticipation in fear place the subject in relationship to time in such a way as to give her a sense of possible mastery over the field of her actions and (therefore) over the future.

In order to get at the temporality of fear as Hobbes understands it, we need to be rather technical in distinguishing the passion of fear from other aversive passions. First, then, to the passions more generally. According to Hobbes, each perceptual object an individual encounters has an effect upon the equilibrium of the person's vital life activity—or what he calls "vitall motion."<sup>23</sup> As he tells it, the motions that "presseth the organ proper to each Sense" are translated "by the Mediation of Nerves, and other strings, and membranes of the body" to the brain and heart where they "causeth . . . a resistance, or counter-pressure, or endeavour of the heart, to deliver itself" (chap. 1, 85). In other words, in the process of perception, a person is not simply acted upon but also resists the motions precipitated by a perceptual encounter. The perceiver is not passively impressed upon by stimuli but rather actively responds in the very process of perceiving. The event of perception, then, is as much a rejoinder or a resistance to transformation as it is a stimulation. And if we recall that for Hobbes memory quite simply comprises the residual motions triggered by perception lingering in the thinking-body over time (chap. 2, 88–89), we can see that both forms of perceptual effect—the stimulation and the resistance—become constituent elements of the perception cum memory of what the perceptual object is. In other words, each thought or memory has an evaluative or affective dimension.

In Hobbes's analysis, the passions as a group constitute different kinds of responses or rejoinders that a person might have to a stimulating object. A positive effect on vital motion compels the organism to draw closer, an impetus Hobbes calls appetite. A negative effect on vital motion repulses the organism, a movement he calls aversion (chap. 6, 119). Appetite and aversion, then, are the imperceptible movements or "endeavours" in a thinking-body toward or away from a stimulating object "before [these movements] appear in walking, speaking, striking, and other visible actions" (119). And importantly, while the motions instigated by a perceptual encounter are "nothing else but motion in some of the internal parts of the organs of the sentient,"<sup>24</sup> they are experienced as something else. As Hobbes explains, when the body's equilibrium is enhanced or disrupted in the course of perception, "the reall effect there is nothing but Motion, or Endeavour; which consisteth in Appetite, or Aversion, to, or from the object moving."<sup>25</sup> Yet, while the "reall effect" of perception is naught but the motion of the body toward or away from the stimulating object, "the apparence or sense of that motion, is that wee either call Delight, or Trouble of Mind" (121). In other words, the experience or "apparence" of those effects for the person is the feeling of pleasure or displeasure at the presence of a particular object (122). The passions are various kinds of this experience or "apparence" of being-moved.

Not too surprisingly, passions take different forms depending upon the presence or absence of an object. Anticipating the Freudian understanding of desire as constituted through loss, Hobbes states that desire signals "the Absence of the Object" and love "the Presence of the same" (119).<sup>26</sup> Similarly, aversion signals "the Absence; . . . and . . . Hate, the Presence of the Object" (119). In other words, hate is the repulsion felt by a subject in response to an object currently before her. And aversion is the repulsion felt by a subject as part of her memory of an object. Aversion, then, is constituted through absence and must be seen as the subject's felt experience of her on-going movement away from an absent object of memory.

Just as we can distinguish between passions that arise in the presence or the absence of a particular stimulating object, so for Hobbes can we distinguish between those that are "*Pleasures of Sense*" (or "*sensuall*") and those that are "*Pleasures of the Mind*" (122). Superficially, it might seem difficult to square such a distinction with Hobbes's refusal of Cartesian dualism. However, he means by "sensuall" pleasures those that are felt

immediately in the flesh either in the presence of, or in the physical encounter with, an object: "Of this kind are all Onerations and Exonerations of the body; as also all that is pleasant, in the *Sight, Hearing, Smell, Tast, or Touch*" (122). By contrast, he says, the pleasures of the mind are tied up with the imagination and can be said to "arise from the Expectation, that proceeds from the foresight of the End, or Consequences of things" (122). In other words, the pleasures and the displeasures of the mind are a kind of anticipation. And while such anticipation certainly consists in "Motions in the body" — as do all thoughts and passions for Hobbes — the imagination that is the basis of anticipation involves residual motions rather than the relatively fresh motions of sensual pleasure.

