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Review essay

## 'New feminist materialisms'

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### ABSTRACT

This review essay discusses and contextualizes four recent publications in and on 'new feminist materialism'. The discussion of the three edited volumes and one monograph demonstrates what the new feminist materialism wants to provoke in different (inter)disciplines, and the contextualization is aimed at dealing with the question of what is 'new' in new feminist materialism. Ultimately, the essay boils down to exploring the theoretical tools that scholars from diverse (inter)disciplinary fields, continents and generations have developed for dealing with *agential* matter rather than (gendered) passive matter. The contextualization exercise wants to show how the new materialism is not a paradigm shift or a rewriting of, for instance, the linguistic turn. These two seemingly opposite epistemological tools are both grounded in an epistemology of recognition, whereas the new materialism wants to move away from such linguisticism. Experimenting with the tool of the 'quantum leap', the essay ends with openings for future (epistemic) research on and of the material turn.

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Material feminisms, Stacy Alaimo and Susan Hekman (Eds.), Indiana University Press, 2008, 434 pp, ISBN – 13: 978-0-253-21946-6

The material of knowledge: Feminist disclosures, Susan Hekman, Indiana University Press, 2010, 145 pp, ISBN: 978-0-253-22196-4

New materialisms: Ontology, agency, and politics, Diana Coole and Samantha Frost (Eds.), Duke University Press, 2010, 336 pp, ISBN 978-0-8223-4772-9

Carnal knowledge: Towards a "new materialism" through the arts, Estelle Barrett and Barbara Bolt (Eds.), I.B.Tauris, forthcoming<sup>1</sup>

It cannot be denied that at the present time, Western academia is experiencing a 'material turn' in a significant amount of scholarly fields. 'New materialisms' are currently

flourishing in several disciplines. Similarly, it should be affirmed that feminist theory is at the cutting edge of these developments. The developments, in most general terms, entail a commentary on the linguistic turn. The linguistic turn has been the so-called paradigm on what once was one side of the 'science wars'. Consequentially, this paradigm has often been made use of in an accusatory manner. The words 'commentary' and 'accusation' both need further explanation in order to frame the discussion.

For starters, a *rethinking* of the nature of epistemic shifts or 'turns', and of what is 'new' in epistemic formations and scholarship, is key to the developments that go under the headings of the material turn and new materialisms. Is the material turn a turn-away from the linguistic turn, that is, does it imply a dualist gesture? Or is it another example of Jean-François Lyotard's famous methodology of 'working

through'? Susan Hekman's astute *The Material of Knowledge* suggests that the new materialism is an attempt "to do what the postmoderns claim but fail to do" (*The Material of Knowledge*: 3) as well as, borrowing from Bruno Latour, it is a "new settlement" (ibidem: 7). The former thus opts for an additive epistemology, whereas Elizabeth Grosz (2010) in particular suggests that *both* dualism *and* working through do not do justice to what happens in current-day academia. So how are we to epistemically characterize the contemporary commentary on the linguistic turn that goes by the name 'material turn' and that produces 'new materialisms'?

If the material turn is characterized as dualistically opposing the linguistic turn, it simply repeats the rhetoric of the science wars, and becomes accusatory itself. This was at stake in the 2008–2009 discussion on 'new feminist materialism' in the *European Journal of Women's Studies*, and the stakes in this historiographical debate were high. In the Open Forum essay 'Imaginary Prohibitions: Some Preliminary Remarks on the Founding Gestures of the 'New Materialism'' Sara Ahmed accuses new feminist materialists like Grosz, Karen Barad, and Elizabeth Wilson of predicating their work on *accusing* feminists of the past and present of a lack of interest in (the matter of) biology, whereas feminist biologists have been and still are at the forefront of feminist theory formation and scholarship. Especially Barad's foundational article 'Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter' from 2003, reprinted in *Material Feminisms* edited by Stacy Alaimo and Hekman, has to pay the price. This article opens with a provocative sentence, which reads:

"Language has been granted too much power. The linguistic turn, the semiotic turn, the interpretative turn, the cultural turn: it seems that at every turn lately every "thing" – even materiality – is turned into a matter of language or some other form of cultural representation" (Barad, 2003: 801).

