
Thomas Lemke. Professor of Sociology with focus on Biotechnologies, Nature and Society at the Faculty of Social Sciences of the Goethe-University Frankfurt/Main in Germany and Honorary Professor at the University of New South Wales, Sydney. His research interests include social and political theory, biopolitics, social studies of genetic and reproductive technologies.
Contact: lemke@em.uni-frankfurt.de

MATER AND MATTER: A PRELIMINARY CARTOGRAPHY OF MATERIAL FEMINISMS

Thomas Lemke

Goethe Universität - Frankfurt am Main

DOI: 1017450/170105

Reception date 2nd February 2017; acceptance date 28th February 2017. This article is the result of research activities held at the Goethe-University Frankfurt/Main in Germany

Abstract

Recently, there has been a new interest in matter and materiality in feminist scholarship. The article situates contemporary material feminisms in relation to older traditions of feminist engagements with materialism. It discusses four distinctive features that I take to be important theoretical improvements and promising political prospects of material feminisms: (1) a stronger engagement with science; (2) the appreciation of material agency; (3) the emergence of a posthumanist perspective; and (4) a reevaluation and revision of ethics. The article provides a provisional mapping or preliminary cartography of this theoretical and empirical re-orientation, while pointing to some theoretical problems and possible drawbacks in current feminist debates and scholarship.

Keywords

New materialism, feminism, posthumanism, feminist theory, matter.

Resumen

Recientemente, ha habido un nuevo interés en la materia y la materialidad en la investigación feminista. El artículo sitúa a los feminismos materiales contemporáneos en relación con tradiciones más antiguas en las cuales se han establecido aproximaciones entre el feminismo y el materialismo. Aborda cuatro rasgos distintivos que considero como importantes mejoras teóricas y perspectivas políticas prometedoras de los feminismos materiales: (1) un mayor compromiso con la ciencia; (2) la apreciación de la agencia material; (3) el surgimiento de una perspectiva posthumanista; Y (4) una reevaluación y revisión de la ética. El artículo proporciona una cartografía provisional o cartografía preliminar de esta reorientación teórica y empírica, a la vez que apunta a algunos problemas teóricos y posibles inconvenientes en los actuales debates feministas y académicos.

Palabras clave

Nuevo materialismo, feminismo, posthumanismo, teoría feminista, materia.

Introduction

In the last twenty years a broad theoretical and intellectual shift has taken place, gaining particular momentum in the past decade.¹ While it is sometimes referred to as the “new materialism”², it is certainly more appropriate to use the plural form, as this strand of thought does not represent a homogeneous style of thought or a single theoretical position but encompasses a multitude of different approaches and disciplinary perspectives. It has been taken up in science and technology studies,³ but also in political theory,⁴ philosophy,⁵ geography,⁶ archeology,⁷ comparative literature⁸ and many other disciplines. The “material turn” criticizes the idea of the natural world and technical artifacts as a mere resource or raw material for technological progress, economic production or social construction. It aims at a new understanding of ontology, epistemology, ethics and politics, to be achieved by overcoming anthropocentrism and humanism, the split between nature and culture, linguistic or discursive idealism, social constructivism, positivism, and naturalism. Central to this movement is the extension of the concept of agency and power to non-human nature, thereby also calling into question conventional understandings of life.

One of the most important strands of the new materialisms is found in feminist theory. This strand encompasses a bunch of different and sometimes, but not always, converging trends in contemporary feminist thought. As this is a very dynamic and complex field of research and expertise, it is difficult to chart the terrain, to specify its frontiers and foundations and to establish what is distinctively new about it. The labels

1. I would like to thank Franziska von Verschuer, who helped me with the work on the manuscript, and Gerard Holden, who copyedited the text.

2. See e.g. M.J. Hird, “Feminist matters: New materialist considerations of sexual difference”, in *Feminist Theory* 5, 2004, pp. 230-232; S. Ahmed, “Open Forum Imaginary Prohibitions: Some Preliminary Remarks on the Founding Gestures of the ‘New Materialism’”, in *European Journal of Women’s Studies* 15, 2008, pp. 23-39; D. Coole, S. Frost, *New Materialisms: Ontology, Agency and Politics*, Duke University Press, Durham-London, 2010; R. Dolphijn, I. van der Tuin, *New Materialism: Interviews & Cartographies*, Open Humanities Press, Ann Arbor, 2012.

3. K. Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*, Duke University Press, Durham/London, 2007.

4. J. Bennett, *Vibrant Matter: A Political Ecology of Things*, Duke University Press, Durham-London, 2010.

5. Q. Meillassoux, *Nach der Endlichkeit. Versuch über die Notwendigkeit der Kontingenz*, Diaphanes, Berlin/Zürich, 2008; L. Bryant, G. Harman, N. Srnicek (eds), *The Speculative Turn: Continental Materialism and Realism*, Melbourne, 2011.

6. B. Braun, S. Whatmore (eds), *Political Matter: Technoscience, Democracy and Public Life*, University of Minnesota Press, Minneapolis, 2010.