Now, importantly, for Hobbes, any anticipation of, or expectation about, the future must draw on memories of the past. As he points out, the future is not something that actually exists. Rather, it is "but a fiction of the mind, applying the sequels of actions Past, to the actions that are Present" (chap. 3, 97). What this means is that we can conceive of the future, and hence generate expectations, only by extrapolating imaginatively from memories. We could say, speaking loosely, that to look forward we must first look backward: any future we imagine will be drawn from a configuration or reconfiguration of our memories of the past. Accordingly, the passions that arise from "the Expectation of consequences" (chap. 6, 122) are characterized by an imaginative projection of the past forward through time.

It is once we apprehend both the backward-looking and the forward-looking dimensions of the passions that we can begin to appreciate Hobbes's account of fear. Fear, he says, is "Aversion, with opinion of Hurt from the object" (122). Since aversion involves an absent object and "opinion of hurt" involves an expectation about the future, we can try to be very precise and say that fear is the feeling of the repulsive movement at play in the imaginative expectation of a future experience of pain from an absent offensive object. Put less awkwardly, fear is the displeasure felt either toward an object whose resemblance to a remembered object is taken as an indication of a noxious experience to come or toward the memory of an object whose threatened return heralds a repeat of what came before. Fear, then, entails a figurative movement from the present back toward a remembered past and then from the past toward an anticipated future. This recursive temporal movement of fear is important for

it recasts the causal field and so provides for the possibility of the subject's agency.<sup>27</sup>

Implicit in the recursivity of fear is a presumption that "like events will follow like actions."<sup>28</sup> That is, the recall and then the projection of the subject's past into an imagined future rests on the supposition that prospective experiences will resemble those of the past. On the face of it, the relationships between events implicit in this assumption that the past repeats itself are merely correlations: as an antecedent of this consequence, this object is a sign of this coming experience.<sup>29</sup> But in Hobbes's discussions of prudence and science, he suggests that, over time and with the aid of experience and language, the conditional form that such anticipation takes slips from the observation of correlation to a presumption about causation. He says that in addition to seeking out the causes, consequences, and effects of various things, "Man . . . can by words reduce the consequences he findes to generall Rules, called *Theorems*, or *Aphorisms*" (chap. 5, 113). That is, we can summarize our observations by formulating conditional statements that can be taken as rules of thumb about what happens when. What is so useful about such collections of rules — about science, as he calls this knowledge of consequences — is that together they tell us the "dependance of one fact upon another" (115). In other words, we take such rules to specify causal relations.

Indeed, it is in this assumption of regularity of movement — of repetition — that we can imagine how to intervene in a causal chain and make things happen as we will. As Hobbes puts the point, "when we see how anything comes about, upon what causes, and by what manner; when the like causes come into our power, wee see how to make it produce the like effects" (115). Of course, like the observations that come from experience, the insights of science are often uncertain: "onely some particular events answer to [the] pretence [of science], and upon many occasions prove so as [one] sayes they must" (117).<sup>30</sup> That is, only some events regularly transpire in the manner that scientific knowledge specifies. Yet, Hobbes says, despite uncertainty about the accuracy of our observations or the applicability of the rules we formulate about causation, we use them as the basis for our own actions. That is, our knowledge about causation — stipulative and uncertain as it is — makes us feel like effective agents: if I do this, then that will happen. To put the point briefly, then, the theory of

causation that is the corollary of the presumption that the past repeats itself enables the subject to take the self as a cause of action.

This centering of the subject as a cause of action in a simple causal field is precisely what occurs in the passion of fear. In fear, a subject's perception of a threat is anchored to, and made possible by, a memory of an unpleasant but absent object. Indeed, it is the memory around which the feeling of fear pivots that is so important, for in the figurative movement back to the aversive memory, the causal horizon is narrowed: there was the object and there was me. More specifically, the aversive object recalled in fear is remembered as the cause of displeasure: *that* object, or its past arrival, caused *me* pain. In other words, the narrowing of the causal horizon that is the corollary of the aversive memory is also a simplification of the causal chain. When such a memory and its conjectured and simplified causal baggage are projected forward in time, they serve as a forecast of what might happen in the future: this object caused me pain in the past, so this (other) object will cause me pain soon.

Hobbes's analysis suggests, then, that the object of memory around which fear forms presents the subject with what Adam Phillips has called "a repertoire of possibilities from the past."<sup>31</sup> The consequences of the events and actions related to the aversive object past are projected forward as examples of what happens in such situations. If we recall Hobbes's contention that to stipulate a rule of causation is to generate a sense of agency, then we can see that the repertoire of possibilities provided by fear's aversive object grants to the subject the sense that there *are* possibilities for action: there is something she can do.<sup>32</sup> In other words, the temporal movements in fear enable the subject to imagine herself as an effective agent. More than this, they allow the subject to take herself as the origin of her own actions.