In 'Imaginary Prohibitions' Ahmed (2008: 34) responds to this sentence by saying that

"Barad is offering a caricature of 'the turns' in recent theory, although no examples are provided to illustrate the argument. We have no idea of who she is actually referring to (other than those who use 'matter' as a pun). Matter here is what matters, as a position that defends itself against theories that make what really matters (matter) disappear. She implies here that theorists are suspicious of the facts of the matter – but not of culture: as if now we trust in words, not things".

Here we see that Ahmed accuses Barad of setting up a new materialism (it goes under the name of 'agential realism') by *negating* the postmodern and poststructuralist linguistic turn. Ahmed, in turn, *negates* the work of Barad by explaining how poststructuralism entailed a distrust in words as well as things (ibidem), and by bringing feminists such as "Donna Haraway, Evelyn Fox Keller, Emily Martin, Sandra Harding and Sarah Franklin" (ibid: 28) that have worked on biology back in. Noela Davis and myself have jumped on the opportunity to highlight the rhetorical dead end that Ahmed is seemingly

trapped by (Van der Tuin, 2008), and the *particularity* of the engagement of new feminist materialists with matter and/or biology (Davis, 2009). Again the question is: how are we to characterize the 'material turn' and 'new materialisms'? Interestingly, Ahmed, Davis and I refer to many of the same authors as the editors and individual authors of the volumes reviewed in this essay do.

*The Material of Knowledge* and *Material Feminisms* deal solely with feminist theory. The two other volumes – *New Materialisms*, edited by Diana Coole and Samantha Frost, and *Carnal Knowledge*, edited by Estelle Barrett and Barbara Bolt – underline the leading role of feminist theorists and scholars in the setting in motion of the recent materialist developments. This role is exemplified by the centrality of the work of Judith Butler in both the linguistic turn (in feminist theory) and the set up of the material, let's say, alternative. It is very clear that Ahmed alludes to the former's *Bodies that Matter* (Butler, 1993) when typifying Barad's critique of "use[ing] 'matter' as a pun". So Ahmed denounces Barad for not reading a materialism into Butler, which she herself explicitly does. Ahmed (2008: 33; cf. Hemmings, 2011: 111) states that the new materialist "reading of Butler as anti-matter seems to be motivated, as if the moment of 'rejection' is needed to authorize a new terrain". Hekman's work has an interesting affirmative answer to this problematic, which also pops up in Ilona Hongisto's chapter in *Carnal Knowledge*, while others are less certain about Butler's materialism (Suzanne Bost in *Material Feminisms* and Rey Chow in *New Materialisms*) or simply deny it (Alaimo, Claire Colebrook and Vicki Kirby in *Material Feminisms*). While preparing for her new feminist materialism or 'ontology of the subject', Hekman reads Butler affirmatively when stating that in the work of the latter, "there is no single causal factor determining the subject; the elements of subjectivity intra-act in a complex web" (*The Material of Knowledge*: 101). Hekman affirms that the paradox that according to her forms the ultimate characterization of Butler's work – we are not outside of language, and yet not determined by it either – is the best starting point for a new materialism. Others do not (intend to) use Butler as a starting point, but consistently push her work to the limit in order to ultimately break through, or away from, it. Here the claim is that among others Butler "can simply ignore or deny the ontological complexity of language/representation" (Kirby, 2006: 99), whereby the question "How is it that the world is lived as somehow signified through a system that is not of being itself?" (Colebrook, 2004: 288) is not addressed or answered.

If we were now to go into the *kind* of feminist theory or epistemology that actually features in the four volumes, we see a curious disjunction is shaping up, especially when the different feminist theories are charted vis-à-vis Sandra Harding's famous tripartition of feminist epistemologies from her book *The Science Question in Feminism* (Harding, 1986). As said, *Material Feminisms* is devoted entirely to the material turn in feminist scholarship. The book is interdisciplinary in nature, ranging from feminist work in the humanities via the social sciences to the biomedical and natural sciences. Demonstrating what a material turn provokes in diverse fields of feminist study, this interdisciplinarity is a true asset of the book. In its three parts – 'material theory', 'material world', and 'material bodies' – the book clearly demonstrates that the material turn in feminist theory transversally connects feminist philosophy,