7. C. Witmore, “Archaeology and the New Materialisms”, in *Journal of Contemporary Archaeology*, 1, 2014, pp. 203-246.

8. B.B. Tischleder, *The Literary Life of Things. Case Studies in American Fiction*, Campus Verlag, Frankfurt am Main-New York, 2014.

used to grasp this movement include “feminist materialism”,⁹ “corporeal feminism”,¹⁰ “feminist posthumanism”,¹¹ “material feminisms”,¹² “transcorporeal feminisms”,¹³ “neo-materialist feminism”,¹⁴ and “gut feminism”.¹⁵ In this article I will use the term “material feminisms” as a common denominator for the plurality of different perspectives that cover a theoretical and disciplinary spectrum ranging from science and technology studies via Deleuzian vitalism to a reevaluation of evolutionary theory.

It is no accident that new materialist ideas play a central role in feminist theory; feminist theory is the “natural habitat” for a reappraisal of matter. There is a long-standing tradition in feminism of exploring the situatedness of knowledge, stressing the close connections between epistemological questions and political issues and focusing on physicalities, on the body¹⁶. The “transversality” of the new materialisms¹⁷, which reconceptualizes central dualisms of (post-)modern thought: nature and culture, matter and mind, human and non-human, has for a long time been a central endeavor of feminist authors. They have stressed that these dualisms are produced in material practices rather than being their originary and organizing principle. If this is the case, however, if material feminisms pick up and build on an older tradition of feminist thought, one might ask what is specific about it. What is new about the new materialisms?

This article will provide an answer to this question by arguing that what comes under the label of material feminisms does indeed introduce something new into feminist theory. It is certainly necessary to keep a healthy distance from the sometimes overblown claims of some representatives of material feminisms, who regard the turn to matter as “a revolution in thought”¹⁸ while dismissing theoretical continuities with older traditions of feminist thought.¹⁹ However, I take the theoretical importance of

9. R. Braidotti, *Nomadic Subjects: Embodiment and Sexual Difference in Contemporary Feminist Theory*, Columbia University Press, New York, 1994.

10. E. Grosz, *Volatile Bodies: Toward a Corporeal Feminism*, Indiana University Press, Bloomington- Indianapolis, 1994.

11. A. Neimanis, “Alongside the right to water, a posthumanist feminist imaginary”, in *Journal of Human Rights and the Environment* 5, 2014, pp. 5-24.

12. S. Alaimo, S. Hekman (eds), *Material Feminisms*, Indiana University Press, Bloomington, 2008.

13. S. Alaimo, “Trans-corporeal feminisms and the ethical space of nature”, in S. Alaimo, S. Hekman (eds), *Material Feminisms*, pp. 237-264.

14. R. Braidotti, “The Posthuman in Feminist Theory”, in L. Disch, M. Hawkesworth (eds), *The Oxford Handbook of Feminist Theory*, 2015, pp. 1-20.

15. E. A. Wilson, *Gut Feminism*, Duke University Press, Durham-London, 2015.

16. For a classic intervention, see D. Haraway, “Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective”, in *Feminist Studies*, 14, 1988, pp. 575-599.

17. See R. Dolphijn, I. van der Tuin, *New Materialism*, pp. 93-114.

18. *Ibid.*, p. 85.

19. See also Susan Hekman’s appraisal of Barad’s agential realism: “Barad’s approach provides a kind of template for the new paradigm that is emerging in contemporary thought. Her settlement applies not just to feminism but to all aspects of critical thought. It can provide a solid foundation for the new paradigm that we are seeking.” (S. Alaimo, S. Hekman (eds), *Material Feminisms*, p. 106).

material feminisms to be that they address the question of the “nature of nature” or the “matter of matter”. I think that this theoretical shift consists in four distinctive features, and it promises to help us reconsider and revise a problematic assumption that has guided and informed feminist theory for a long time.

The article is structured as follows. I will first briefly situate contemporary material feminisms in relation to older traditions of feminist engagements with materialism. Secondly, I will advance the thesis that the new interest in matter, ontology and nature provides an answer to a specific paradox of feminist theory. While feminists in recent decades have produced important work on the body in its social, historical and cultural dimensions, they have at the same time been hesitant or even reluctant to engage directly with biological data and the corporal materiality of the body. Material feminisms seek to address this problem and to argue for a comprehensive appreciation of matter and biology. Thirdly, and this will be the main part of the article, I will discuss in some detail four distinctive features that I take to be important theoretical improvements and promising political prospects of material feminisms: (1) a stronger engagement with science; (2) the appreciation of material agency; (3) the emergence of a posthumanist perspective; and (4) a reevaluation and revision of ethics. In discussing these features, I will also point to theoretical problems and possible drawbacks that I observe in current feminist debates and scholarship.