Now, among the passions Hobbes discusses in *Leviathan* is one he identifies as "Panique Terror" (chap. 6, 124). His initial elaboration of this passion depicts it as "Fear, without apprehension of why, or what" (124). In other words, it is a fear without an identifiable cause or object. Importantly, to have an objectless fear is not simply to not know what one is scared of. If fear has no object, then no recursive movement around memory is possible, no simplification of causality can take place, and no anticipatory projection can occur. Without a remembered object to project into



the future, the movement of the imagination stalls; the subject can conjure no imaginative possibilities for the future, possibilities around whose consequences the passions might otherwise do their deliberative work. Where there is no deliberation, there is no willing: no willing, no action. Or, perhaps it is better to say that there is no voluntary action. Hobbes explains that when panic terror takes place in a crowd, there is always someone who has "some apprehension of the cause," an apprehension that, as we have seen, might well be a fabrication. However, "the rest run away by Example; everyone supposing his fellow to know why" (124). In other words, in panic terror, the actions performed by the subject take place through a kind of mimesis. When fear has no object, the subject is bereft of the "repertoire of possibilities" generally provided by fear's object and so cannot imaginatively compose a simple field of action in which she might act as an voluntary agent. Without the all-important work of the imagination, the subject becomes not much more than a conduit for ambient causal forces, responding reflexively, mimetically, to other people's reactions. So, an objectless fear rips the illusion of agency from the subject and thereby deprives her of the ability to initiate actions. This is not simply a kind of disorientation born of disillusionment: I thought I was an agent, but I'm not; what now? Rather, having lost the future, the subject becomes lost to herself.

For Hobbes, then, if we are not to be hurled into blind terror by our inability to map with certainty the complex causes that roil the world around us, we must give our fear an object: our fear "must needs have for object something" (chap. 12, 169–70). That is, we must conjure an object, excavate a memory — any memory — so that our imagination can do its temporal do-si-do and render the field available for our active intervention. The recursive temporal movement around fear's object enables the subject to confront a field that is impossible to master and yet act as if she were nonetheless a masterful agent. That is, the recursive movement that pivots around fear's object furnishes the subject with a sense, if only a semblance, of agency. According to Hobbes's arguments, then, the compulsion in fear to suppose causes, to secure fear's object, is annexed to an insight into our impotence — our lack of sovereignty over ourselves, our actions, and the world. Indeed, in fear we can see the subject's disavowal of that lack of sovereignty.

### The Politics in and of Fear

Hobbes's insight that fear produces in individuals a semblance of self-sovereignty is reflected in his discussions of the political sovereign authorized and instituted via covenant. Indeed, a reading of his politics through the framework of the analysis of fear elaborated above suggests that the infamously large and concentrated power of the sovereign functions to formalize the dynamic through which individuals gain a sense of themselves as autonomous agents. That is to say, the inflated sovereignty of the sovereign serves as a locus for each individual's imagination of herself as self-sovereign.

Such a reading runs roughly thus: In the chaos of civil war, the "miseries, and horrible calamities" that attend the "dissolute condition of masterlesse men" (chap. 18, 238) make individual lives insecure and the outcomes of individual actions and work uncertain (chap. 13, 186). In such a tumultuous context, replete with a myriad of possible obstacles, accidents, and injurious encounters, individuals cannot imagine and sustain a sense of their own effectiveness at securing a future. That is, without a comprehensibly stable and linear perception of causality from which to infer the possibility of their own agency, they are unable to engage in "Industry, . . . Culture of the Earth; Navigation . . . Building, . . . Arts, . . . Letters" and so forth (186). In such a complex and indomitable causal field, Hobbes says, individuals face a "continually feare, and danger of violent death," which is to say that the object of their fears is a future that is no future (186). In these circumstances, Hobbes says, people need an alternative object for their fear, an object of fear that enables them to map and thence to intervene in a causal field. The sovereign functions as just such an object: a common object of fear.

