46

New materialism(s)

Geoff Pfeifer

The term "New Materialism" has come to signal a diverse array of movements in philosophy, social theory, and the social sciences more generally that have emerged on the scene over the last twenty-five years or so. Some of these movements and thinkers understand themselves and their work as falling under that term, while others go by different terminology such as "Vital Materialism." "Speculative Realism," "Post-Humanism," and "Object-Oriented Ontology." In this way then, we should think of the term new materialism as more of an umbrella term that captures this diverse array of work across the humanities and social sciences. Diana Coole and Samantha Frost argue that one way of carving up this diversity of views is to think of them along three subcategories or trajectories: ontology and questions of agency, biopolitics and bioethics, and critical materialism (Coole and Frost 2010). While this is not a perfect grouping, it does tell us a lot about the domains in which new materialist thinking deals and also gives us some sense for the breadth and diversity of its adherents. Though these movements are diverse in this way, and many of them have differing and conflictual commitments and premises, the fundamental set of premises that unites them across such differences is a belief that the standard and long-lasting understanding of the human (or the subject) as the sole active agent in the world is mistaken, and that "things," "objects," and other material phenomena also exhibit a kind of agency that act on and help shape human subjects, other objects, and also the larger social and ecological world in which we find ourselves.

To be sure, and as we will see below, there is no agreement across these thinkers/theories as to what this amounts to, but they all seek to demote the role of the human, so these views can also be seen as non-anthropocentric in a variety of ways (hence the "post-humanist" title that is used to sometimes refer to these movements of thought). Connected to this is a rejection what Quentin Meillasoux (2008) has referred to as the "correlationist thesis." Correlationism is a new name for a long-standing epistemological commitment that exists across a large swath of philosophical and social theories. Correlationism, as Meillasoux describes, is the view that "we only ever have access to the correlation between thinking and being and never to either term apart from the other" (Meillasoux 2008: 5). We cannot, in other words, understand the world apart from human cognition and so simply do not have access, or the ability to make sense of the ways in which the world and its objects might exist apart from thought, nor can we say much about how those objects might affect thought (and wider human existence). The various, and relatively new, traditions

DOI: 10.4324/9781003111399-47 541

that belong under the new materialist title and that are mentioned above push back on this view, seeking to argue that we can in fact understand the role that objects play in the world apart from subjects and, further, that to understand subjectivity and the social at all, we need to understand the role that the objective world plays in its construction. In fact, Bruno Latour has argued explicitly that objects are the "missing masses" in social explanation (Latour 1992).

Materialism old and new

Such a materialist decentering of the human subject and human agency is, in itself, not what makes the materialism of "new materialism" new, as materialist critiques of such views that center the subject are much older than, and serve to ground, this emerging new materialist tradition. We can think here of the (partial) Marxist critique of the view of the subject the primary agent in history wherein the self, subjectivity, and the social are produced and reproduced by material social and economic structures that pre-exist any one individual and, as such determine to a large degree, the possibilities, choices, and awareness of persons. The Marxist Base/Superstructure model helps define this view. In this model, the non-economic "ideological" structures of society are determined by the material base of the means and relations of production—that is, the factories, machines, and labor and exchange practices as they exist at a given time (see, for instance, Williams 1973 for a classic explanation of this). In this model, our individual awareness, beliefs, and abilities are structured by this economic base as it exists at a given time, and those beliefs and abilities also structure and are structured by the larger set of social relations that are produced by the material economic base in order that it reproduce itself. So here, the agency of individuals is subordinated to the material processes in which they find themselves. Two especially condensed examples of this in Marx's own work can be found in his Theses on Feuerbach and The Eighteenth Brumaire of Louis Bonaparte wherein, in the former, Marx notes, against Feuerbach and the left Hegelians of his time, that "the human essence" is not something that is wholly interior to a given subject or individual, or something that exists apart from the material social, historical, and economic spaces and practices within which one finds themselves, but rather it is—at least partially—the interiorized product of what Marx calls there the external "ensemble of social relations" (Marx 2000a, 2000b: 172).