Situating Material Feminisms

In order to get a better idea of what is specific and different in contemporary material feminisms, we can compare them with older traditions of synthesizing materialist thought and feminist theory. Let’s pick two exemplary books, published under very similar titles only a decade apart: in 1997 Rosemary Hennessy and Chrys Ingraham edited a book entitled *Materialist feminism: A reader in class, difference and women’s lives*; in 2008 *Material Feminisms* by Stacy Alaimo and Susan Hekman came out. Comparing the titles already indicates a shift away from “materialism” to the “material” and from singular to plural. A quick look at the tables of contents makes it obvious that something substantial has definitely changed in how scholars relate materialism and feminism. While the former book focuses on the living and working conditions of women in capitalist societies, trying to analyze them within the analytic triangle of race, class and sex, the latter engages with the materiality of bodies and natural environments. Somehow

investigations into women's labor practices, reproductive choices, political access and health options were displaced by an interest in somatic physicalities, living and non-living matter and human-nonhuman encounters.²⁰

Thus, the first theoretical shift by material feminisms to be noted is the distance from once popular materialist approaches, especially Marxist and socialist materialism. The second displacement concerns a critical stance towards poststructuralist feminism, especially the work of Judith Butler. Material feminists often accuse Butler's focus on human bodies and discursive practices of a "failed materialism"²¹ that needs to be complemented and corrected. One important critique of Butler has been formulated by Karen Barad, who is probably the most prominent representative of material feminisms. Barad stresses that for Butler (and Foucault) "agency belongs only to the human domain, and neither addresses the nature of technoscientific practices and their profoundly productive effects on human bodies, as well as the ways in which these practices are deeply implicated in what constitutes the human"²² What is needed then, according to Barad, is a posthumanist account that addresses the agency of both human and non-human bodies.²³

So, in conclusion material feminisms are characterized by a double line of separation.²⁴ They seek to go beyond Marxist and socialist accounts on the one hand and post-structuralist approaches on the other. Both are accused of privileging language, meaning and the social and of being ignorant of matter and the agentic forces of non-human entities.

But still the question remains: Why have new materialist ideas particularly flourished in feminist theory? I argue that the reason for this is to be found in a particular theoretical matrix that has informed feminist thought and politics in recent decades.

20. M. J. Hird, "Feminist Engagements with Matter", in *Feminist Studies* 35, 2009, pp. 329-346, pp. 329-330.

Similarly, Astrida Neimanis has argued that material feminism differs from "ecofeminism": "Despite important overlaps between the body of scholarship known as 'ecofeminism' and posthumanist feminism, the latter is generally uninterested in an essentialized relation between 'woman' and 'nature'. Posthumanist feminists generally espouse neither that women are naturally better custodians of nature, nor that they are closer to nature, nor that nature is a benevolent." (A. Neimanis, "Alongside the right to water", p. 14; see also E. Grosz, *Volatile Bodies*, p. 46).

21. R. Dolphijn, I. van der Tuin, *New Materialism*, p. 48.

22. K. Barad, *Meeting the Universe Halfway*, pp. 145-146.

23. See also J. Kerin, "The Matter at Hand: Butler, Ontology and the Natural Sciences", in *Australian Feminist Studies*, 14, 1999, pp. 91-104; V. Kirby, *Judith Butler. Live Theory*, Continuum, London-New York, 2006, pp. 70.

24. Material feminisms also enact a third line of criticism directed against "reductionist materialism", which has dominated the scientific discipline of biology for a long time. It is characterized by the tendency to assert that "the apparently distinctive attributes of organisms arise from the properties of their component parts – cellular and, ultimately, molecular" (T. Benton, "Biology and social sciences: Why the return of the repressed should be given a (cautious) welcome", in *Sociology*, 25, 1991, pp. 1-29, p. 14).

The Return of the Repressed: The Paradox of Feminist Theory

Feminist theory has for a long time been dominated by the sex/gender distinction, which was roughly based on the opposition of nature and culture. Within this conceptual frame, sex was understood as a biological fact while gender was conceived of as socially constructed.²⁵ This theoretical constellation was extremely productive in “de-naturalizing” claims that legitimized women’s social inequality or justified their oppression as rooted in an inferior biological make-up. Furthermore, it helped to contrast and confront biological determinism with social constructivism, opening spaces of “it could or it should be otherwise”. Within this theoretical constellation, the natural sciences are the “natural enemy” and biology is seen as “a kind of obstacle against which we need to struggle”.²⁶

However, the achievements and successes of feminist theory came at a price. There were some quite problematic implications. First, the sex/gender distinction was itself essentialized, and its historical and cultural specificity was rarely addressed. One extreme solution to this problem was Butler’s concept of gender performativity, which tends to dissolve the opposition of sex and gender by subsuming the former under the latter. As Miriam Fraser put it: “Sex is shown to have been gender all along”.²⁷