According to Hobbes, the sovereign does not simply impose order through the threat of punishment (the familiar fear-as-motivation story). The sovereign also reduces and narrows the causal field within which people act. That is, the sovereign power serves both as the object around which each individual's fear turns and as the reference point in a simplified causal field. Hobbes elucidates this point in his discussion of laws and punishment. He contends, for example, that "he that foresees what wil become of a Criminal, re-cons what he has seen follow on the like

Crime before; having this order of thoughts, The Crime, the Officer, the Prison, the Judge, and the Gallows" (chap. 3, 97). As we can see here in Hobbes's presentation of what he supposes will be an individual's tracing of the causes and consequences of a particular action, the sovereign-as-fearsome object reduces the causal field by giving it a focus: this action caused this punishment. In regularizing actions and their consequences, the sovereign's laws serve as the material for an imagined future that itself gives the subject a basis for choosing and acting.<sup>33</sup> It is with an eye to the imagined (and delimited) consequences possible in this reduced field of action that the individual makes a decision to act (97). But in addition to mapping a field of consequences, the threat of punishment also modifies people's behavior such that it regularizes or makes more predictable the threats and dangers within the field of action. When the causal field is simplified and rendered more manageable in this way, individuals are able to insert themselves into now-comprehensible causal chains and take themselves to be effective agents. So, the sovereign is not simply a common object of fear around which individuals orient their actions as if to avoid punishment. The sovereign also functions as the ground for each subject's presumption of her own status as an autonomous actor. That is, as a consequence of its simplification of the causal field, the sovereignty of the sovereign constitutes the condition for each individual's construction of the illusion of her own sovereignty as an individual agent.<sup>34</sup>

And crucially, the masterful unitary appearance of the sovereign conceals the heteronomous causes of its actions. Not only is the sovereign a fictive person whose singular authority is created through a broadly held agreement (chap. 17, 227–28) but the sovereign's actions depend for their success upon the subjects' passions—in both the philosophical causal sense as well as in the affective sense.<sup>35</sup> For Hobbes, individuals' activities and more specifically their obedience are the passions that are the necessary complement to the sovereign's actions. In other words, the subjects of the sovereign are the moved-movers who actuate the sovereign's initiatives. So, the sovereign is not in fact a masterful agent whose will is a singular, self-originating, and efficacious cause and whose actions have a circumscribed and pointed effect. Yet, it must appear to be so if it is to function to simplify the causal field in such a way as to enable individuals to imagine themselves as effective, autonomous actors. In Hobbes's analysis, then, out of a complicated field of causation, individuals produce the

sovereign as the simplifying object of fear that serves as the guarantor of their agency as individuals.

It is important to emphasize the insight here—the fact that individuals actively produce the sovereign whose fearsome and singular effectiveness is the condition for their sense of themselves as autonomous agents. As suggested above, for individuals the comfort to be had in the illusion of autonomy rests upon the apparent autogenesis of the fearsome sovereign's actions. In other words, in order to work as an object of fear, the sovereign must appear to be a singular and self-contained entity whose actions are easy to map in and as a causal field. However, to make the sovereign appear as a simple and simplifying unity, the individuals who collectively produce it must disavow the complex causes of the sovereign's acts. In other words, to give the heteronomous sovereign the dressing of autonomy it must have if it is to be an effective object of fear, individuals must distance themselves from the sovereign power and efface their contributions to, and their facilitation of, its actions. To put the point differently, for individuals, the fantasy of self-sovereign autonomy is parasitic on the illusion of the sovereign's simple unity. Accordingly, their pursuit of that fantasy entails the enhancement and centralization of the sovereign power and the differentiation of its actions from those of its subjects.<sup>36</sup> Paradoxically, then, individuals' efforts to generate a sense of themselves as effective autonomous actors results in an inflated sovereign power whose efficaciousness is seemingly disconnected from, as well as set against, the daily activities of the populace. Not only are individuals thereby alienated from the ways in which they are in fact effective, that is, from the complex interdependencies through which all actions take place but they also invest themselves in a fantasy of autonomy whose inevitable fragility demands recurrent efforts to produce the sovereign as the object of fear that can make their illusory and elusive self-sovereignty feel more real.

## Conclusion

When fear is figured as a motivation, the individuals who are fearful are portrayed as not wanting fearsome things in their lives: fear and the things that inspire it are phenomena of which we strive to rid ourselves. As such, fear can be a reliable instrument in the effort to institute law and order—and also a tool in an arsenal gathered for the purpose of political manipula-

with these points, even though his own tendency is to emphasize (correctly I think) how the two modes of experience readily become mixed together once a sophisticated use of language is accomplished.