As mentioned, the social relations Marx refers to here are the material, economic, and labor practices and traditions that structure one's existence and determine one's place in the social structure as well as the set of choices available to one and so, limit one's freedom. These are the particular combination of the base and superstructure that exist in a given moment. In The Eighteenth Brumaire of Louis Bonaparte, Marx makes the same point in the famous and often quoted lines where he says, "Men make their own history, but they do not make it just as they please, they do not make it under circumstances chosen by themselves, but under circumstances directly encountered, given, and transmitted from the past" (Marx 2000a, 2000b: 328). Again, here Marx is pointing out that human freedom is situated and structured by history and context. That such freedom is not free from determination by external and material social relations. The "matter" of history and social structure intervenes and decenters—or at least constrains—the agency of the individual. Though some versions of thought that fall under the new materialism take this materialist thinking on board and extend it-many of those that fall broadly under Coole and Frost's categories of Biopolitical, and Critical Materialist thinking for instance some also remain critical—some of those that fall under the Coole and Frost category of ontology—of the kind of Marxist materialism described above. As an example of the latter, we can think of the materialist ontology of Bruno Latour, who is counted among the new materialists and whose Actor-Network Theory (ANT) forms the partial basis of the work of other new

materialists (Latour 1996). Latour is critical of certain types Marxist-inflected materialist critical theory insofar as he thinks that it does not really, even in its analysis of the material world and its structures and its objects, get to the objects themselves but is rather concerned with the role those objects play for us, in our interpretation of them, and our use of them (see, Latour 2004).

Other new materialists, however, retain the core of the Marxist view but, in many ways, take it even further. In each of its versions and in different ways, the materialism of the new materialists further demotes the role of the human and of human freedom, decentering it even more and to the point that, for many of these thinkers, the human and human subjectivity is just one thing among a whole host of other "objects" that sometimes has its own agency and is sometimes the effect of the agency of other objects and structures (some socially generated and determined in the sense that Marx has in mind in his concept of the "social relations" that are determinative in his view of individual subjectivity, some not socially generated and simply environmental). The further point that many new materialists want to make here is that matter itself is dynamic, not fully determined or inert, but rather open, shifting, and changing as the various ways in which it is combined and interacts with other matter shifts and changes throughout time. This is why some new materialists think of matter as "vital" and think of their materialist analysis as a "vital materialism."

Vital materialism

We can see this in the work of prominent feminist new materialist thinkers such as Karen Barad, Elizabeth Grosz, Jane Bennett, Sarah Ahmed, Diana Coole, and Rosi Braidotti. Bennett and Braidotti, for instance, draw on a range of thinkers that include Latour, Deleuze and Guattari, Donna Haraway, Baruch Spinoza, Michele Foucault, and others in building their materialist philosophies in ways that reflect the understanding of a kind of agency that is unmoored from the human subject and found across various components in a given situation or, in more Deleuzian and Guattarian language, a given assemblage (Braidotti 2012). Karen Barad does this also though they do not draw as much from Deleuze and Guattari (though Barad's view is consistent with those who make more explicit use of Deleuze) and also because Barad works in the space of feminist science studies and physics, they also draw on work by Niels Bohr in building their theoretical edifice (Barad 2003). I will say a little more about some of these thinkers and their views before moving on to discussing a few others.