There is a second problematic implication. By relying on the sex-gender distinction, feminists also implicitly accepted and “reproduced the traditional task division between the social sciences and the biomedical sciences. Feminists assigned the study of sex to the domain of the biomedical sciences, and defined the study of gender to the exclusive domain of the social sciences.”²⁸ However, conceiving of gender as malleable, plastic and variable contributed to essentializing sex as something inert, stable and fixed. Thus, the biological body got “bracketed off” in feminist research, retaining a residual and unarticulated role compared to presumably more relevant social factors.²⁹ As a result of this focus on the historical, social and cultural dimensions of the body, its biological and somatic aspects were systematically left out of feminist inquiry. So, we have a very solid chain of significations here that informed the feminist imagination for quite a long

25. See M. Fraser, “What is the matter of feminist criticism?”, in *Economy and Society*, 31, 2002, pp. 606–625, p. 607.

26. E. Grosz, “Darwin and Feminism: Preliminary Investigations For a Possible Alliance”, in S. Alaimo, S. Hekman, *Material Feminisms*, p. 23.

27. M. Fraser, “What is the matter of feminist criticism?”, p. 609.

28. N. Oudshoorn, *Beyond the Natural Body: An Archaeology of Sex Hormones*, London- New York, 1994, p. 2.

29. E. Annandale, “Gender and health status: Does biology matter?”, in S.J. Williams, L. Birke, G.A. Bendelow (eds), *Debating Biology. Sociological reflections on health, medicine and society*, Routledge, London-New York, 2003, pp. 84–95, pp. 85–87.

time: sex is understood as biology and biology equated with determinism and essentialism, while gender is conceived of as social which translates into malleable and dynamic. Rigidity and universalism on the one side, flexibility and variability on the other.³⁰

One of the most interesting aspects of material feminisms is that they challenge this theoretical matrix. They call for “the return of the repressed”³¹ in social science research more generally, and sensitize us to the “paradox”³² or the “irony”³³ of feminist scholarship and politics. Elizabeth Wilson has pointed out that while feminists have produced important work on the body, they have at the same time relied on a very restricted understanding of the biological body. Feminist research has focused on the gendered metaphors, representations and narratives that inform biological science, but there has been an aversion to engaging directly with the corporal or somatic dimensions of the body. Feminist theory and politics is still largely based on an antibiologism which made possible the achievements and successes of the past, while at the same time leading to some important blind spots and serious reductionisms. As Wilson puts it: “Antibiologism both places significant conceptual limitations on feminist theory and has been one of the means by which feminist theory has prospered.”³⁴

Vicky Kirby’s balance sheet is even more critical. Kirby argues that feminist theory has successfully “denaturalized” things, but in doing so it reaffirmed and stabilized a certain concept of nature: a prescriptive, deterministic, static idea of nature. To counter this longstanding and well-entrenched imaginary, Kirby stresses the mobile, changing and dynamic nature of nature, arguing that feminist theory needs to question the understanding of nature as a passive and inert substance.

[O]ne of the ironies of feminism’s achievement is the tendency to answer the politics of exclusion and devaluation by inverting and reinforcing this same logic, rather than questioning it. The politics of inclusion, ‘we are all equally human’, “the other” is not closer to the animal, to Nature, to the primitive, concedes that human identity is *internally* fractured, historically and culturally differentiated

30. See Ted Benton’s observation in his seminal article: “If gender as a cultural phenomenon is cut adrift from any systematic connection with sexual difference then the *specificity* of the forms and mechanisms of women’s oppression is hard to sustain, the integrity of the various complex levels and aspects of women’s situation is lost, and, perhaps most obviously, the price of claiming ‘gender’ for the cultural sphere is the loss of sex and sexuality to the ‘enemy’ domain of biology.” (T. Benton, “Biology and social sciences”, p. 3, italics in orig.)

31. T. Benton, “Biology and social sciences”.

32. E.A. Wilson, *Gut Feminism*, p. 4.

33. See Kirby in V. Kirby, E.A. Wilson, “Feminist conversations with Vicki Kirby and Elizabeth A. Wilson”, in *Feminist Theory*, 12, 2011, pp. 227-234, p. 230.

34. E. A. Wilson, *Gut Feminism*, p. 4.

and politically fraught. However, this internal incoherence, which operates to secure and define the identity of the anthropological against its less complex ‘others’, inadvertently reasserts that Nature is, indeed, primordial material, a separate system that lacks the ability to cognise, self-organise, re-present and re-conceive itself. Cartesianism writ large!³⁵

In sum, material feminisms invite us to rethink some more or less hidden assumptions of feminist scholarship and politics by proposing a “return to matter”. This theoretical shift provides some important theoretical advantages and political prospects for the future, but it also entails serious problems and possible shortcomings.

Prospects and Problems of Material Feminisms

Critique of or engagement with science?

In their edited volume *New Materialisms: Ontology, agency, and politics*, Diana Coole and Samantha Frost delineate several distinctive themes or topics in new materialist scholarship. One of them is an “ontological reorientation” that takes up or is even based on developments in the natural sciences³⁶. Similarly, Myra Hird has insisted that material feminisms no longer focus on a critique of science, exposing its truth claims, structural biases and ideological forms but rather engage with science by promoting forms of cooperation and productive dialogues with scientists³⁷.