Perception not only has multiple layers of intersensory *memory* folded into it, it is suffused with *anticipation*. This does not mean merely that you anticipate a result and then test it against the effect of experience. It means that perception expresses a set of anticipatory expectations that help to constitute what it actually becomes. The case of the word “hardness” already suggests this. A more recent experiment by neuroscientists dramatizes the point. The body-brain patterns of the respondents were observed through various imaging techniques as the subjects were asked to follow a series of pictures moving from left to right. The images at first glance look the same, but upon closer inspection your experience shifts abruptly from that of the bare head of a man to the nude body of a woman as you proceed down the line of images. People vary at which point the gestalt switch occurs. More compellingly, when asked to view the series a second time from right to left, almost everyone identifies the shift from the nude woman to the man’s face farther down the line than they had in moving from left to right. The authors contend that the body-brain processes catalyzed by this series engender dicey transitions between two embodied attractors. The first attractor retains its hold as long as possible; the second, triggered as you move from right to left, is retained until pressed to give way to another. The suddenness of the shift in experience correlates with dramatic shifts in observable body/brain patterns. “By placing electrodes on the appropriate muscles to measure their electromagnetic activity, [neurobiologist Scott] Kelso could clearly measure the sudden shift from one pattern to another. The underlying idea in Kelso’s studies was that the brain is a self-organizing, pattern-forming system that operates close to instability points, thereby allowing it to switch flexibly and spontaneously from one coherent state to another.”<sup>20</sup> The “imbalance” that Merleau-Ponty identifies in embryos also operates in the perception of mobile human beings who must respond to rapidly shifting contexts.<sup>21</sup> Perception, to be flexible, is organized through multiple points of “instability” through which one set of memory-infused attractors gives way to another when the pressure of the encounter becomes intense enough. Each attractor helps to structure the actuality of perception.

Perception could not function without a rich history of inter-involvement

between embodiment, movement, body image, touch, sight, smell, language, affect, and color. The anticipatory structure of perception enables it to carry out its functions in the rapidly changing contexts of everyday life; it also opens it to subliminal influence by mystics, priests, lovers, politicians, parents, military leaders, filmmakers, teachers, talk show hosts, and TV advertisers.

Another way of putting the point is to say that the actuality of perception is “normative,” where that word now means the application of a culturally organized attractor to a situation roughly responsive to it. A visual percept, for instance, contains the norm of a well-rounded object, compensating for the limitations of the particular position from which it starts. As Merleau-Ponty puts it, “The unity of either the subject or the object is not a real unity, *but a presumptive unity on the horizon of experience*. We must rediscover, as anterior to the ideas of subject and object, that primordial layer at which both things and ideas come into being.”<sup>22</sup> The import of this presumptive unity becomes more clear through the discussions of depth and discipline.

### Visibility and Depth

Merleau-Ponty concludes that we make a singular contribution to the experience of spatial depth, even though, as Diana Coole says, “the depth and perspective that permit visual clarity belong to neither seer nor seen [alone], but unfold where they meet.”<sup>23</sup> The experience of depth, you might say, incorporates different possible perspectives upon the object *into* the angle of vision from which it is now engaged. The experience is ubiquitous. If you draw a Necker cube on a flat piece of paper, depth will be immediately projected into it. Upon viewing the image for a few seconds, the image becomes inverted, so that a figure in which depth had moved from left to right now flips in the other direction. Upon learning how to produce the flips — by focusing your eye first on the bottom right angle and then the top left angle — it becomes clear how difficult it is to purge experience of depth. The short interval between the switch of gaze and the flip of the angle also testifies to the half-second delay between the reception of sensory experience and cultural participation in the organization of perception. It teaches us that perception must be disciplined to be and draws attention to the fugitive interval during which that orga-

tion. Yet, Hobbes's analysis suggests that because the dynamics of fear simplify the world in such a way that we can imagine how to act — because fear gives a focus to our perception and apprehension of causality — individuals might actually seek out a measure of fear in order to shore up their self-image as autonomous self-sovereign agents. As we have seen, Hobbes suggests that in moments in which our ontological condition becomes distressingly obvious to us, that is, when the complexity of causation and the heteronomy of our actions becomes more conspicuous in our daily lives, we will evince a tendency to increase the power of the sovereign. In other words, because the recursive temporal movements in fear efface the indeterminacy of all actions by centering subjects as autonomous individual agents, individuals might bolster the fearsome power of the state. At issue here is not the matter of identification, as if the sovereign's effectiveness serves as a proxy for individuals' effectiveness in a time of crisis. Rather, Hobbes suggests, even in situations of noncrisis, the endeavor to generate a sense of individual effectiveness in the form of autonomy proceeds by way of the selection — and even the production — of an object to fear.

