

Agentic Capacities and Capacious Historical Materialism: Thinking with New Materialisms in the Political Sciences

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Abstract

In this article, I note that the idea of a new materialist turn has recently been gathering steam. The first part considers some of the signature elements of the new materialisms. The most distinctive aspect identified here is the invocation of a generative or vital ontology of immanence. Following discussion of some of its principal claims, the article draws out its implications for reconceptualising agency, in particular regarding the way agentic capacities are recognised to be distributed across animate, and perhaps also inanimate, entities. The significance of this development for the political sciences is then explored. In a second part, I suggest that the new materialism entails a normative project. Here, ethical overtures towards a new sensitivity predicated on vital materialist insights are contrasted with a renewed critical theory. The latter is commended as a material reckoning of the 21st century: a project provisionally labelled a capacious historical materialism.

Keywords

Agency, critical theory, Foucault, Latour, materialism, power

In just the last few years there has been much talk in the social, human and even natural sciences of a materialist turn. While it is clear that this is neither a complete revolution back to older forms of materialism nor a complete rejection of the more constructivist approaches associated with poststructuralism, it does seem as if a shift is afoot. While this learns from approaches associated with the former cultural, or linguistic, turn – including its critique of the earlier materialisms it displaced – it is also critical of the way that turn has developed. The so-called new materialists are self-consciously

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positioning themselves in the wake of a paradigm that looks too limited in light of new challenges that are emerging from novel ways of understanding matter, handling objects and interacting with nature. In International Relations, too, the influence of new materialist approaches is becoming apparent, as demonstrated by the title of *Millennium's* annual conference in 2012: 'Materialism and World Politics'. In this case, there is nonetheless some understandable reticence about criticising constructivism, given the discipline's ongoing engagement with its distinctive history of methodological and political realism.

In this article I look at some of the trends that are emerging under the flag of new materialist thinking and ask about their significance, in particular for some of the social sciences' most cherished concepts and assumptions, but also more generally as a political-ethical intervention within the material unfolding of the 21st century. The structure of my inquiry is as follows. In the first part, I summarise some of the signature features of new materialist ontology. In the second, I attend to a particularly vexed issue that has remained problematic for old and new materialisms alike, as well as for intervening poststructuralisms: agency. The question of agency has been particularly salient for the political sciences, including International Relations, so any new thinking in this regard is especially pertinent. In the final part of the article, and keeping in mind the ontological choreographies and agentic capacities sketched earlier, I consider some of the political implications of the new materialisms for a renewed critical theory that I tentatively call a capacious historical materialism.

It is certainly premature, and would not anyway be desirable, to claim that the new materialism amounts to any one approach or set of ideas. This was why, when Samantha Frost and I edited a volume of some of the latest contributions to the field in 2010, we entitled it *The New Materialisms*.¹ This theoretical pluralism encompasses scholars with interests in ancient atomism and modern vitalism; theorists of modern political thought who are reinterpreting Hobbes, Spinoza, Marx and Nietzsche; and phenomenologists and ecologists. Deleuzeans but also Foucauldians and even Derrideans; critical realists, speculative realists and historical materialists; followers of Bruno Latour and Pierre Bourdieu, as well as a host of systems theorists who draw on complexity or chaos theory, all seem happy to fly under the new materialist flag. Such breadth clearly has its problems if it implies that pretty much any current research can be reclassified as materialist. But there are two rather fundamental areas where there is sufficient overlapping around a distinctive reorientation for these areas to serve as identifying markers of new materialist thinking. The first concerns an ontology of becoming, in which the very processes involved in the materialisation of matter are being redescribed. The second entails renewed attention to actual material changes and processes that are currently under way, changes whose very complexity and volatility are congruent with the rhythms of new materialist ontology while also imparting a certain urgency to studies of

1. Diana Coole and Samantha Frost, eds, *The New Materialisms: Ontology, Agency, and Politics* (Durham, NC: Duke University Press, 2010). See also Iris van der Tuin, 'New Feminist Materialisms', *Women's Studies International Forum* 34 (2011): 271–7.

emergent materialisations. It is integral to this second focus, I would argue, that those who embrace the choreography of new materialist ontology do not pause for too long to debate its finer philosophical points, but move on to a reckoning of the material circuits, flows and experiences that mark the 21st century. A capacious historical materialism from this perspective will need to integrate detailed, empirical, fine-grained studies of micro-level phenomena with attention to intermediate structures of political economy and broader macro-level systems. Since the latter include the geopolitical as well as the ecological, while at every level there is a particular interest in the ways materiality is pervaded by power relations, International Relations has a crucial role to play here.

New Materialist Ontology

Various terms have been coined to indicate new materialist ontology. Vital materialism/materialist vitalism or generative immanence/immanent generativity are indicative of the kind of choreographies it describes. Some of their salient features are as follows.

Firstly, this is not about Being, but becoming: crucially, what is invoked is a process not a state, a process of materialisation in which matter literally matters itself. Secondly, this is not, then, the dead, inert, passive matter of the mechanist, which relied on an external agent – human or divine – to set it in motion. Rather, it is a materialisation that contains its own energies and forces of transformation. It is self-organising, *sui generis*. Matter is lively, vibrant, dynamic.

Thirdly, this materiality is not causally determining or determined, and nor are its future forms teleologically prefigured. Its emergence is unpredictable and cannot be read off from antecedents. Its development is not therefore linear. New materialists invoke swerves and swarms, the event, rather than causal chains or laws. This has yielded a great deal of stress on contingency and chance. Yet importantly, I think, this does not *a priori* rule out a quotient of inertia or more or less enduring continuities – such as patterns, path dependency, institutions, systemic logics – whose turgidity and congealing remain particularly important for the analysis of power. It is just that none of these more lasting forms are guaranteed, unassailable or as stable as they might appear. They need always to be reappraised within any particular context, along with their underlying ontological assumptions, lest they become reified or taken for granted. This will include paying attention to their genealogy as well as a critical analysis of the interests or privileges they serve, especially regarding accretions of desirable matter.