environmental feminism, and what used to be a postmodern feminist identity politics. The latter can be illustrated with the daring chapter 'How Real is Race?' in which Michael Hames-García discusses, in the last part of the book, a new materialist theory of race. Echoing Ahmed, Hames-García asks "what critics have to gain by discounting identity and race. What interests do polemics against race and identity serve?" (*Material Feminisms*: 315). Hames-García is entering an almost virgin land here. Apart from Arun Saldanha's 'Reontologising Race: The Machinic Geography of Phenotype' (Saldanha, 2006), I do not know of attempts at a contemporary materialist theory of race. Using a Baradian neologism, Hames-García insists that it is of the greatest importance to conceptualize culture and biology as 'intra-acting', and writes:

"Bodies do not have inherent meanings. Yet, given the physical properties of bodies and the historical sediment of their intra-actions with ideologies and politico-economic practices, one cannot attach just any meaning to any body. In other words, the body is something more than an inert, passive object on which ideology inscribes meaning, but rather it is an agential reality with its own causal role in making meaning" (ibidem: 327).

Just like the chapter 'Cassie's Hair' written by Susan Bordo, which similarly proposes the study of how race emerges in intra-actions between people, and between nature and culture (including histories of determination), it becomes clear here that the editors and all individual authors of *Material Feminisms* want to shift postmodern feminist identity politics in order for a new feminist materialism to come to full fruition. Feminist postmodernism is said to have repeated the (gendered) gesture of making matter inert and passive. Overlooking the book as a whole, however, the definition of feminist theory that gets shaped in the book by successively discussing women and gender, 'race'/ethnicity, cyborg/environmental studies, and (dis)ability does show traces of Harding's 'feminist postmodernism', notwithstanding the fact that its politics of diversity is explicitly questioned in the introduction (ibid.: 2–3). It is here that I see the book differ from the other volumes under discussion in this essay. Because despite the transversal connections between the distinct chapters, the book is set up according to a categorization, whereas Hekman, borrowing a concept from Andrew Pickering, affirms: "The point is not to separate them into neat categories but to analyze their intra-action. In short, it is mangles all the way down" (*The Material of Knowledge*: 125).

In the article "Jumping Generations: On Second- and Third-wave Feminist Epistemology" I argued that

"A characteristic of the new materialism is that it does *not* involve a postmodernisation of feminist standpoint theory, as this would not necessarily constitute something qualitatively different from feminist standpoint theory nor to the progress narrative structure of second-wave epistemology. New materialists [...] avoid the spatiotemporal fixity, and the linearity implied in classifications. New materialism has been brought to the fore working on the cracks in the dialecticism of second-wave feminist epistemology by presenting the three feminist epistemological classes as

sharing characteristics. The shared conversation of new materialism defines generationality as generative; generative of shared *feminist* conversations between third-wave feminist epistemologists from different inter-disciplines, and between third- and second-wave feminist epistemologists" (Van der Tuin, 2009: 28; emphasis in original. Cf. Van der Tuin, 2008, Van der Tuin and Dolphijn, 2010).