Rosi Braidotti traces the lineage of her brand of new materialism through the work of Judith Butler, back to its beginnings in the Marxist materialist tradition mentioned above, and into the quasi-structuralist re-reading of Marx through Althusser and his school via Lacan and Spinoza and especially in the late Althusserian conception of "aleatory materialism" (Braidotti 2012). It should be note here also, that Coole and Frost trace the partial lineage of this line of new materialist thinking to Althusser also (Coole and Frost 2010). As Braidotti notes, the Althusserian school began to understand that "contemporary materialism had to be redefined in the light of recent scientific insights, notably psychoanalysis, but also in terms of the critical inquiry into the mutations of advanced capitalism" (ibid.: 20). The theoretical tools that emerge in this line of thinking, for instance, that subjective awareness is not just the product, as in the classically Marxist sense mentioned above, of the economic situation and the relations of production that are built over time by capitalism but also appeal to the embeddedness of the subject in the material world of wider-than-economic relations. Of course, as we have seen, the traditional Marxist understanding of the subject also recognizes this, but the difference in the Althusserian school's interpretation is that those extra-economic relations and conditions are not to be seen as merely superstructural and predicated the more material base of economic and labor relations. Those

things become, in Althusser's view, also part of the material base (Althusser 2005). This emerges, in part, out of his reading of the production individual subjects and the larger social structure in relation to the Lacanian concept of "overdetermination" where, in any given moment, the institutions that exist, and the subjects that attend those, are interpellated in the ways that they are as a result of a host of material determining forces beyond and above those that exist in the classically understood base of the means and relations of production (ibid.).

The recognition here is that the subject's identity and awareness are the product of a whole host of material and historical relations that go beyond traditional Marxist analysis. The Althusserian view here is then that the determination of the subject (and of subjective awareness) "in the last instance" by the economic and the classic conception of the "relations of production" often never arrives, and that such determination takes place by other, equally material means; namely institutions, traditions, and social practices that the more standard Marxist theory takes to be the non-material ideological structures of society (Althusser 2005). Althusser and his followers take those to also be very real, material producers and reproducers of a given set of social relations (and of individual subjective awareness) that work alongside the relations of production and the means of production. So here there is a kind of irreducibility to be found in a given social and subjective formation insofar as it is overdetermined by a host of material causes that congeal in a given time. In a late essay, speaking of this irreducibility, Althusser likens materialist philosophical analysis to jumping on a moving train without knowing the train's origin or where it is headed, referring precisely to this irreducibility of a given social formation (Althusser 2006: 290–291).

Foucault and Deleuze, as Braidotti notes, each in their own ways, build on this kind of analysis. For Foucault, relations of power which are diffuse and spread across various aspects of a given socio-historical situation mark and construct the subject and the social insofar as the subject's material body is always part of, and subjected to, the materiality of the situation. Deleuze and Guattari transform the Foucauldian critique of the role of power into an analysis of the ways in which subjective desire itself is constructed—or "assembled" in their terminology—through a host of forces that are distributed across a variety of "actors"—some human, some not—in a given moment and in such a way that those actors, much like in the Latourian account, have a status as agents insofar as they do part of the work of assembling subjectivity in particular ways, at particular times (Deleuze and Guattari 1987).

For Braidotti, a certain strand of Feminism contributes to, and also builds upon the foundations of this form of new materialist thinking. She cites Simone De Beauvoir as one of these contributors arguing that her particular combination of a "phenomenological theory of embodiment with Marxist—and later on poststructuralist—re-elaborations of the complex intersections between bodies and power" which as she goes on to argue, "goes even further than mainstream continental philosophy in rejecting the dualistic partitions of minds from bodies or nature from culture" (Braidotti 2012: 21). What Braidotti finds in De Beauvoir and others (such as Luce Irigary) in this vein of Feminism is an intersection with the idea coming from the Althusserian/Foucauldian/Deleuzian line of thinking she reconstructs, wherein material power is diffuse across a given social form and critically, and does not only constrain individuals and groups—though it does do this—but also constructs them in particular ways. Adding to this, the Deleuzian-Spinozist thesis of a kind fundamental ontological monism, this particular strand of Feminist thinking, especially around difference, and specifically, sexual difference becomes, according to Braidotti, a critical piece of feminist new materialist thinking:

The notion of the univocity of being or single matter positions difference as a verb or a process of becoming at the heart of the matter. There are only variations or modulations

of space and time within a common block so it is all about patterns of repetition and difference ... sexual difference in particular poses the question of the conditions of the possibility for thought as a self-originating system of representations of itself as the ultimate presence. Thus, sexual difference produces subjectivity.