A fourth aspect of new materialist ontology is particularly significant for its sense of agency. I consider this dimension separately, but for the time being what I want to emphasise is that because new materialist ontology stresses immanence rather than transcendence, it has inspired references to matter as itself being vital or agential, and this, in turn, poses the intriguing question of the source and nature of this endogenous, lively immanence. As I explain below, various ways of addressing this issue are evident but a common theme is resistance to ontologising agency as such, that is, to fixing it in or as a distinctive type of being, especially inasmuch as this is defined as human or as synonymous with (self-)consciousness, cognition or rationality. In other words, if new materialist accounts of agency remain contested, they do agree that the sort of definitions used

conventionally by the political sciences are both too narrow and too reliant on presuppositions grounded in an obsolete ontology.

A fifth aspect of new materialist ontology is its refusal of dualisms or of what are considered to be anachronistic categories. Of course, poststructuralism was also inimical to dualism. But rather than deconstructing oppositions – and especially rather than undertaking linguistic or textual deconstructions of texts – new materialisms focus on the actual entwining of phenomena that have historically been classified as distinct. Thus, it is not simply a question of eschewing the subject/object or matter/ideal dichotomies that engender problems of epistemology. It also means insisting upon the irreducible imbrication of human/nonhuman or natural/social processes. If I can express this rather baldly, dualism is approached here not so much as a philosophical or linguistic problem as a misreading or idealisation of real processes of emergent materialisation, something Hegel and Heidegger both appreciated.

From an ontological perspective, a corollary of this position is a rejection of long-standing classifications, especially those associated hierarchically with a Great Chain of Being in which God/Man/Nature or human/animal/mineral are ordered. New materialists espouse what Bruno Latour calls a flat ontology: that is, one that does not privilege some kinds of entity or agency over others and one in which new assemblages and unstable hybrids are recognised to be constantly emerging and dissipating across a normatively and ontologically horizontal plane. From this perspective, it is a radically non-anthropocentric (or non-theocentric) ontology. At the same time, this indistinct systemic complexity may be recognised as particularly and increasingly symptomatic of the (late/post-)modern world. Although humans have always interacted with technologies in order to dominate nature, and despite their embodiment entailing an ineluctable animality, in an era referred to as the anthropocene, nature may be said to have become so thoroughly imprinted with and destroyed by human projects – projects that are altering the very geology and biosphere of the planet – that it no longer makes sense to refer to any relatively independent domain.

The ontological rejection of philosophical dualism also has epistemological-cum-methodological implications. Renewed attention to the resistance, recalcitrance and resilience of matter in social explanation suggests a more realist approach than constructivism allows. When we suggested in *The New Materialisms* that this is a prerequisite for renewing critical theory, it did not seem to be an especially controversial point for political theorists. While we lamented the limitations of radical – that is, particularly linguistic – forms of constructivism, in particular through a tendency to become imprisoned within self-referential circles of language or culture that are unable to give matter its due, this was in the context of a more general concern about a drift in the social and human sciences towards increasingly abstract, overly theoretical, formal approaches. This is exemplified not only by constructivist and deconstructionist proclivities, but also by normative political philosophy and by an obsession with modelling and statistical analysis within the social sciences more generally. It is not that such methodologies or their data are without value. But they do tend to lack both the wider critical framework that would explain their value and broader significance and the rich, substantive details of ethno-/socio-/eco-logical systems that would breathe life into their findings. In the context

of recent political theory, a more materially and critically realist approach seems compelling.

What we had not anticipated was the suspicion, if not downright hostility, that overtures to realism would incur from International Relations theorists. This seems to have arisen from the way new ideas enter diverse disciplinary fields that are structured by different kinds of contestation. Constructivism is clearly still regarded as a potent critical tool in International Relations in face of the discipline's enduring realism. In International Relations, the realism that has been the dominant approach since the Second World War has meant a scientific approach predicated on neo-positivist methods and associated assumptions about the agency of rational, self-interested actors (individuals, states), which in turn serve to legitimise political realism and associated assumptions about *raison d'état*. In this context, it is understandable why International Relations theorists are reluctant to question the flexible appreciation of power relations and their constitutive powers that poststructuralism offers, if this means returning to realism as they understand it.

The kind of realism that new materialist ontology suggests is, however, closer to critical or dialectical realism than to neo-positivism. It takes an empirical interest in emergent materialisations without being simply empiricist; it does not call for the abandonment of constructivist investigations and critiques of power relations but seeks to contextualise them more broadly; it is not a crude representationalism or uncritical return to some putative immediacy. Rather, it recognises the way concepts and experience, meaning and matter, emerge historically and reciprocally as embodied actors immerse themselves in and engage with/within material and social environments. In this process, the creativity and intransigence of materiality verify or negate, guide and inspire, theoretical and empirical investigations of evolving structures. There is a back-and-forth, question and answer, in which situated knowledge is generated and refined over time through experience and learning. So this is far from positivism, while it is normatively agnostic on the question of political realism. It reopens the real to social scientific inquiry, but without renouncing the critical reflexivity that constructivism insists upon.

Sixth, if new materialism describes a monist ontology, this does not express a single substance. New materialist becoming is ineluctably multiple and complex; variegated, folded, labyrinthine; and multi-dimensional and multi-scalar. Different levels and entities move with variable speeds and manifest themselves with variable intensity. The point here is that entities, structures, objects all emerge as unstable, indeterminate assemblages that are composed of and folded into manifold smaller and larger assemblages. At every level, these open systems are reconfigured by their encounters with other provisional constellations, from the tiniest to the most cosmic. The challenge for the social scientist is to trace these densely productive and reversible relationships, without assuming they yield only a chaotic or random flux.