I think that this transdisciplinary methodological move might indeed broaden and enlarge feminist imaginations by actively incorporating the so far mostly excluded materiality of physical bodies and environments. It makes it possible to extend the lines of inquiry, and opens up new empirical fields for feminist research. Possible research questions include investigating how forms of socio-economic inequality materialize in certain biological features, how social and personal experiences affecting well-being and health are transferred cross-generationally by epigenetic mechanisms, how non-human nature exhibits forms of agency and sociality, and many more. Thus, material feminisms productively question established disciplinary borderlines and knowledges.

35. V. Kirby, in V. Kirby, E.A. Wilson, “Feminist conversations with Vicki Kirby and Elizabeth A. Wilson”, p. 230, italics in orig.

36. D. Coole, S. Frost, “Introducing the New Materialisms”, in S. Coole, S. Frost, *New Materialisms*, 2010, pp. 1-43, p. 6.

37. M.J. Hird, “Feminist Engagements with Matter”, pp. 330-331.

Furthermore, they disturb a critical perspective that already “knows the enemy”, a position that takes for granted that “biological” means “essentializing” features and phenomena.

However, this opening is also coupled with a certain uneasiness. In the following I will focus on two concerns. First, I am quite hesitant to follow Latour’s famous call to say farewell to critique³⁸ and to conceive of “critique” as an essentially destructive and negative enterprise. Barad and other material feminists claim that critique has to be replaced by affirmation and creation³⁹. I think that this only expresses a very limited understanding of critique, which needs to be replaced by a more complex concept.⁴⁰ While I completely share the view that positive and creative engagements with theories are necessary, I also think that critique and affirmation do not exclude but rather complement one another. So, it is still necessary to critically flesh out the situatedness of scientific knowledge. And it is still essential to expose the gendered stereotypes and essentialist assumptions that often go along with the production of scientific facts. And it is also indispensable to take into account the power asymmetries within the sciences, and between the natural sciences on the one hand and the social sciences and humanities on the other.⁴¹

There is a second problem in this rapprochement or realignment of feminism and science that has been pointed out by Elizabeth Wilson. Wilson notes that there is a tendency in feminist theory and beyond “to side with scientific data in a very literal kind of way. There is a growing credulousness in the humanities about data put in front of us by scientific investigation. I have found this to be particularly evident in the neuro-humanities literatures, which take up certain claims about human and animal neurological function as gospel”.⁴² So, in some areas of research the feminist tradition of antibiologism is completely reversed, giving rise to a naïve acceptance of the results of (experimental) scientific research. Instead of critically analyzing scientific truth claims, they are taken for granted or even provide the basis for feminist theory without any

38. B. Latour, “Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern”, in *Critical Inquiry*, 30, 2004, pp. 225-248.

39. Interview with K. Barad, “Matter feels, converses, suffers, desires, yearns and remembers”, in R. Dolphijn, I. van der Tuin, *New Materialism: Interviews & Cartographies*, p. 49.

40. See e.g. T. Lemke, “Critique and Experience in Foucault”, in *Theory, Culture & Society*, 28,4, 2011, pp. 26-48.

41. For a more extensive discussion of this turn from critique to affirmation in new material scholarship see T. Lemke, “Varieties of materialism”, in *Bio Societies*, 10, 2015, pp. 490-495; see also T. Lemke, “New Materialisms: Foucault and the Government of Things”, in *Theory Culture & Society*, 32, 2015, pp. 2-25.

42. V. Kirby, E.A. Wilson, “Feminist conversations with Vicki Kirby and Elizabeth A. Wilson”, p. 233; E. A. Wilson, *Gut Feminism*, pp. 4-5.

inquiry into the methodological designs and the transferability of the results of the scientific research.⁴³

This tendency is even visible in one of the most innovative and complex versions of material feminisms, Barad's agential realism. Barad draws on quantum mechanics, especially the work of Niels Bohr, to propose a new alignment of ontology, epistemology and ethics.⁴⁴ However, as Trevor Pinch has argued, Barad's turn to physics and her taking up of certain experimental settings in quantum mechanics tends to ignore important insights from the tradition of science studies. Rather than deconstructing, situating or contextualizing the insights of quantum physics, she employs them as "the obvious grounding for a new ontology in science studies"⁴⁵. Barad's emphasis on intra-actions, diffraction patterns and a relational ontology thus comes at a price. It is built on the idea of a straightforward transfer of insights from science that are seen to provide a solid foundation for science studies and feminist theory: "one often gets the impression that Bohr isn't just a bloke from Copenhagen but someone who was closer to being a God"⁴⁶.

Pinch, being a physicist himself, claims that it is only the failure to situate and contextualize quantum mechanics that allows Barad to use Bohr as a foundation for agential realism.⁴⁷ He argues that Barad adheres to an obvious paradox: "I find it deeply puzzling that Barad can call for a more situated account of science and at the same time fail to situate the very part of science she is talking about, while drawing in a realist mode upon experiments to support her position"⁴⁸.