I called this new feminist materialist methodology, following Rosi Braidotti (2002), 'cartography'. Are *The Material of Knowledge*, *New Materialisms*, and *Carnal Knowledge* structured along cartographical lines? An interesting first observation pertains to Hekman's *The Material of Knowledge*. In contradistinction to her emphasis on 'mangles', Hekman has set up her book according to four 'settlements', which is Bruno Latour's terminology for what Michel Foucault has called an 'episteme' in *The Order of Things* (Foucault, 1966, 1994) or for Thomas Kuhn's 'paradigms' from *The Structure of Scientific Revolutions* (Kuhn, 1962, 1969, 1996). Hekman's goal is "articulating a new theoretical position that meets the challenge of the linguistic turn" (*The Material of Knowledge*: 7), and for that reason she visits "a number of versions of the new settlement emerging in contemporary discussions" (ibidem: 8), which are brought together in the final chapter of the book via the materialist concept of 'disclosure', which, providing an alternative for both a totalizing objectivism and a relativist subjectivism, suggests contemporary scholars to examine "[d]ifferent disclosures [that] yield different material realities. We can weigh the advantages and disadvantages of these different realities and assess their effects" (ibid.: 127). It is precisely the specific *set* of settlements through which this concept is created that makes Hekman's monograph truly original. Hekman discusses the philosophy of science of Latour and Pickering, the analytical philosophy of Ludwig Wittgenstein, Foucault's and Gilles Deleuze's continental philosophies, and the new feminist materialisms of particularly Barad and Grosz. Albeit that we again see traces of a classificatory approach, and can surely doubt whether the material turn will (or should) produce a new 'settlement', Hekman's work does live up to the three characteristics of new feminist materialisms such as I have described them in my publications on the topic. *The Material of Knowledge* cuts across the generations in academia, is trans-disciplinary in nature, and, most of all, the book is definitely trans-Atlantic. Traversing Anglo-Saxon, analytical philosophy and Continental philosophies connects Hekman's book to *Carnal Knowledge*.

*Carnal Knowledge* is an anthology that brings together new materialist work of a wide range of junior and senior scholars from Australian and Finnish origin. The volume focuses specifically on the creative arts, and wants to demonstrate "how art allows us to map the complex relations between nature and culture, between the body and language and knowledge" (*Carnal Knowledge*: 21). It is interested in the material turn towards the agency of matter, and starts from an observation about the linguistic turn that is by now familiar:

"Under the sway of postmodernism, writing about the arts concerned itself with meaning, situating art within the broader discursive formations. Theorized through this interpretative frame, the place, role and power of materiality in art was subsumed under the rubric of discourse or ignored" (ibidem).

The essays in the volume address a wide variety of artistic practices (painting, literature, film, music, fashion, dance, etc.), and are placed in one of the volume's four parts ('discourse, affect and material interventions', 'the matter of film', 'carnal insistence', and 'materiality the virtual and the real'). The book uses a similarly vast array of theoretical tools for moving beyond the postmodern paradigm of 'mute matter'. Employing such range of theories, *Carnal Knowledge*, similar to *New Materialisms*, is less susceptible to creating or assuming a new materialist 'settlement'. Such a delineable epistemic formation might end up *not* being able to address the *complexity* between nature and culture, language and materiality, and body and mind that new materialist scholars want to be able to finally 'catch'. In addition, *all* books reviewed here demonstrate that the epistemic formation formed in the material turn is not one, and that it is not only epistemic! In her own single chapter, editor Barrett for instance strikingly traverses the seemingly disconnected oeuvres of French feminist Julia Kristeva, American pragmatist John Dewey and neuroscientist Antonio Damasio. It is truly transversal to link Kristeva's "account of thought/language, subjectivity and meaning making as an infinite dialectic – *material process* that involves a two way movement between biological processes and discourse" (*Carnal Knowledge*: 103) via Damasio's "affect is 'knowing' differently coded" (ibidem: 104) to Dewey's "action, feeling and meaning are one" (in *ibid.*: 105) in order to be able to "examine the material and experiential dimensions of creative production that give rise to what [she] call[s] the "esthetic image", this is a structural aspect of the artwork that emerges as an outcome of the grafting of affect to the symbolic through sensory and material processes" (*ibid.*: 100).

Barrett's chapter 'Materiality, Affect, and the Aesthetic Image' invites for a discussion on the role of *affect* in the material turn as such. Affect is very prominent in *Carnal Knowledge* without it becoming a book on the affective turn (cf. Clough with Halley, 2007; Gregg and Seigworth, 2010). Jondi Keane for instance in his chapter 'Effect: Initiating Heuristic Life' cites Brian Massumi's "a state of receptivity is produced that is so pure that it can only be conceived as a third state, an excluded middle, prior to the distinction between activity and passivity: affect" (in *ibid.*: 74) only in order to complexify the matter of affectivity via the work of architect-theorists Shusaku Arakawa and Madeline Gins: "The ensuing calibrations, calculations and biochemical projections are *efferent* (outgoing) and *afferent* (incoming), which is to say that the body initiates paradoxical and conflicting modes of activity that both inhibit and prompt action. The configurations that impact upon how persons attend, perceive, select, decide and judge are distributed into and also organize the environment" (*ibid.*: 76). Jussi Parikka and Milla Tiainen also state the complexification exercise of the material turn very clearly in a chapter that centers around the 2002 dance piece *Hunt* of Tero Saarinen which is "an attempt to approach *Hunt* as a singularity that belongs to itself in the sense of not being subsumed by supposedly general ideas (like "body as movement" or "affective economy") of which it would only serve as a particular instantiation. Eventually, however, the 'exemplary' force of *Hunt*, as intimated above, lies in the ways its very singularity is connectable to other components and registers spanning from media-cultural and socioeconomic engagements of the body to theoretical concepts" (*ibid.*: 337).