When I commend a capacious historical materialism, it is in order to emulate this interlocking, multi-modal becoming inasmuch as it traces material flows across different tiers of the social/natural eco-sphere and tries to appreciate their feedback loops as they give rise to the lived parameters of ordinary lives. In this sense, it does understand matter

in a rather straightforward, uncomplicated way as the actual, sensuous, corporeal, milieu of everyday survival; as commodities and consumer durables, the hardwiring and detritus of the cityscape, the vegetative landscape of wet and green stuff. But in order to understand its materialisation and, from a critical perspective, the way it is entangled with power relations, it must attend to the microscopic and macroscopic, the molecular and the molar. This means tracing politico-economic, geopolitical and biophysical circuits, conduits and networks through which matter passes as it is transformed, given surplus value, degraded, rerouted, hoarded and so on.

I hope this brief overview has served to convey something of the logic and rhythm of new materialist ontology, as well as situating it more polemically in terms of alternatives it reorients or rejects. In the context of International Relations it might perhaps be helpful to categorise it as opposed to positivism or behaviouralism; as sympathetic to the idea of historical materialism as the study of the historical emergence of matter (albeit while abandoning earlier tendencies towards grand historical narratives, a Newtonian understanding of determining laws of matter and a drift towards reifying obsolete structural logics); and as open to the critical approaches associated with constructivism, especially regarding the way power insinuates and reproduces itself, provided these are integrated, on the one hand, into broader social scientific investigations of emergent material structures and the material interests they serve and, on the other, into more detailed empirical studies of how power maintains itself and its planetary consequences for survival.

From Agency to Distributed Agentic Capacities

As mentioned earlier, the question of agency is especially important for the political sciences because it identifies the actors they privilege, the qualities that are recognised as effective or legitimate, and the locations where forces are found to bring about significant changes. At the ontological level, new materialist propensity is to shift agency entirely away from recognisable actors by ascribing becoming to difference or negativity; to cracks or reversals; virtuality or folds.² This suggests that the generativity of materialisation is not attributable to any extraneous substance, force or agency, but is a productivity inherent in the fractures, non-coincidences, relationality, encounters that endow matter with internal effulgence. In other words, this is not an ontology of solid matter, as an unbroken or meaningless plenitude that is set in motion by agents. Emphasis falls, rather, on the shifting associations between and within entities that are incessantly engendering new assemblages within open systems. Porous membranes, rather than fixed boundaries, allow such systems to interact with and transform one another. From a dialectical perspective, this might be cast as a de-totalised totality in which the emphasis falls on dense mediations that never, however, achieve closure or follow any prescribed itinerary such as thesis–antithesis–synthesis or direction, such as guaranteed progress. So this is agentic force without a narrative embedding.

2. See, for example, G. Deleuze, *Difference and Repetition* (London: Athlone Press, 1994); D. Coole, *Negativity and Politics* (London: Routledge, 2000).

Inasmuch as immanent generativity is ascribed, or manifests, agentic capacity because it actively and contingently changes itself, there are divergent views regarding its ontological provenance. For existential phenomenologists such as Merleau-Ponty, for example, the constitutive fissuring of and within matter that is the secret of its becoming is ascribed to an organic reversibility that is specific to bodies, but which more generally defines Being/becoming as flesh.³ For materialist vitalists like Deleuze, on the other hand, material immanence may be attributed to a vibrant effervescence whereby nomadic propensities are found even within the mineral, that is, the inorganic, world. For example, the structure of metal turns out to be full of crystalline spaces that yield a variegated topography of cracks and defects, bringing indeterminacy, vitality, *esprit de corps* to even this most seemingly inert material.⁴ From a somewhat different standpoint – that of new materialist emphasis on the irreducible intermeshing of human and nonhuman systems – it may be that this very fusion is what endows organic and inorganic processes with agentic or alchemical force, provided a true intermeshing here is not resolved back into passive matter and form-giving agency but recognises their co-production.

It is clear, then, that new materialism recognises agency as being distributed across a far greater range of entities and processes than had formerly been imagined. Since in modern Western thinking agency has been a primary site where anthropocentrism and humanism have reigned, identifying more broad and diffuse forms or qualities of agency serves to displace these perspectives. This is a rather different way in which new materialist agency challenges traditional classifications. It is not just that agency has conventionally been defined as a property unique to humans; inversely, the characteristics that have traditionally been held to define humans and to render them a distinctive and privileged species have been used to define the characteristics of agency, namely, cognition and rationality (and masculinity). From a new materialist perspective, terms like agency, (self-)consciousness, reflection, rationality, cognition, subjectivity are reified abstractions that elide manifold, piecemeal processes through which their constituent capacities evolve or fail. By rejecting this language of agency and by showing that agentic capacities are diffused across many different types of material entity, new materialists are able to decouple agency from humans while raising questions about the nature of life and of the place or status of the human within it.⁵

The analytical move here is to eliminate presuppositions about agents and their avatars or facsimiles (such as human subjects or individuals, collectivities, states). Beginning instead with a notion of agentic capacities, agency can then be identified as it emerges to

3. M. Merleau-Ponty, *The Visible and the Invisible* (Evanston, IL: Northwestern University Press, 1968), ch. 4.

4. Deleuze and Guattari write: 'what metal and metallurgy bring to light is a life proper to matter, a vital state of matter as such, a material vitalism that doubtless exists everywhere but is ordinarily hidden'. 'The relation between metallurgy and alchemy reposes ... on the immanent power of corporeality in all matter, and on the *esprit de corps* accompanying it.' *A Thousand Plateaus* (London: Athlone Press, 1988), 411. See Jane Bennett, *Vibrant Matter* (Durham, NC: Duke University Press, 2010), 4. Compare this with Heidegger's 'worldless' stone, the poor animal environment and the human world of disclosing, as discussed by Agamben in *The Open: Man and Animal* (Stanford, CA: Stanford University Press, 2004), chs 12 and 13.