(Ibid.: 29)

Braidotti points here to the idea that sexual difference itself (and this subjectivity by connection) is not fixed, nor is it eternal- it is rather the result of the complex process of production generated in and out of the particular ways in which bodies—social bodies, individual bodies, human bodies, natural bodies, etc.—interact and congeal in a particular place at a particular time and are expressed in that organization at that moment. So here, particular versions of gendered social and cultural norms are only such expressions, but they can tell us a lot about the gendered body and its experiences—these expressions though, are also not eternal nor immutable and this gives us the ability to see oppressive norms around sex and gender as also contingent and changeable. She continues, speaking of her particular brand of new materialist "nomadism":

The starting point for most feminist redefinitions of subjectivity is a new form of materialism that develops the notion of corporeal materiality by emphasizing the embodied and therefore sexually differentiated structures of the speaking subject. Consequently, rethinking the bodily roots of subjectivity is the starting point for the epistemological project of nomadism. The body, or the embodiment of the subject is to be understood as neither a biological nor a sociological category, but rather a point of overlap between the physical, the symbolic, and the sociological ... The body refers to the materialist, but also the vitalist groundings of human subjectivity and to the specifically human capacity to both be grounded and to flow and thus to transcend the very variables—class, race, sex, gender, age, disability—which structure us. It rests on a post-identitarian view of what constitutes the subject ... a nomadic vision of the body defines it as multi-functional and complex, as a transformer of flows and energies, affects desires and imaginings.

(*Ibid*.: 33)

Here then, the body is the intersection-point of these material forces. It is neither fixed, nor transcendent, it is a site upon which these processes take place. Here we can see the non-anthropocentric nature of this view- there are many "agents" in operation in our bodily interpellation. Some are human and human generated, some are not. And the body then is, as Braidotti argues, the "intensive and dynamic entity" that is a part of this larger material flow "that is stable enough to sustain and undergo constant, though non-destructive fluxes of transformation" that radiate from the agglomeration of expressive forces coursing through existence at all levels, human and non-human, objective and subjective (Braidotti 2006: 201).

Jane Bennett offers another take on this type of new materialist thinking in her conception of a vital materialism of things. Instead of focusing, as in Braidotti, on bodies and their production in an out of material flows and forces, Bennett looks to what she, hewing closer to Latour—but also relying on Deleuze and Spinoza—takes to be the agency of things and the ways in which they are active and "agental" as a part of a larger "congregant" or "confederate" assemblage (Bennett 2010: 42). Her argument here is not so much that things in themselves have agency alone, but that agency is "enacted" in an assemblage of the human and the non-human in a given situation. Agency is for Bennett, "distributed" across multiple Latourian actants and

emerges in the movement of the assemblage of those actants. Bennett describes the agency of non-human actants in this way:

By actant I mean an entity or a process that makes a difference to the direction of a larger assemblage without that difference being reducible to an efficient cause; actants collaborate, divert, vitalize, gum up, twist, or turn the groupings in which they participate.

(Bennett 2012: 149)

She draws also, as just noted, on Deleuze and Guattari's conception of an assemblage described here as an "ad hoc grouping of diverse elements," a complex, and "living, throbbing confederation" of bodies, energies, and forces that become active in their association (Bennett 2012: 23–24). Bennett also looks to Spinoza for help in describing the theory of material assemblages she is working out.