## Notes

- 1 See, for example, Blits, "Hobbesian Fear." Blits claims that, for Hobbes, fear is fear of the unknown, a fear that arises out of the epistemological limits that Blits argues are the corollary of Hobbes's solipsistic account of perception. Although I cannot dispute the argument about solipsism in full here, I do present contrary arguments in "Hobbes and the Matter of Self-Consciousness."
- 2 Corey Robin argues that, for Hobbes, fear is not a natural emotion but rather the fabrication of a political machinery, a necessary tool for the production of order. In his reading, Hobbes suggests that fear must be cultivated for the purposes of politics: "Fear had to be created. . . . It was a rational, moral emotion, taught by influential men in churches and universities." See Robin, *Fear*, 33. In essays that provide something akin to combined versions of the fabrication and the epistemological arguments, William Sokoloff and Chad Lavin point to the need for a strong and fearsome sovereign given the uncertainties produced by the unknown. See Sokoloff, "Politics and Anxiety in Thomas Hobbes's *Leviathan*"; Lavin, "Fear, Radical Democracy, and Ontological Methodone."
- 3 Hobbes, *Leviathan*, chap. 14, 200.
- 4 For an example of such an argument, see Leo Strauss's now-classic account in *The Political Philosophy of Thomas Hobbes*.

- 5 Hobbes, *Leviathan*, chap. 14, 189.
- 6 Ibid., chap. 46, 689.
- 7 For a full elaboration of Hobbes's materialism and its ethical and political implications, see Frost, *Lessons from a Materialist Thinker*.
- 8 Hobbes, *De Corpore*, chap. 3, 34.
- 9 Thanks to James Martell for pushing me to articulate this point.
- 10 Although it is too cumbersome to include in the text, the full quote is: "That which I say necessitateth and determinateth every action . . . is the sum of all things, which being now existent, conduce and concur to the production of that action hereafter, whereof if any one thing now were wanting, the effect could not be produced." Hobbes, *Of Liberty and Necessity*, 246.
- 11 Hobbes, *De Corpore*, chap. 9, 120.
- 12 Hobbes, *Of Liberty and Necessity*, 274.
- 13 Hobbes notes our lack of mastery over our own thoughts in *Human Nature*, pointing out that "one conception followeth not another, according to our election, but as it chanceth us to hear or see such things as shall bring them to our mind." Hobbes, *Human Nature*, chap. 5, 35.
- 14 Hobbes contends that imagination is nothing but "decaying sense" and that "when we would express the *decay*, and signifie that the Sense is fading, old, and past, it is called *Memory*. So that *Imagination* and *Memory*, are but one thing, which for divers considerations hath divers names." Hobbes, *Leviathan*, chap. 2, 89.
- 15 Hobbes, *De Homine*, chap. 13, 63. The text referred to here is actually included in the present essay, 164.
- 16 In a remark whose very articulation questions the presumption that a subject might be sovereign over his or her own actions, Hobbes denounces the idea that the will has anything to do with self-mastery. He rejects the claim that "to will is to have dominion over his own action, and actually to determine his own will," declaring to the contrary that "no man can determine his own will, for the will is appetite; nor can man more determine his will than any other appetite, that is, more than he can determine when he shall be hungry and when not." Hobbes, *The Questions Concerning Liberty, Necessity, and Chance*, 34.
- 17 As is the case with the complex causal chains that determine worldly events, we may not be aware of all the memories and experiences that shape our imagination and passions, or of all the movements of passion and memory that cause us to choose to do this act rather than that. Indeed, our inability to recall or trace them all makes it seem as if we and our actions are "free" in some existential sense. But, Hobbes says, "to him that could see the connexion of those causes, the *necessity* of all mens voluntary actions, would appeare manifest." Hobbes, *Leviathan*, chap. 21, 263.
- 18 See Hobbes, *De Corpore*, "Of Cause and Effect," 120. See also, Hobbes, *Of Liberty and Necessity*, 270–74.