5. Agamben, *The Open*, 15f.

varying degrees and in diverse situations, in more or less ad hoc, hazardous ways.⁶ The approach is more genealogical or phenomenological. Foucault, for example, describes the ways bodies are materially endowed with new agentic capacities through discipline. Politically, particular humans or states operating in an international state system, or economic structures like capitalism, may evince greater or lesser degrees of agentic capacity depending on the situation. In short, this ontological and methodological shift from agency to agentic capacities directs new materialist research towards tracing the contingent appearing (or not) of capacities for agency within any particular field of forces.

It follows that new materialism is not merely a question of repositioning (cognitive, rational, human) agents within febrile fields of forces or sedimented structures that limit their room for manoeuvre. In this sense it steps outside the agency–structure debate. It goes much further by recognising that diffuse agentic capacities emerge within, and are in their more rudimentary forms continuous with, the productivity ascribed to materialisation itself. In other words, agency is not merely displaced in new materialist ontology; rather, its ontology is rethought from its perspective. This in principle allows agentic capacities to be found in both subjects and structures. It is in this sense that some new materialists refer to agential matter or agential realism.⁷ Lest this might appear as too radical a move from the standpoint of political analysis, it is germane to point out that it does not preclude an identification of agents who might manifest their capacities in ways which have a strong affinity with conventional accounts. It is merely that their emergence has to be traced and not presumed, which will likely result in their capabilities for agency being recognised as more partial, contextual and provisional than liberal humanism (individual agency), Marxism (class agency) or realist approaches to International Relations (state agency) allow.

A great deal will hinge, however, on which capacities are recognised as agentic. From a phenomenological perspective, agentic capacities initially evolve through perception. In perceiving, the body structures its environment through a practical engagement with it; it generates corporeal meaning in pre-personal, non-cognitive ways that permit a degree of creative improvisation.⁸ From this point of view, agency, like subjectivity, is an abstraction that conflates a series of corporeal processes or abilities that evolve over time but which are anchored in perception's ability not just passively to receive images of external nature, but also actively to structure and respond to a material milieu. According to primacy to perception and corporeality rather than to reason and subjectivity seems to suggest two principal agentic capacities. These are, firstly, the active potency or efficacy needed to bring about change, for example, by structuring and differentiating the perceptual field, thus endowing it with significance such that meaning and matter are entwined. Secondly, there is reflexivity in the sense that agentic effects matter to their perpetrators.

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6. D. Coole, 'Rethinking Agency: A Phenomenological Approach to Embodiment and Agentic Capacities', *Political Studies* 53 (March 2005): 124–42.
 7. See, for example, Jane Bennett's essay in *The New Materialisms* (2010) and Karen Barad, 'Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter', *Signs: Journal of Women in Culture and Society* 28, no. 3 (2003): 801–31, and also Barad, *Meeting the Universe Half Way: Quantum Physics and the Entanglement of Matter and Meaning* (Durham, NC: Duke University Press, 2007).
 8. M. Merleau-Ponty, *The Phenomenology of Perception* (London: Routledge, 1962).

This need not entail self-conscious reflection, although this would seem to exemplify this particular capacity and to be especially important for any critical theory. But for agency to be present (such as in the body or plant), any change must be experienced as a motivation to continue or alter its course as it probes its environment. In other words, unless agentic change matters, agentic capacity is nullified to the extent that its world is simply a fate of random, indifferent chance.

Such views are associated by new materialists with a concept of dispersed or distributed agency. This again suggests that, far from being uniquely human attributes, agentic capacities may be discerned across a broader range of entities. But the question that arises in this case is just how widely distributed such capacities are; in particular, if they exceed the human, are they nonetheless limited to the animal or organic realm, as phenomenology seems to suggest?

If the condition for developing such capacities is corporeality, then this distributes agentic capacities quite widely since it can include nonhuman bodies. Animals are unlikely to demonstrate very developed agentic capacity inasmuch as their reflexivity and their latitude to structure their environment (as *Umwelt* rather than *Lebenswelt*) remain relatively closed.⁹ Yet, as Wendy Wheeler and Linda Williams' current discussion of 'The Animals Turn' suggests, a new interdisciplinary field of animal studies regarding 'our closest physical and cultural point of connection with the nonhuman world' is emerging that is entirely congruent with a new materialist spectrum of agentic capacities.¹⁰ Mind is considered, here, to be a property of systems – vegetative, animal, human, ecological – while consciousness is reappraised in terms of strange capacities associated with the animal mind – vague presentiments, hazy sensations and intuitions – and with the animality of human consciousness, too. In this sense, the corollary of recognising animals' agentic capacities is its far-reaching implication for an assessment of human agency.

For Bruno Latour, whose Actor-Network Theory (ANT) is proving influential among new materialists and in particular among International Relations scholars, this limitation still, however, concedes too much to a vertical ontology. Latour espouses a notion of *actants* in order to ascribe agency even to inanimate entities. The key point here is that actants have efficacy: they make a difference, produce effects and affects, alter the course of events by their action; they may allow, encourage, authorise, influence, block, suggest and so on.¹¹ There seem to be two related issues at stake here. One is methodological. Latour is determined to subvert the dualism that puts scientific, causal, nonhuman systems on one side and social scientific, reflexive human agency on the other. Ascribing agency to both sides of the equation reinforces the idea of irreducibly human/nonhuman systems. He is also rightly critical of sociological tendencies to reify agency in abstract structures that serve as hidden actors which are merely postulated. Here Latour insists that references to agency require an 'account of its action' and that this entails rendering