*Carnal Knowledge* is a new materialist collection, not only because it brings together new materialist work, but also because it consistently and constantly reflects on what is 'new' about new materialisms (it does not *apply* conceptual tools such as affect, but traverses bodies of thought), and on the ways in which new materialist work displaces traditional conceptualizations of scholarship and prominent paradigms in art theory and practice, notwithstanding the fact that it *also* reflects upon the relation between scholarship – traditionally the sacred realm of knowledge production – and art as traditionally thought of as a more subjective form of knowledge production. *Carnal Knowledge*, then, is a book on art, but with an important epistemic focus.

With Parikka and Tiainen's chapter 'The Primacy of Movement: Variation, Intermediality and Biopolitics in Tero Saarinen's *Hunt*' and Brian Martin's chapter 'Real Immateriality in Australian Indigenous Art' it is easy to bridge *Carnal Knowledge* and *New Materialisms*, despite the distinct emphases of these two volumes (the arts versus political theory and political economy). Parikka and Tiainen, and Martin prominently address the issue of the political in the material turn, thus addressing (or rather questioning) the relation between Marxist materialism and the new materialisms. Martin is interested in the ways in which 'ideology' and the theory of ideology get to be grounded, literally, if we look at Aboriginal culture. Grounded via 'land' and 'country', Aboriginal ideology and Aboriginal art is said to *be* ontological (instead of representational or even transcendent, that is, in need of an anti-representationalist or material turn). This chapter that contrasts a series of Western conceptualizations of ideology (for instance by Martin Heidegger and Louis Althusser) and the Aboriginal art of Badger Bates boils down to the insight that "Aboriginal 'cultural ideology' is the 'real' world" (*ibid.*: 305). Parikka and Tiainen express that whereas the relation between Marxist materialism and the new materialisms immediately comes to mind when discussing the material turn and politics, new materialist scholars do not work with good-old dialectics, "but [with] a political economy where the intensities of movement and, in that sense, 'creative' embodiment are closely aligned together with immaterial labor, creative economy and innovation culture" (*ibid.*: 361). In other words, what they suggest is that to some extent, the new (creative) economy literally *capitalizes on* the new materialist concepts of (im) materiality, networks, flows, etc., and that, by implication, neither can be naively celebrated. Parikka and Tiainen celebrate *Hunt*, precisely because it *poses* the question of the tension between the seemingly paradoxical attempt at capturing anti-representationalism by the neo-liberal creative economy of the new media, and the seemingly revolutionary act of an anti-representationalist artistic and scholarly practice, and because it leaves us with the *necessity* to actually address this question in our work.

Coming from political theory and political economy, *New Materialisms* cannot *not* address the issue of the ideological, of course, so the important observation here is that *New Materialisms* tackles the topic *well*. The editors perceive new materialisms to be what they call "*renewed materialisms*" (*New Materialisms*: 4; emphasis in original), with which they want to highlight that many contemporary materialisms take their inspiration from old materialisms, while doing something new to, or with them. The editors have wanted to stress

in the title of their volume that the new materialisms that are currently being developed are not to be captured in one model (or settlement). Like Coole and Frost state in their introductory chapter:

“If we pluralize these new materialisms, this is indicative of our appreciation that despite some important linkages between different strands of contemporary work and a more general materialist turn, there are currently a number of distinctive initiatives that resist any simple conflation, not least because they reflect on various levels of materialization” (ibidem: 4).