Here it is not only Spinoza's monism that Bennett is interested in but also his suggestion that all things have a "conatus" (Spinoza 1992). That is, they strive to increase their active abilities and powers. For Spinoza, as Bennett notes here, one of the primary ways that this conatus is expressed is in associating together with other things, as that association is precisely what increases power and activity: "while the smallest or simplest body or bit may indeed express a vital impetus, conatus or *clinamen*, an actant never really acts alone. Its efficacy or agency always depends on the collaboration, cooperation, or interactive interference of many bodies and forces" (ibid.: 21). So a body's power is enhanced when it "collaborates with" other bodies in what Bennett calls a "heterogeneous assemblage" (ibid.: 23). On this view then, agency itself is not owned by one thing or "actant" but rather it is produced—or "assembled"—in this associative process:

What this suggests for the concept of agency is that the efficacy or effectivity to which that term has traditionally referred becomes distributed across an ontologically heterogeneous field rather than being a capacity localized in a human body or in a collective produced (only) by human efforts.

(Ibid.)

The main idea here being that if we want to really understand agency, we need to look to these assemblages in order to see its emergence in them. It exists out there, in the material assemblage, rather inside a human body alone. We should be careful to note that this is not to say that humans are not agents in Bennett's view, though they of course are, they are just not the only agents, and sometimes, they may not be the most important agents in a given assemblage. Bennett's work, perhaps more than any other of the New Materialists—outside of Latour—has had a fairly important impact across disciplinary boundaries. It has been analyzed and made use of, in a variety of social sciences, from education, to political theory, to geography (which was already amenable to assemblage theory), and others and so is perhaps one of the more important of the new materialist theories (see, for instance, Whatmore 2006; Anderson and Kearnes 2012).

Speculative realism

The other main theoretical movement that fits under the moniker of new materialism, is, as pointed out at the outset, often called Speculative Realism. Again, like the thinkers and theories grouped above, there is not total agreement among those that claim the speculative Realist title

as to all of the features that belong to this movement but there is a commitment to the reality of objects and their relations beyond their correlation with human consciousness. There is also a shared movement away from the corellationist view as a result. In this way, many thinkers that consider themselves Speculative Realists, take Meillasoux's work here as their starting point even when they are disagreeing with portions of it. Speculative Realism also has a more narrow audience than the work of other new materialists discussed above (except for maybe the work of Graham Harman and his Object-Oriented Ontology) as it is primarily a movement in the discipline of philosophy.

Speculative Realism includes too many thinkers to fully explore here, a few of which are as already mentioned, Graham Harman, but also Levi Bryant, Nick Srnicek, Ian Hamilton Grant, Ray Brassier, Isabelle Stengers, Steven Shaviro, among others. Each of these thinkers in their own ways develops a philosophy of objects and objective realism via the category of the speculative and often in connection with realist accounts of the world and its objects emerging from the sciences. Meillasoux himself, for instance, argues against correllationism by pointing to what we know scientifically about the world apart from, and prior to, human experience. Here he refers to things like modern scientific techniques for dating material objects (Meillasoux 2008 9–10). And Ray Brassier's work engages—both from a critical and a positive perspective—neuroscience and scientific realism (Brassier 2007).

Harman's realism takes its starting point from an insight provided by Heideggerian phenomenology. He makes use of Heidegger's distinction between our experience of objects (and our wider world) as being "ready-to-hand" in our everyday dealings with the world, and the projects that we are concerned with and those objects becoming "present-to-hand in the moments in which those projects break down or cease working (Heidegger 1962). In the former, material objects that are a part of those projects—think here of say, the computer for the project of the contemporary writer, or to use Heidegger's own example, the hammer for the carpenter recede from our awareness as individual objects- they become part of the scene and meaningmaking activity of the project itself (the writing, the hammering, etc.). But, if for instance, the hammer breaks as I am using it, or one of the keys on my computer sticks as I am trying to write on it, it interrupts the meaning-making activity of the project such that the object (the hammer, the computer) shows up again for me as a thing—as "present-to-hand—disconnected from the project and the meaning it once had (ibid.: 98-99). For Heidegger, this breakdown is a problem to be solved (when our projects break down in these ways, it can lead to meaninglessness, and existential crises). For Harman, there is a different lesson here. These moments are existential experiences of the depth and separateness of the objective world from their entanglement in our consciousness and awareness. This is, for Harman, the first step in acknowledging the "subterranean reality" of objects beyond their correlation with thought (Harman 2012: 186). Harman continues here:

Object-oriented philosophy pushes this another step further by saying that objects distort one another even in sheer causal interaction. The raindrops or breezes that strike the hammer may not be "conscious" of it in human fashion, yet such entities fail to exhaust the reality of the hammer to no less degree that human praxis or theory.