9. See Agamben's wonderful improvisation on Uexküll's account of the tick's *Umwelt*, here. *The Open*, 45–7.

10. W. Wheeler and L. Williams, editorial: 'The Animals Turn', *New Formations* 76 (2012): 5–7, 6.

11. B. Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (Oxford: Oxford University Press, 2005), 72.

'more or less explicit which trials have produced which observable traces': a tracing of empirical details, myriad actants, dense networks. Too often, he complains, sociologists, and especially those of a critical bent, explain inertia and inequality simply by invoking social laws or structures without investigating how they are sustained, the details of power's operations, the manifold actions, networks and conduits that maintain them.¹² Instead, action should be recognised as a 'conglomerate of many surprising sets of agencies that have to be slowly disentangled'.¹³

This aspect of ANT seems to me to be entirely compatible with a capacious historical materialism. But like material vitalists such as Deleuze, Latour seems to go further with a second project, as when he suggests that agentic capacity can be ascribed to things and describes them as shuddering, muttering and swarming as they are awakened from their slumbers. Thus is the sense in which Jane Bennett uses his work to speak of vibrant matter and 'thing-power'.¹⁴ It has a bearing on the two criteria of agentic capacity mentioned earlier. From this perspective, inanimate objects as Latour presents them (as actants) might be accorded a weak form of agency inasmuch as they are indeed efficacious (for example, they might exert powerful affect on actors' moods). I am nonetheless hesitant about this particular new materialist move because occluding the second criterion of agentic capacity, namely reflexivity, attributes agency to inorganic matter that is indifferent to the impact of its efficacy. Lacking the characteristic of reflexivity that would make their survival matter to them, things also lack motivation to change themselves or the world in order to improve their life chances or enhance their well-being. In phenomenology, the equation that Latour rejects between reflexivity and the human is displaced onto the body. But absent this attribute of agency entirely and it is difficult or even irrelevant to move to a political project of critically inspired change, a project that, furthermore, must surely privilege human actors in a political setting even if their room for manoeuvre is severely constrained by numerous and diffuse actants.

From this latter perspective the desirability of recognising a third agentic capacity suggests itself: responsibility. I am not suggesting this in a sense of moral agency. But in the anthropocene and the damaging environmental consequences associated with it, it is surely important to identify – as the very term does – the particular responsibility of the human species for bringing about great extinctions and endangering the planet's life-support systems. Theoretically, I have argued, new materialism accomplishes two things as far as post-humanism or anti-anthropocentrism are concerned. Its ontology robs the human species of any cosmic privilege, while it also positions embodied humans within the general field of materialisation, such that congruent theories of agency do not limit agentic capacity to humans or focus on humans' moral agency. Yet practically, materialist concerns about the environment as life-support – and I suggest that this must be the bottom line that concerns the new materialism – suggest that human mastery or will to mitigation must be accorded some privileged role. This is not to suggest that humans are after all omnipotent or omniscient; on the contrary, new materialist ontology emphasises

12. Latour, *Reassembling the Social*, 53, 67.

13. Latour, *Reassembling the Social*, 44.

14. See, for example, Bennett's *Vibrant Matter*.

the lack of control humans exercise over the complex systems with which they are melded and the weakness of collective agency in geopolitical contexts. But any material reckoning of the present must also be alert to the unique ways humans' imprudent interventions in basic life-support systems pose a threat to all species and to the very fabric of the earth. If humans have always relied on immersion in human/nonhuman systems, for example by using tools and other technologies or by consuming natural resources in order to survive, they are also altering and encroaching upon the nonhuman in unprecedented and accelerating ways.

Having rejected vertical or dualist ontologies, then – and this rejection may itself pave the way for a more bio-/eco-centric environmentalism – it is still important to hold human beings accountable, in a material if not in a moral sense, for the destructiveness they are wreaking on vulnerable eco-systems and to acknowledge the importance of cultivating agency – ethical or political, individual and collective – to tackle it. Immanent generativity, especially where it is being complemented in fields like International Relations by complexity theory, no longer credits self-generative systems with natural homeostatic capacities (agency) to maintain equilibrium (Gaia). It recognises that systems can suffer entropy or collapse if critical thresholds are exceeded; that the entwining of the human and nonhuman only renders this potential more dangerous; and that crucial inputs here are likely to be as minuscule as they are protean. This is another way of saying that a capacious historical materialism will need to examine the manifold pathways that link everyday life to the biosphere if agentic efficacy is to be engendered.

To conclude this discussion of agency, then, it seems to me that new materialist ways of thinking have immense significance for the political sciences in this regard. For the most part, this importance arises from reappraising the ontological underpinnings of agency, where this entails a shift from human agents to dispersed agentic capacities. How widely those capacities are distributed and which capacities are identified as agentic will have a significant bearing not only on broader philosophical questions such as the nature and place of the human, but also on social scientific methodologies that must now investigate the precarious appearing of agentic capacities in diverse situations, alongside their material effects and contexts. But against this background, it is important not to lose sight of the responsibility of (some) human agents for imperilling the entire eco-system and for directing critical theory to explain the precarious materialities of the 21st century. This is why political economy, demography and the environmental and life sciences warrant greater salience within the political sciences inasmuch as they take seriously the entwining of human and nonhuman systems.

New Materialist Ethics and Politics

For some of its exponents, the new materialist turn principally involves a descriptive or epistemic reorientation rather than a normative project. Yet for many of us who have welcomed a materialist turn after the cultural turn, this is precisely because of the possibilities it opens up for a more robust critical theory and a transformation of conduct towards matter. If a renewed materialism may be regarded as a timely response to – or even as an expression of – the current global condition, what might this entail? I want to suggest two possible directions it might take. The first is primarily ethical. Although it

has its attractions, I will comment on what seem to me its limitations. The second is more political. This is where I will flesh out my proposal for a critical reckoning through what I provisionally call a capacious historical materialism.