It is thus that they draw out three new materialist themes of contemporary reflection. First, the current posthumanist theorization of agential matter in the natural sciences and beyond in part one of the book (‘the force of materiality’). Second, the theoretical impetus of biopolitics and bioethics (‘political matters’). And third, a – what I would call – non-linear take on political economy (‘economies of disruption’). What makes all of this work new materialist is that the three themes express

“an emphasis on materialization as a complex, pluralistic, relatively open process and their insistence that humans, including theorists themselves, be recognized as thoroughly immersed within materiality’s productive contingencies” (ibid.: 7).

All volumes under discussion thus conceptualize new materialisms’ anti-representationalist outlook as pertaining to its anti-linguisticism as well as its attempt at de-hierarchizing the so-called object and the so-called subject of knowledge (or art).

What first came to my mind when reading *New Materialisms* is that Nancy Tuana’s chapter ‘Viscous Porosity: Witnessing Katrina’ from *Material Feminisms* could easily have been published in that former collection of essays. In the chapter, Tuana movingly discusses how the event of the hurricane Katrina, ruining the city of New Orleans, made her aware, again, why what she calls an ‘interactionist ontology’ should be embraced by 21st century (feminist) theorists. This Whiteheadian ontology that “re-materializes the social and takes seriously the agency of the natural” (*Material Feminisms*: 188; emphasis in original) directs Tuana to observations about cities, ‘the’ environment, economies that might shock us, and to pleading for

“recognizing the interaction of nature-culture, genes-environment in all phenomena, not just the phenomena of sex or race. As important as it is to make the case that categories of race or distinctions between sex and gender are actually reinforcing sexist and racist practices and impeding efforts to truly understand these phenomena, our efforts are more likely to be ineffectual if we treat race or sex as somehow different than other phenomena, even unintentionally by only attending to them” (ibidem: 209).

The interconnectedness of the volumes (note that I could have given more examples, and that the above example arbitrarily results from my reading sequence) proves that a

material turn has effectively been set in motion indeed, and that the label ‘new materialisms’ nowadays functions as a search-light for transversally connecting an extensive amount of sometimes scattered scholarly and, as we have seen through *Carnal Knowledge*, artistic work. This observation differs slightly from *New Materialisms*’ own epistemology of interpreting new materialisms as a force that renews ‘old’ materialisms. With this Lyotardian stance, the ‘new’ of new materialisms becomes an exercise in rewriting, which Grosz, who has published in *New Materialisms*, has called an anachronism: “Something [...] not yet used up in its pastness, it still has something to offer that remains untapped, its virtuality remains alluring and filled with potential for the present and future” (Grosz, 2010: 48). Methodologically, this anachronism translates as “re-reading the past for what is elided, repressed, unutilized, or unconscious in it” (ibidem), that is, we are to explore and give new life to (i.e. to renew) the past (ibid.: 49). Such a stance, Grosz makes clear, thrives on an epistemology of recognition, which is a (post) modern linguisticism that most new materialist authors would shy away from.

Be that as it may, *New Materialisms* is an extraordinary and in fact *interdisciplinary* collection in its own right. In the opening chapter titled ‘A Vitalist Stopover on the Way to a New Materialism’ for instance, Jane Bennett offers a remarkable close and diffractive reading of the theoretical and lab work of Hans Driesch, standing on the brink of the 20th century, and George W. Bush, who, standing on the brink of the 21st, is discussing issues like abortion, artificial life and stem cell research. At first, Driesch’s seemingly mechanistic work on the animating force of ‘entelechy’ (picked up by the Nazis, to which Driesch strongly objected) is critiqued for its application of the dualism that (active) life radically differs from (passive) matter (compare Bush), while in a second instance this work is wittily read as opening up for a discussion of *the life of matter*, and as an effect, entelechy is affirmatively rewritten. This rewriting is necessary, because Braidotti, in the same volume, eschews from discussing (neo-)vitalism in the light of “the problematic nature of vitalism in European thought and modern history” (*New Materialisms*: 202). Bennett’s new materialism – a vital materialism – thinks entelechy “as an attempt to name a force or an agency that is naturalistic but never fully spatialized, actualized, or calculable” in order for a materialism to develop that “eschews the life-matter binary and does not believe in God or spiritual forces, nevertheless also acknowledges the presence of an indeterminate vitality – albeit one that resists confinement to a stable hierarchy – in the world” (ibidem: 63; emphasis in original). The argument of Bennett can be read in parallel with the chapter of Parikka and Tiainen, discussed above: both are about *posing* certain questions, and about leaving the reader with the *necessity* to actually address, instead of refrain from, these pivotal questions. This gives the work of Driesch, as well as Bennett’s chapter, as well as *New Materialisms* as a whole, an exceptional contemporary relevance.