(186-187)

The point here, as Harman goes on to argue is that each of these interactions—breakdowns between human relations to objects, object's relations with one another—show us the limits of our phenomenal knowledge of them. They show us that there is more to objects than what can be gleaned of them in thought. Further, Harman argues that this also points to a "conflict

between real objects and their sensual qualities" (ibid.). Using Heidegger's Hammer example again, Harman continues:

The broken hammer alludes to the inscrutable reality of hammer-being lying behind the accessible theoretical, practical, or perceptual qualities of the hammer. The reason for calling this relation one of allusion is that it can only hint at the reality of the hammer without ever making it directly present to the mind ... This deeply non-relational conception of the reality of things is the heart of object-oriented philosophy.

(Ibid.)

In this way then, we only ever have access to the depth of these objects, via their being alluded to in ways that allow us to speculate about their existence and piece them together through such oblique references to what they are not—i.e., they are not (or at least not wholly) their sensuous qualities, they are not (or again, not wholly) their interactions with other objects. For Harman, Object-Oriented philosophy offers us not a "naïve realism," but rather "a weird realism in which real individual objects resist all forms of causal or cognitive mastery" (188). As noted at the beginning of this section on Speculative Realism, Harman's is but one way of making sense of the reassertion of the distinction between concept and object that is at the core of the realist project here. Other thinkers in this new tradition have different ways of working this reassertion out.

Ian Hamilton Grant, in an essay written as a partial response to Harman argues that Harman's view could go further still (Grant 2011). That when speculating about objects through such allusion as Harman recommends, what we come to see is that objects themselves depend on sets of "conditions" for their existence above and beyond our experience of them (and their interaction with other objects), those conditions then, in Grant's view "do not belong to the object—they are not "its" conditions, but rather conditions that "possibilize" it" (43). As an example, Grant points out that "the causes of mountain formation are also the causes of geogony, of ideation, of animals, of fever-dreams, and of telecommunications" (ibid.). What he means here is that all of those things, though they are separate and separable, exist because of a set of conditions, that make them collectively possible at the same time, in this world. So those conditions themselves are, for Grant, more foundational than the objects that they possibilize and also exist apart from human cognition- so they also are separable in the way that objects and concepts are in Harman's view. These conditions then are more than ideal. Grant calls such conditions "powers" and argues that they "are natural history in the precise sense that powers are not simply formally or logically inseparable from what they do, but they are what they do, and compose being in its becoming" (46). His point here is simply that it is not, in his view, only objects themselves that are real in the sense that Harman claims, but so are the processes and interactions that make them possible.

Conclusion

As can be seen by the short snapshot of the broad and multitudinous line of thinking, the theoretical movements that make up this emerging New Materialist tradition are both united in their shared rejection of the centering of the human and human agency, and also the idea that we cannot get beyond the intertwining of the objective world with thought. They offer a diversity of ways of thinking through this return to the objective and the spreading of agency out, across assemblages of human and non-human entities and objects. We can see the ways in which this tradition also offers new ways of thinking the self and the social, the ontological and the

political, and the ethical and ecological as a result. We can also see here how these movements are connected and rooted in longer-standing materialist traditions in the humanities and social sciences as well as the ways in which they attempt to build and transform them.