1. A New Sensibility

I begin by considering suggestions that appreciating the agentic capacities of the nonhuman and of the complex systems in which humans are embedded might engender a new sensibility. The modern quest to dominate nature was subjected to thoroughgoing criticism by the first generation of critical theorists and in particular by Adorno and Horkheimer in *Dialectic of Enlightenment*. Instrumentalist, utilitarian attitudes towards nature have also been challenged by romantic strains of thought throughout modernity. These have often blamed such attributes for destroying both the natural environment and our abilities to appreciate or interact with it. From these critical and romantic points of view, a different ethos or mode of being-in-the-world is often advocated, with encounters with the natural or nonhuman world – whether through immediately visceral experiences, sublimated artistic pursuits or everyday encounters that heighten sensitivity to the other – typically being commended as routes to kindling a more generous, humble or creative orientation.

One such example is Herbert Marcuse's account of a new sensibility. Developed in the context of the 1970s' counterculture with its insistence on limits to growth, it seems to have renewed resonance today. Harmonious, erotic, playful and imaginative, the new sensibility or aesthetic ethos is described by Marcuse as an attitude of letting-be that he associates with the pacification of nature. Crucially, it is accompanied by a trenchant critique of consumer capitalism and of the alienated toil and tepid pleasures to which 'false needs' condemn us. As a way to cultivate a new sensibility, Marcuse favoured some of art's 'more primitive "technical" connotations: as the art of preparing (cooking!), cultivating, growing things, giving them a form which neither violates their matter nor the sensitivity'.¹⁵ Cooking, gardening, rambling, painting, writing, music are the sort of activities that are often commended for their playful, non-instrumental orientation and as a way to achieve a closer relationship with the natural world while enhancing appreciation for its immanent forms.

A recent version of such arguments is Bennett's *Vibrant Matter*, which makes a case for the ethical potential of new materialism to cultivate a transformed sensibility. Bennett, too, has human mastery in her sights, but she also subscribes to Latour's more extensive distribution of agency to things, which she supplements with a Deleuzean account of their immanent vitality. She hopes that chance encounters with and appreciation of actants will help transform modernity's attitudes and forms of conduct as these pertain to matter. 'What is needed', Bennett writes, 'is a cultivated, patient, sensory attentiveness to nonhuman forces operating outside and inside the human body.'¹⁶ This is equated with a 'countercultural kind

15. H. Marcuse, *An Essay on Liberation* (Harmondsworth: Penguin, 1969), 39.

16. Bennett, *Vibrant Matter*, p. xiv: 'The ethical task at hand here is to cultivate the ability to discern nonhuman vitality, to become perceptually open to it.' See also Bennett's *The Enchantment of Modern Life* (Princeton, NJ: Princeton University Press, 2001).

of perceiving' which, through cultivating respect for nonhuman alterity and agency – for animals, plants, earth, but also for artefacts and commodities – will engender 'a more open-ended comportment' that is also 'a more ecological sensibility'.¹⁷ Bennett asks: if 'we were more attentive to the indispensable foreignness that we are, would we continue to produce and consume in the same violently reckless ways?' In this vein, she cites a number of ecological thinkers whom she credits with summoning 'more sustainable, less noxious modes of production and consumption', although 'in the name of a vigorous materiality rather than in the name of the environment'.¹⁸

Yet this is where this kind of ethical project seems to me deficient. While a more ecologically and aesthetically sensitive ethos is certainly beguiling, its efficacy in bringing change and its motivation to do so will surely remain highly constrained unless accompanied by a critical analysis of the social structures that ethical beings inhabit and of the resistances or constraints they entail. Any agent who may be persuaded by vital materialism to adopt a more interactive and open relationship with matter will quickly come up against systemic obstacles (effectively operating as agentic logics) that are partly ecological but which are also a consequence of socio-economic structures and politically invested institutions. In other words, without a better understanding and critique of the circuits through which matter flows – that is, an empirical, scientific and political investigation – it is difficult to appreciate the damage and challenges current forms of production and consumption involve or to think realistically about ways materially to transform them. This is particularly the case as far as production and consumption are concerned, since most of the objects we encounter in the 21st century have not only been made over by technology but are also commodified and, as such, they have passed through the logic of competitive market systems. Since the late 1970s the dominant discourses of economics, politics and demography have been complementarily pro-growth: they both promote and rely upon incessant increases in consumption, production and population. They have on their side the massive resources of the advertising industry and the policy community. Perhaps a new ethical ethos will simply displace this pro-growth hegemony. But my wager is that a more efficacious, or at least complementary, option is critically to analyse these discursive frameworks and ideological claims, to demonstrate their material consequences, to identify the constituencies that benefit materially and disproportionately from them, and patiently to engender agentic forces that are persuaded of the high stakes at issue.

It may be premature to posit a viable alternative to global capitalism and illusory to imagine the emergence of new social movements or collective will with the agentic capacity to transform it. But for the time being, a material reckoning of the perils and obstacles, the inertia and flows, the systemic logics and granular details, would be a timely prelude to the interventions that will become necessary as population and consumption increase apace. The materialist turn literally beckons social scientists and critical theorists out of their libraries and back into the material world, to look afresh at all its disparate appearing (and disappearing). As the Royal Society has recently expressed it:

17. Bennett, *Vibrant Matter*, xv, 10, 17ff.

18. *Ibid.*, 111, 113.

'natural and social scientists need to increase their research efforts on the interactions between consumption, demographic change and environmental impact. They have a unique and vital role in developing a fuller picture of the problems, the uncertainties found in all such analyses, the efficacy of potential solutions, and providing an open, trusted source of information.'¹⁹ What is still missing from this formulation, however, is the critical, political dimension.