So, while there is certainly a lot of potential in engaging directly with scientific data and transgressing disciplinary boundaries, there is also a danger that this new appraisal of science, especially biology, might invite a revival of scientific positivism.

Material agency or revitalized reification?

The second important aspect of material feminisms concerns the domain of ontology. New materialisms enact a theoretical move that shifts agency from identifiable actors to relational fields of forces that allow for the emergence of "agents". So, agents are rather

43. See also S. Abrahamsson, F. Bertoni, A. Mol, R. Ibáñez Martín, "Living with omega-3: new materialism and enduring concerns", in *Environment and Planning D: Society and Space*, 33, 2015, pp. 4-19, p. 5 fn. 5.

44. K. Barad, *Meeting the Universe Halfway*.

45. T. Pinch, "Review Essay: Karen Barad, Quantum Mechanics, and the Paradox of Mutual Exclusivity", in *Social Studies of Science* 41, 2011, pp. 431-441, p. 434.

46. *Ibid.*

47. Pinch points to the work of Bohm as a different account of quantum mechanics and one that is critical of Bohr, (*Ibid.*, pp. 434-435).

48. *Ibid.*, p. 439.

the result of practices of assembling and associating than their originary principle or starting point. As Coole succinctly puts it:

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. [...]. 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. [...]. The analytical move here is to eliminate presuppositions about agents and their avatars or facsimiles (such as human subjects or individuals, collectivities, states).⁴⁹

Let me illustrate the prospects and problems of such an analytic shift from “agents” to “agentic forces” by discussing Jane Bennett’s concept of a “vitality of matter”⁵⁰, developed in her book *Vibrant Matter*. Bennett disturbs conventional understandings of agency as she acknowledges the force of non-human entities: “By ‘vitality’ I mean the capacity of things – edibles, commodities, storms, metals – not only to impede or block the will and designs of humans but also to act as quasi-agents or forces with trajectories, propensities, or tendencies of their own.”⁵¹

This perspective allows for a different concept of agency. First, Bennett argues that agency needs to be “distributed across a wider range of ontological types” that cuts across the human/nonhuman divide so that things like food and minerals can be reconceptualized as having the ability to act.⁵² Secondly, she moves beyond the focus on individual bodies and their borders to propose a concept of action that is based on certain configurations of human and nonhuman forces that she calls –following Deleuze and Guattari– assemblages. Bennett coins the term “thing power” to account for the ability of inanimate things to produce effects by operating in conjunction with other material bodies.

The theoretical merit of this perspective is that it makes it possible to rethink and refute the idea of matter as dead or passive stuff, matter as a resource or raw material of human action. While I think that this is an important and indeed necessary move, again

49. D. Coole, “Agentic Capacities and Capacious Historical Materialism: Thinking with New Materialisms in the Political Sciences”, in *Millennium-Journal of International Studies*, 41, 2013, pp. 451-469, p. 457.

50. J. Bennett, *Vibrant Matter*, p. vii.

51. *Ibid.*, p. viii.

52. *Ibid.*, p. 10.

I hesitate; quite paradoxically, this appreciation of things and matter might end up in a new form of reification. Again let me note two problems. First, in new materialist accounts and in material feminisms agency is sometimes conceived of as an attribute or a property of things.⁵³ In this perspective things as such possess agency. Steve Hinchliffe⁵⁴ has observed an important ambiguity in Bennett's concept of things, one that could be diagnosed in many new materialist accounts. While Bennett claims that things are to be understood relationally, as they are not stable and solid entities but participate in dynamic and processual assemblages, she simultaneously conceives of them as "things in themselves" that have persistence and activity that extends beyond and prior to their relationality. As Hinchliffe puts it, the very idea of a "force of things" amounts to a "naïve realism" that allows things to have a "more-than-relational character".⁵⁵

The second problem concerns the concept of agency itself. It might not be sufficient to only extend the category of the actor beyond humans to include formerly excluded entities by affirming the agentive capacities of things. As Annemarie Mol and her co-authors point out, this theoretical move does not seem to be radical enough, as it still buys into the liberal concept of agency that conceives of agency as a property of individual entities. This extension leaves intact the liberal imaginary and the conceptual divide between causality and agency, external forces and inner will, and it would be more pertinent to abandon the notion of "agency" altogether and to put the emphasis on "modes of doing" that better bring out the relationality of how materialities work in concert.⁵⁶

Posthumanist Perspectives

A third characteristic of material feminisms is closely connected to the rethinking of agency: an explicitly posthumanist perspective that grants no privilege to human action or bodies. Material feminisms enact a weak and fluid concept of humanity that is highly dependent on and embedded in non-human nature. Instead of celebrating

53. See H. Meißner, "Feministische Gesellschaftskritik als onto-epistemo-logisches Projekt", in C. Bath, H. Meißner, S. Trinkaus, S. Völker (eds), *Geschlechter Interferenzen. Wissensformen – Subjektivierungs-weisen – Materialisierungen*, LIT Verlag, Münster, 2013, pp. 163-208, p. 166.