The contemporary relevance of the diverse new materialisms runs as a current through *New Materialisms*, and appertains to theory as such as well as to what we are used to calling the application of theory for coming to grips with issues of socio-political and ethical relevance. Pheng Cheah’s chapter on ‘Non-Dialectical Materialism’ for instance involves

the first category. Cheah, well-known in new materialist circles since his rewriting of Butler in the article 'Mattering' (Cheah, 1996), maps mechanical, Hegelian, Marxist, and Derridean and Deleuzian materialisms. The innovative conclusion of his cartography of these respective teleological/idealistic, dialectical and non-dialectical materialisms is that Jacques Derrida (often scapegoated by new materialists, since allied with the linguistic turn) and Deleuze (often celebrated by new materialists, since seen as the epitome of the material turn) can, as it happens, be read together. This conclusion sheds new light on Kirby's chapter from *Material Feminisms*, which, in a manner that is often yet erroneously misunderstood, proposes to "naturalize language and its productive energies" (*Material Feminisms*: 228; emphasis in original), that is, which suggests "to interpret [Derrida's] 'there is no outside of language' as 'there is no outside of Nature'" (ibidem: 229) because "then it is in 'the nature of Nature' to write, to read and to model" (Kirby, 2006: 84). Braidotti's chapter 'The Politics of "Life Itself" and New Ways of Dying' is pertinent to the second category, while showing that new materialisms do not apply theory, but, in an anti-representationalist mode, de-hierarchize the distinction between theory and application/practice altogether. Braidotti's biopower, for starters, shows how "[l]iving matter itself becomes the subject and not the object of inquiry, and [that] this shift toward a biocentered perspective affects the very fiber and structure of social subjects" (*New Materialisms*: 201). Then Braidotti, who depicts the material turn as "an ontology of presence after so much postmodernist deconstruction [...] a neorealist practice of bodily materialism [...] matter-ialism, or radical neomaterialism" (ibidem: 202; emphasis in original), turns to the ways in which "the current political climate has placed undue emphasis on the risks involved in pursuing social changes, playing ad nauseam the refrain about the death of ideologies" (ibid.: 209) only to affirm that this obsession with *thanatos* should be exchanged for *bios-zoē* in order to come to a sustainable ethics.

All in all, the work coming out of the material turn is mind-blowing work, both in scholarly and in artistic research, and in art. The linguistic turn, or the ways in which this turn has sedimented in research, gets to be commented on from diverse atlantic, disciplinary, and generational angles. However, it is still unclear *how* the new materialisms are new. Should the turn of the material turn be seen as a paradigm shift or a new epistemic formation, or as a rewriting? My wager is that it is neither. Following Grosz (2010: 49), I am at this point tempted to understand the material turn as a "leap into the future without adequate preparation in the present, through becoming, a movement of becoming-more and becoming-other, which involves the orientation to the creation of the new, to an unknown future, what is no longer recognizable in terms of the present". Here, and in contradiction to the idea of the material turn being a rewriting, we do *not* aim at finding something untimely (for instance a new feminist materialism) in an excessive patriarchal or linguisticist past (ibidem). Grosz directs us to the question of how to conceptualize (and practice) a "freedom (from concrete usefulness, from timeliness)" (ibid.: 51). The gist of Grosz's argument is a plea for a theoretical approach of the untimely, which implies "direct[ing] itself to change, to changing itself as much as changing the world" (ibid.: 49).