2. *Capacious Historical Materialism: A New Materialist Critical Theory of the Present*

Among the seven billion people striving for better standards of living, some two billion suffer from insufficient calories or nutrition, while the proliferation of human flesh means a further three billion mouths must be fed by the end of this century. Most aspire to a higher standard of living and unprecedented numbers are both achieving and not achieving it, placing yet more pressure on social systems but also on environments whose carrying capacity has already been exceeded and whose capacities to support life are being degraded at an increasing rate. Resource wars, food and water insecurity and ecological migrations are just some of the symptoms that are likely to afflict International Relations over coming decades. New materialism suggests a holistic but critical response to this high-level yet deathly generalisation, through exploring the complex interlocking systems that comprise the materialisation of the present. In this sense, its principal task is to trace emergent but potentially deadly assemblages in all their material finery. This is an enormous project so the sketch that follows can only be indicative of some of the directions it might take.

Consonant with a multidimensional ontology, a capacious historical materialism will need to address several levels of inquiry simultaneously if it is to grasp the way matter flows and circulates through complex bio-social systems. While it is rather formulaic, it is perhaps helpful to begin by envisaging three primary tiers of investigation: micro, meso and macro. These correspond respectively to the existential details of the embodied quotidian; the social, economic and governance structures where production, consumption and the management of resources and embodied individuals occur (i.e., the intermediaries that are crucial switching points for directing, distributing and manipulating matter), and the planetary eco-/bio-/geo-systems where 'nature' succumbs to or eludes social control. This is the sense in which any new historical materialism must be capacious relative to earlier 19th-century forms. While each level will itself evince considerable complexity in its own right, the main challenge is to understand how these modalities affect one another; how matter is transformed as it moves between them; the key switching points where change could be targeted, and where and how power is insinuated to reproduce or advance structures that are inimical to social and planetary well-being. If it is the last aspect that renders this a critical theory, it is the preceding ones that lend it real material weight.

19. The Royal Society, *People and the Planet* (London, 2012), 104. Available to download from: http://royalsociety.org/uploadedFiles/Royal_Society_Content/policy/projects/people-planet/2012-04-25-PeoplePlanet.pdf

At the micro-level, this new materialism means detailed, concrete studies of everyday visceral experience that bring real material ballast to what otherwise remain abstract studies. It is striking just how often sociologists like Bourdieu, Latour and Foucault emphasise these terms: concrete, real, empirical, material, detailed, meticulous. This is where bodies' material needs, their consumer habits, their daily routines, come under scrutiny in an existential and bio-physical way. The challenge is therefore to attend to the myriad and mundane dust of ordinary lives while recognising the tentacles of power that pervade them from higher levels (such as the generation of the corporeal and human capital needed to fuel the economy or of the desires needed to sustain consumption) and the way the most prosaic activities (such as producing rubbish, going shopping, driving a car) impact on more distant eco- and atmospheric systems that will in turn blight everyday existence, albeit in unequal ways mediated by economic and geopolitical structures.

Rediscovering the earlier, materialist Foucault of studies like *Discipline and Punish*, then taking his approach further, would in my opinion be an excellent starting point here. The bedrock of that point is not necessarily the molar body. In the schema of bare life or human rights, bodies' survival or integrity may be considered the normative and material ground zero for any notion of well-being. But because flesh can and is broken down further, it is also necessary to heed its disaggregated, micro-biological or infinitesimally calibrated constituents: its gestures, capabilities, organs, performances, pleasures, genes, all of which become amenable to modification (social engineering, commodification) through irreducibly material interventions and effects that are some of modernity's most potent instruments of control. A materialist approach that pays attention to how biological matter acquires or surrenders agentic capacities through numerous bio-, techno- and eco-systems is not, then, inimical to constructivism inasmuch as it recognises the productive effects of power. But in this materialist version, it must follow Foucault in emphasising the materiality of this disciplinary 'anatomy-politics', this 'micro-physics', of power, as well as in recognising that its rationale sprang initially from broad processes of material development that first swept across Europe during the 18th century, where capital and demographic expansion provoked new forms of disciplinary power over bodies and of biopower over populations. This was power that could reach deep into the social body in its most fine-grained and intimate details as well as regulating its biological-demographic characteristics through biopolitics.

When Foucault uses phrases like 'tiny, everyday, physical mechanisms', 'real, corporal disciplines', 'physico-political techniques', when he defines panopticism as a 'very real technology', a 'direct, physical power' individuals exercise over one another, when he refers to a carceral continuum as the 'technical and real, immediately material counterpart' to the 'chimerical' granting of the right to punish advocated by contract theory, he is stressing the concrete, bio-physical aspects of everyday power relations.²⁰ This is congruent with the way Althusser emphasises how ideologies are materially embedded in everyday practices such as work routines that reproduce higher-level structures by

20. These are just a few samples of a pervasive realist and materialist emphasis in Foucault's *Discipline and Punish* (London: Penguin, 1977), 222, 223, 225, 303.

engendering the kind of embodied subjectivities they require. But while Foucault emphasises the bodily capacities needed to fuel the new productive machinery of capitalism, from the perspective of consumption, the biopolitics of the 21st century will also recognise the body as an ensemble that depends on myriad micro-systems – bacteria, genes and so on – that are also conduits for biopolitical regulation and commodification.²¹

On the one hand, it is important, then, to emphasise the ways matter circulates through the household by way of consumer durables and natural resources: to see what abundance or scarcity, the consequences of abstruse financial systems, actually mean here for poverty or environmental profligacy. On the other, it is possible at this level to investigate how small disciplinary practices and inducements operate to produce and constrain the embodied and desirous individuals that are the inputs of and rationale for production and consumption; to explain, too, how public policy norms affect everyday behaviour and existential conditions by penetrating the most private realms of family life. This is where the lived experience of a sub-living wage, social security cuts, recession, sovereign debt, inadequate contraception translates into diet and health, hunger and diminished life chances, profligacy and excess. It is where pain and pleasure, deprivation and desire, are made real. It is the material bedrock of higher-level structural or theoretical analyses that breathes ethnographic life into them. This, in short, is where the political becomes personal as socially normalised structures of power have real consequences for the integrity and well-being of bodies. But it is also where myriad practices of everyday life occur in whose name prosperity is pursued and through whose inputs higher-level systems are reproduced or damaged.

