

THE BLOOMSBURY
HANDBOOK OF

21ST-CENTURY
FEMINIST
THEORY

Edited by Robin Truth Goodman

B L O O M S B U R Y
LONDON • OXFORD • NEW YORK • NEW DELHI • SYDNEY

BLOOMSBURY ACADEMIC
Bloomsbury Publishing Plc
50 Bedford Square, London, WC1B 3DP, UK
1385 Broadway, New York, NY 10018, USA

BLOOMSBURY, BLOOMSBURY ACADEMIC and the Diana logo are trademarks of
Bloomsbury Publishing Plc

First published in Great Britain 2019

Copyright © Robin Truth Goodman and Contributors, 2019

Robin Truth Goodman and Contributors have asserted their rights under the Copyright, Designs and
Patents Act, 1988, to be identified as Authors of this work.

For legal purposes the Acknowledgments on p. ix constitute an extension of this copyright page.

Cover design: Eleanor Rose
Cover image © Ociacia / iStock

All rights reserved. No part of this publication may be reproduced or transmitted
in any form or by any means, electronic or mechanical, including photocopying,
recording, or any information storage or retrieval system, without prior
permission in writing from the publishers.

Bloomsbury Publishing Plc does not have any control over, or responsibility for, any
third-party websites referred to or in this book. All internet addresses given in this
book were correct at the time of going to press. The author and publisher regret any
inconvenience caused if addresses have changed or sites have ceased to exist, but can
accept no responsibility for any such changes.

A catalogue record for this book is available from the British Library.

A catalogue record for this book is available from the Library of Congress.

ISBN: HB: 978-1-3500-3238-5
ePDF: 978-1-3500-3240-8
eBook: 978-1-3500-3239-2

Typeset by Newgen KnowledgeWorks Pvt. Ltd., Chennai, India

To find out more about our authors and books visit www.bloomsbury.com
and sign up for our newsletters.

CONTENTS

LIST OF FIGURES	viii
ACKNOWLEDGMENTS	ix
LIST OF CONTRIBUTORS	x
Introduction <i>Robin Truth Goodman</i>	1
Part One The Subject	19
1. Subject <i>Susan Hekman</i>	21
2. Identity <i>Michelle M. Wright</i>	33
3. Difference <i>Hortense J. Spillers</i>	45
4. Birth <i>Fanny Söderbäck</i>	59
5. Body <i>Maria Margaroni</i>	81
6. Affect <i>Anca Parvulescu</i>	95
7. Sex <i>Rita Mookerjee</i>	109
8. Intersex/Transgender <i>Kathleen Long</i>	121
9. Experience <i>Alison Phipps</i>	143
10. Intersectionality <i>Aída Hurtado</i>	159

Part Two The Text	171
11. Language <i>Kyoo Lee</i>	173
12. Writing <i>Aimee Armande Wilson</i>	181
13. Reading <i>Nicole Simek</i>	193
14. Realism <i>Margaret R. Higonnet</i>	205
15. Poetics <i>Caitlin Newcomer</i>	217
16. Translation <i>Luise von Flotow</i>	229
17. Genre <i>Mihoko Suzuki</i>	245
18. Archive <i>Laura Hughes</i>	263
19. Critique <i>Ewa Płonowska Ziarek</i>	277
Part Three The World	289
20. World <i>Masood Raja</i>	291
21. Environment <i>Shannon Davies Mancus</i>	299
22. Anthropocene <i>Alison Sperling</i>	311
23. The Political <i>Marios Constantinou</i>	325
24. Political Trauma <i>Joy James</i>	345
25. Labor <i>Susan Ferguson</i>	355
26. Commodity <i>Robin Truth Goodman</i>	369

CONTENTS	vii
27. Matter <i>Emanuela Bianchi</i>	383
28. Technology <i>Anne Cong-Huyen</i>	399
29. Home <i>Sarah Afzal</i>	411
30. Migration <i>Effie Yiannopoulou</i>	423
31. Diaspora <i>Avtar Brah</i>	437
32. Community <i>Mina Karavanta</i>	449
33. Anti-Imperialism <i>Rashmi Varma</i>	463
34. Future <i>Bridget Crone and Henriette Gunkel</i>	481
INDEX	491

CHAPTER TWENTY-SEVEN

Matter

EMANUELA BIANCHI

The gendered stakes of matter are visible and audible in the very word: matter—*materia-mater*—mother. Taking this equivalence at its word, we see that matter signifies a kind of source or origin, one with a specifically feminine sign: matter as mother, the maternal origin, accompanied, no doubt, by all the fantasies of existential—solace, terror, and mystery that the maternal origin may be capable of conjuring. Matter, as philosopher Luce Irigaray, among others, first brought to our attention in the 1970s, is as a philosophical term inseparable from what it has been opposed and subordinated to in the Western philosophical tradition as first conceived in Ancient Greece: it thus takes its place in a chain of well-known equivalences—matter is opposed to form as body is opposed to mind or soul, as nature is opposed to culture, as sensible is opposed to intelligible, as feminine is opposed to masculine.