54. S. Hinchliffe, "Review of *Vibrant Matter*", in *Dialogues in Human Geography*, 1, 2011, pp. 396-399.

55. *Ibid.*; see also E. Cudworth, S. Hobden, "Liberation for Straw Dogs? Old Materialism, New Materialism, and the Challenge of an Emancipatory Posthumanism", in *Globalizations*, 12, 1, 2014, pp. 134-148. Bennett is (partly) aware of these conceptual problems, and refers to them as "disadvantages": Thing-power, she acknowledges, "tends to overstate the thingness or fixed stability of materiality" and the term is characterized by a "latent individualism" (J. Bennett, *Vibrant Matter*, p. 20). Nevertheless, in the book and in her work in general, she still endorses this isolationist and individualist concept of agency.

56. S. Abrahamsson et al., "Living with omega-3", pp. 13-15.

human uniqueness and singularity, the analytical privilege is transferred to multiple connections, heterogeneous inter-actions and associations with the non-human. Seen through this posthumanist lens the “human species, and the qualities of self-reflection, self-awareness, and rationality traditionally used to distinguish it from the rest of nature, may now seem little more than contingent and provisional forms or processes within a broader evolutionary or cosmic productivity”⁵⁷.

This posthumanist stance is firmly rooted within the feminist tradition as it critically engages with the Enlightenment project, which informed a specific model of cultural universalism and political emancipation. Prolonging the critique of Universal Man, it seeks to decenter human exceptionalism, rationality and agency. As Astrida Neimanis notes, this posthumanist perspective embraces “difference as a positive value, without winding up at an unworkable relativism. From a feminist point of view, then, posthumanism might best be conceptualized as an expansive, inclusive and non-hierarchical way of thinking about the situation of the human in a more-than-human world.”⁵⁸

While this posthumanist perspective is certainly a necessary theoretical move, there are again two caveats to be taken into account. First, the theoretical shift to posthumanism and the analytic egalitarianism attached to it sometimes tend to obscure the de facto privileged role and the planetary power of humans to affect other bodies. What is needed is what one might call a “strategic anthropocentrism”⁵⁹ that takes into account the asymmetrically destructive and oppressive power of humans. As Coole puts it: “Having rejected vertical or dualist ontologies, [...] 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”⁶⁰. While it is important to destabilize the “anthropological matrix”⁶¹, material feminisms need to account for the responsibility of Man for endangering living conditions on the whole planet. Thus, a critical posthumanism not only abandons “humancentrism” but is also – as Cudworth and Hobden put it – “highly attuned to the domination of the animal that is not human, in addition to the animal which is”⁶².

The second problem is that the critique of anthropocentrism is often a very abstract and general charge, and is not linked to the problem of eurocentrism or to post-

57. D. Coole, S. Frost, “Introducing the New Materialisms”, p. 20.

58. A. Neimanis, “Alongside the right to water”, pp. 13-21.

59. B. Donaldson, “Introduction”, in B. Donaldson (ed.), *Beyond the Bifurcation of Nature: A Common World for Animals and the Environment*, Cambridge Scholars Publishing, Newcastle upon Tyne, 2014, pp. 1-6, p. 6.

60. D. Coole, “Agentic Capacities and Capacious Historical Materialism”, p. 461.

61. B. Latour, *We Have Never Been Modern*, Harvard University Press, Cambridge (Mass.), 1993, p. 107.

62. E. Cudworth, S. Hobden, “Liberation for Straw Dogs?”, p. 144.

colonial debates on alterity. As a result the debate tends to homogenize the “human”, thereby ignoring its internal fractures and fissures. Thus, power asymmetries and social inequalities within “the human” are rarely addressed as the focus of interest shifts to entanglements of human and non-human entities or assemblages. Paradoxically, the “human” that is to be left behind and superseded by a posthuman or a “more-than-human” picture is finally reaffirmed as something solid and stable.⁶³

Ethics and politics

The fourth important feature of material feminisms is that they seek to conceptually integrate epistemology, ontology and ethics. This proposal is a pervasive topic in the literature, but it is most prominently and systematically articulated in Barad’s work. The important point in agential realism is to accept responsibility for the specific material intra-actions and to permanently review and rework the boundaries that they enact. As Barad claims that we participate in the making of the phenomena we seek to understand, she calls for “an appreciation of the intertwining of ethics, knowing, and being”, an endeavor she terms “ethicoonto-epistem-ology”⁶⁴.