It is apparent, then, that the detailed existential, genealogical and ethnographic studies of daily matter need to be addressed in their own right but also linked to a meso-level where higher-level social structures, economic systems and political institutions, inter alia, operate as intermediaries or mediators for the modification of matter and its distribution. This level is where a new political economy of 21st-century production and consumption is badly needed, especially since the most notable index of matter's movement through social systems is its commodification. The underlying logic of the capitalist system remains a relentless commodification and privatisation of the commons. In this sense, global capitalism remains a powerful actant with agentic capacities that shape lives and life chances regardless of individual plans. Several caveats are nonetheless needed vis-à-vis an inevitable connection to Marxism. Firstly, the constituents, inertia, beneficiaries, internal logics, agentic force of socio-economic structures will need to be traced afresh rather than being presumed and reified on the basis of theoretical deductions based on 19th-century models, narratives and ontology. The *how* of power, the 'fabrication mechanism' of collective agency, will need to be explored afresh.²² Secondly, unlike older versions of historical materialism that saw the state as epiphenomenal, it is important fully to recognise the role of governance in its domestic and international or global dimensions; to catalogue the way it, too, relays and directs matter, for example

21. Nikolas Rose, *The Politics of Life Itself* (Princeton, NJ: Princeton University Press, 2007).

22. Latour, *Reassembling the Social*, 22.

through policies predicated on neoliberal ideology or demographic revisionism, or through more or less effective commitments to de-carbonising the economy. This, in particular, is where International Relations plays a role in attending to the geopolitical circuits of matter and power. Thirdly, if previously political economy was figured as the macro-level, in a capacious historical materialism, it is only an intermediary: between the banal but effective materialities and agentic capacities of individual or household, on the one hand, and higher-level eco-, bio-, geo-systems, on the other. This is where new materialists' emphasis on flows of matter and their conduits is especially important in recognising bidirectional, complex links between human, economic and natural capital.

A partial example is provided by Australia's national science agency (CSIRO), which uses a 'stocks and flows framework' to simulate different scenarios for the physical economy, drawing from a huge database concerning human, natural and industrial activity that allows trends, inertia and constraints to be modelled. CSIRO's 'Future Dilemmas' report focuses in this case on the environmental impact of population growth by paying particular attention to water, soils, biodiversity, atmosphere and natural amenity.²³ The flows in the model refer to fast-paced movements, such as markets, while stocks reflect the inertia of natural capital and demographics. Through such studies, the nation's growing economy and increasing population can be integrated into the broader materialities of its fragile eco-systems, while fully accounting for the costs to natural capital in the form of embedded water, air miles, fertiliser use, river pollution and so on. These, in turn, can be linked to the meals enjoyed in the privacy of the home, with an aspiration to map the journey of consumer goods such as food from the farmyard gate to the dinner plate and thereby to fill in the circuits through which materials pass as they move through environmental, economic and domestic systems. A capacious materialism will need to make use of such studies, but, in order to remain critical and to avoid temptations to assume the facts will speak for themselves, it must also heed the vested interests and stocks of political or economic capital that interrupt or increase material flows, especially inasmuch as these increase material inequality.

Finally, there is the truly macro, or planetary, level, where social scientists need to pay considerably more attention to accounts of the current state of matter, for example in census data or in studies such as the United Nations Environmental Program's (UNEP) 'Global Environmental Outlook' (GEO) reports. The most recent of these (GEO-5, May 2012) concludes that deleterious changes to the earth system that are unprecedented in human history, with critical thresholds close to being or having already been exceeded, are not being arrested or reversed by existing policies.²⁴ This is supported by detailed evidence of complex non-linear changes, adverse environmental impacts that are already

23. B. Foran and F. Poldy, 'Future Dilemmas: Options to 2050 for Australia's Population, Technology, Resources and Environment', a CSIRO technical report for the Department of Immigration and Multicultural and Indigenous Affairs (2002), available at: www.cse.CSIRO.au/futuredilemmas/

24. GEO-5 includes numerous graphs, databases and reports that can be downloaded from: www.unep.org. For a useful summary and overview of the findings included in GEO-5, see UNEP, *Keeping Track of Our Changing Environment: From Rio to Rio+20 (1992–2012)* (Nairobi: UNEP, Division of Early Warning and Assessment, 2011).

apparent and alarming trends that will exacerbate the problem. While the report's recommendations remain asinine because they are framed by the prevailing transnational policy discourses that lack any effective criticism of pro-growth policies or analysis of agentic emergence beyond overtures to 'political will', such material reckonings are crucial for fleshing out provocative theoretical concepts like the anthropocene. Again, a capacious historical materialism will trace its causes in and effects on the existential and corporeal details of daily life, while relating them critically to the mediating socio-economic structures and their ideological supports.

Conclusion

Reflecting on the emergence and direction of new materialist thinking, I have suggested that it covers a huge amount of ground, from the most rarefied reaches of generative becoming to the most visceral details of bodily well-being. During its brief history it has drawn together insights regarding a new ontological imaginary, novel approaches to agency, possibilities for a new sensibility and practical guidance for undertaking a critical social theory fit for the 21st century. In this last guise, I have suggested that new materialism provokes a rich research agenda whose ambition is nothing less than a material reckoning of the present. In this sense, the materialist turn is an invitation to direct our attention once again to the material world; to plunge into its vibrant forms; to think afresh about the manifold ways human animals encounter, are affected by, respond to, destroy, rely upon and are generally imbricated with matter, and to assume a critical stance by exploring the dangerous ways matter is being reconfigured and distributed. The political sciences, I have argued, have an especially important role to play here, provided their critical investigations integrate evidence drawn from the bio-physical sciences in ways that are congruent with a flat ontology.

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