References

- Althusser, L. (2005) For Marx. New York and London: Verso.
- Althusser, L. (2006) Philosophy of the Encounter: Later Writings 1978–1987. New York and London: Verso
- Anderson, B. and M. Kearnes (2012) "On Assemblages in Geography." *Dialogues in Human Geography*. Vol. 2, No. 2, 171–189.
- Barad, K. (2003) "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter." Signs Vol. 28, No. 3, 801–831.
- Bennett, J. (2012) "Systems and Things: A Response to Graham Harmon and Timothy Morton." New Literary History. Vol. 43. No. 2. 225–233.
- Bennett, J. (2010) Vibrant Matter: A Political Ecology of Things. Durham and London: Duke University Press. Brassier, Ray (2007) Nihil Unbound: Enlightenment and Extinction. New York: Palgrave.
- Bryant, L., N. Srnicek, and G. Harman (eds.) (2011) *The Speculative Turn: Continental Materialism and Realism*. Melbourne: re.press.
- Braidotti, R. (2006) "Post-Human, All Too Human: Toward a New Process Ontology." *Theory, Culture, and Society*. Vol 23, No. 7–8. 197–208.
- ——. (2012) "Interview with Rosi Braidotti" in Dolphin, R. and I. van der Tuin (eds.) (2010) New Materialism: Interviews and Cartographies. Ann Arbor: Open Humanities Press.
- Coole, D. and S. Frost (eds.) (2010) New Materialisms: Ontology, Agency, and Politics. London and Durham: Duke University Press.
- Deleuze, G. and F. Guattari (1987) A Thousand Plateaus: Capitalism and Schizophrenia. Minneapolis: University of Minnesota Press.
- Dolphin, R. and I. van der Tuin (eds.) (2010) New Materialism: Interviews and Cartographies. Ann Arbor: Open Humanities Press.
- Grant, Ian Hamilton Grant. (2011) "Missing Conditions: A Response to Harman" in Bryant, L., N. Srnicek, and G. Harman (eds.) *The Speculative Turn: Continental Materialism and Realism*. Melbourne: re.press.
- Harman, G. (2012) "The Well-Wrought Broken Hammer: Object-Oriented Literary Criticism." New Literary History. Vol 43. No. 2. 183–203.
- Heidegger, M. (1962) *Being and Time* (translated by John Macquarrie and Edward Robinson). New York: Harper Collins.
- Latour, B. (1992) "Where are the Missing Masses? A Sociology of a Few Mundane Artifacts." In Wiebe Bijker and John Law (eds.). Cambridge Mass: MIT Press, pp. 225–259.
- ——. (1996) "On Actor Network Theory: A Few Clarifications." Soziale Welt. Vol. 47, No. 4. 369–381.
- ———. (2004) "Why Has Critique Run out of Steam? From matters of Fact to Matters of Concern." Critical Inquiry. Vol. 30, No. 2. 225–248.
- Marx, K. (2000a) "Theses on Feuerbach." In David McLellan (ed.), Karl Marx: Selected Writings, 2nd edn. Oxford: Oxford UP.
- ——. (2000b) "The Eighteenth Brumaire of Louis Bonaparte." In David McLellan (ed.), *Karl Marx: Selected Writings*, 2nd edn. Oxford: Oxford UP.
- Meillasoux, Q. (2008) After Finitude: An Essay on the Necessity of Contingency. New York and London: Continuum.
- Pitts-Taylor, Victoria (ed.) (2016) Mattering: Feminism, Science, and Materialism. New York and London: New York University Press.
- Spinoza, B. (1992) The Ethics, TIE, and Selected Letters (translated by Sam Shirley). Indianapolis and Cambridge: Hackett.
- Watson, J. (2013) "Eco-Sensibilities: An Interview with Jane Bennett." Minnesota Review Vol. 81. 147-158.
- Whatmore, S. (2006) "Materialist Returns: Practising Cultural Geography in and for a More-than-Human World." *Cultural Geographies*. No. 13. 600–609.