For this comprehensive understanding of ethics, Barad turns to the work of Emmanuel Lévinas and his concept of responsibility. Her posthuman rendering of Lévinas’ ethics suggests a rethinking of (the boundaries of) ethics. Ethical concerns are not something additional or subsequential that comes after the facts are established, evaluating them, reflecting and reconsidering them. According to Barad, the matter of ethics is not about the consequences of mattering, it is about what comes to matter. It is not a mediated activity but a material engagement. In agential realism no neat line distinguishes facts and values, rather facts are always already value-laden, they embody normative preferences that give rise to some material configurations rather than others. Thus, this ethical perspective is

not about right response to a radically exterior/ized other, but about responsibility and accountability for the lively relationalities of becoming of which we are a part. [...]. We are accountable for and to not only specific patterns of marks on bodies [...] but also the exclusions that we participate in enacting.

63. H. Meißner, “Feministische Gesellschaftskritik als onto-epistemo-logisches Projekt”, pp. 165-166; P. Garske, “What’s the ‘matter’? Der Materialitätsbegriff des ‘New Materialism’ und dessen Konsequenzen für feministisch-politische Handlungsfähigkeit”, in *Prokla*, 44, 2014, pp. 111-129, pp. 122-124.

64. K. Barad, *Meeting the Universe Halfway*, p. 183.

Therefore accountability and responsibility must be thought in terms of what matters and what is excluded from mattering.⁶⁵

While this understanding of ethics and its intimate connection to ontological and epistemological questions are an innovative and important theoretical achievement of material feminisms, let me again point to some problems. First, placing ethics everywhere, seeing it interwoven with the “fabric of the world”⁶⁶, risks making it unspecific and weak. The general and boundless extension of ethics to all intra-actions seems arbitrary and empty. As Barad, following Lévinas, conceives of responsibility as integral part of intra-actions, every intra-action becomes a relation of responsibility. What gets lost in this comprehensive conception is a sense of the specificity of the differential normative values articulated in the materializations. While the notion of responsibility is highly normatively loaded, it remains diffuse and unclear how intra-actions differ in their ethical value. This provokes the question of what criteria to draw on to discriminate intra-actions that are “fuller” or “more just” than others, what materializations are to be preferred over others. Or in Barad’s own words: how do we account for “ways of responsibly imagining and intervening in the configurations of power”?⁶⁷

Secondly, it seems strange that Barad invokes ethics rather than politics. She rarely attends to conflicts and controversies in determining what matters, rather she emphasizes that “we” are responsible for the “agential cuts” we are enacting. But how does this responsibility translate into political options, and how is responsibility itself a differential resource given existing asymmetries, exclusions and forms of oppression?

In fact, it seems necessary to supplement the “ethics of mattering”⁶⁸ by an adequate understanding of politics. While Barad’s stress on radical contingency and relationality is surprisingly combined with a systematic omission of tension and struggle, the multiple possibilities of “worlding”⁶⁹ as potentially conflicting or competing alternatives have to be taken into account. To put it differently, so far agential realism lacks an understanding that the ethical openness of worldly re-configurations is also always already a political, meaning a contested project.⁷⁰

65. *Ibid.*, pp. 393-394.

66. *Ibid.*, p. 182.

67. *Ibid.*, p. 246.

68. *Ibid.*, p. 3.

69. *Ibid.*, p. 392.

70. This argument is developed more extensively in K. Hoppe, T. Lemke, “Die Macht der Materie. Grundlagen und Grenzen des agentiellen Realismus von Karen Barad”, in *Soziale Welt*, 66, 2015, pp. 261-280.

Conclusion

In concluding this provisional mapping or preliminary cartography of material feminisms, I would like to stress that the balance sheet I have presented might appear more negative or problem-centered than I intended it to be. In fact, material feminisms represent some of the most interesting and innovative developments in current feminist theory. To be sure, they are not a “revolution in thinking” as some of their proponents claim, but they address important theoretical and political issues in contemporary societies and are certainly more than a simple repetition of older feminist concerns and topics in new guises.

Apart from the points I have mentioned in this article, there are many more theoretical and political prospects in material feminisms. Let me note only a few of them. First, material feminisms promise to go beyond the worn-out alternative of social constructivism and scientific realism. Secondly, they invite us to disentangle the notions of matter, ontology, nature and biology as necessarily associated with determinism, essentialism and reductionism⁷¹. Thirdly, they challenge feminist imaginations and critical vocabularies by questioning the idea of nature as solid, stable and static. We still need to “denaturalize” things, but we need to do so by denaturalizing the very idea of denaturalization. By conceiving of nature as dynamic, flexible and changing, material feminisms invite us to rethink the tools of critique. In employing concepts like “naturalization”, “biologization” or “reification”, we endorse a specific understanding of nature, biology and thingness that is part of the theoretical and political constellation feminists are challenging.

To be clear: This does not mean that we should stop attacking and denouncing essentialisms, but we should do so by revising and reviving our critical apparatuses and imaginaries. If the new materialisms are not to become old idealisms, they will have to confront these concerns and challenges. And they will do so not by giving up critique and replacing it by affirmation, but by affirming the vitality and vibrancy of critique.

71. M. Fraser, “What is the matter of feminist criticism?”.