But how to prepare ourselves methodologically for this leap into the future? How to *do* such an epistemology of non-recognition? I would like to end this review essay by reflecting upon an answer that can be found in recent new materialist work.

In *Meeting the Universe Halfway*, Barad talks about the 'quantum leap' as simultaneously her theoretical tool and the so-called 'object' of her study (cf. Van der Tuin, 2011). Here is the definition:

"Quantum leaps aren't jumps (large or small) through space and time. An electron that "leaps" from one orbital to another does not travel along some continuous trajectory from here-now to there-then. [...] What makes a quantum leap unlike any other is that there is no determinate answer to the question of where and when they happen. The point is that it is the intra-play of continuity and discontinuity, determinacy and indeterminacy, possibility and impossibility that constitutes the differential space-time matterings of the world" (Barad, 2007: 182; cf. ibidem: 432 n. 45).

Barad also uses the quantum leap for understanding conceptual invention: a new concept involves a quantum leap, she says (ibidem: 428 n. 3). And when Barad discusses what might come out of the continental philosophical reading of the most quantum physical chapters of *Meeting the Universe Halfway*, she even explicitly employs the idea that two continuous and discontinuous, determinate and indeterminate, possible and impossible schools of thought are in an intra-action, and she ends this short, tentative section by saying that such "[q]uantum leaps in any case are unavoidable" (ibid.: 38). What, in this light, is the 'new' of new materialisms? What is involved when a scholar or a text or a so-called paradigm 'leaps'?

Another scholar that has employed the 'quantum leap' for understanding epistemic developments is Massumi. In an interview on the oeuvre of Gilbert Simondon that implicitly touches upon the material turn, Massumi states that what we are in fact talking about is "the paradox that before" Simondon and the new materialists "entered into relation, the respective multifunctionalities were not in effect. They were nowhere. They are not to be found in the past. It is when the relation kicked in that they were determined, by that very event, to *have been* the potential for what has come" (De Boever, Murray, & Roffe, 2009: 40). The 'new' thus comes from the future: "Invention is the bringing into present operation of *future* functions that potentialize the present for an energetic leap into the new" (ibidem; emphasis in original). Here Massumi addresses Barad's unavoidable quantum leap. This anti-representationalist leap suggests that we have to think differently about temporality, just like Grosz suggested. What we are talking about here is Grosz's 'orientation to the creation of the new, to an unknown future, what is no longer recognizable in terms of the present'. The leaping into existence of a concept involves the impact of the future on the present. A concept does not come from nowhere (Kuhn and Foucault) or from the past (Lyotard), but it is when a relation kicks in, that the inventiveness gets to be determined. Paradigm shifts or shifts in epistemic formations as well as rewritings are in fact quantum leaps, and the study

of them, previously the documentation of shifts between incommensurable disciplinary matrixes or of luring linearities in excessive epistemic formations, involves the study of leaps, of the sudden yet unavoidable clicking together of potentialities. I suspect the material turn can be said to involve such a click.

An example could be the generation of 1968 that did not settle in the linguistic turn: this is the clicking together of a (dis)continuous, trans-Atlantic bunch of individuals (bodies and bodies of knowledge) in and around Parisian academia, affected by the future, which made Foucault ([1970] 1998: 343; **emphasis added**) jokingly claim that “perhaps one day, this century will be known as Deleuzian”. The generation of 1968 seems to have been affected by the future. Or think of the sudden yet unavoidable click between Haraway’s ‘material-discursive’ and the new feminist materialists, dragging the former out of the predetermined schema of Harding’s feminist epistemologies of recognition as famously composed in *The Science Question in Feminism* (1986). The new involves a quantum leap, whereby “genuine newness emerges from [...] relational contingencies” (Harvey et al., 2008: 106).

I have not come to a final conclusion yet, and more research is necessary in order to make sure whether the ‘quantum leap’ really is a good ‘model’ for understanding how the material turn turns, and how new materialisms are new. What I do know is that more new materialist scholars are experimenting with this terminology and phenomenon (e.g. Kirby, 2011). Will epistemological work like my own be affected by this futurity?

## Endnote

<sup>1</sup> For this essay I have used a draft version of the book, which the editors provided me with on March 21, 2011.

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