Hélène Cixous, writing around the same time as Irigaray, begins her essay *Sorties* with just this series of oppositions, and adds another through which they might all also be understood: passivity/activity (63–4). The first term is ineluctably subordinated to the second, and functions as its other, its undergirding and support, providing not simply an infrastructure but also a kind of reflected glory in which the superordinate term might bathe. Such a conceptual grid is indeed an all-too-familiar commonplace of twentieth-century feminist thought. For Irigaray, from her early critical-feminist philosophical analyses in *Speculum of the Other Woman* and *This Sex Which Is Not One* (both first translated into English in 1985), the facticity of the origin of all of us in a maternal body, and the radical notion that this mother is also a woman, becomes in the masculinist discourses of philosophy a frozen site, incapable of reciprocity, functioning only as a mirror for the male. In particular, at the level of an investigation into substance and being inaugurated in the Western philosophical tradition, the advent of “matter” in Aristotle’s thought as a term of Western metaphysics marks in a profound way the appropriation and evisceration of the maternal-feminine: red blood becomes white blood (*le sang blanc*) as factual, corporeal origin is transformed into its French homonym, mere reflective surface and semblance (*le semblant*) (*This Sex* 77, 186–8, 192, 197; *Speculum* 216, 221). Nonetheless, Irigaray insists that there is a profound power for feminism to be sought in the “elsewhere of matter,” since “mother-matter-nature must go on forever nourishing speculation,” even if such matter is typically expelled as excess waste, if not madness, in the phallic order (*This Sex* 76–7).

At the same time, “matter” has also appeared in feminist thinking as a referent of “materialism” within the materialist feminist tradition. “Materialism” here, however, signifies less matter as a term within Western metaphysics, but denotes, rather, the range of

human activities by which the means of human subsistence are produced and reproduced. Materialism in this Marxist sense thus refers to a field that includes material conditions of production, relations of production, forces of production, and the various activities of human labor through means of which humans act upon, transform, and reproduce their material and human worlds. The mode of production in which we find ourselves is determinative for Marx of our mode of life, and the “nature of individuals” will also depend on the material conditions of production in which they find themselves (150).

While “matter itself” is not a key term or element in this field, materialist feminists such as Silvia Federici have emphasized how traditional Marxism has excluded or downplayed the labor power represented by the corporeal dimensions of human existence undertaken by women: the labor represented by provision of sexual services (paid or unpaid), pregnancy, childbirth, breastfeeding, caretaking, food preparation, housework, household management, and other labor, mostly falling to women, that functions in capitalism primarily to reproduce the workforce. In her analysis of the transformation under capitalism during sixteenth- and seventeenth-century Europe of the body of the worker into a mechanical instrument of production, and the body of woman in turn into a machine for reproduction of the workforce, Federici raises parallels with the transformations in conceptions of the body itself in the thought of early modern philosophers such as Descartes and Hobbes (see, especially, 133–61). For these thinkers, the body itself, its corporeal and material nature, is newly understood according to the causal, calculative, and productive logic of the machine. If the body is rendered in these philosophies akin to something dead, an automaton, a tool or an instrument without liveliness in itself, what then provides the impetus and the energy for its movement? Here, we can see how the concerns of materialist feminism dovetail with the “matter” of Western metaphysics. As the rise of capitalism intensifies the dependence of women on employers and on men, the body becomes not just that which must be transcended and overcome, but it is further hypostatized as the passive receptacle, instrument, and reflector of something else. What is this but a certain force that now resides firmly on the side of the masculine, the state, and capital’s economic power, and which provides the animating, motive, and now productive principle through which it might be operated and governed?

In bare bones, then, these are two lines of thinking which reveal how and why matter comes to “matter” for feminist thought (see Meißner). Irigaray, too, pays attention to the “materialist” side of mattering, insofar as she emphasizes how women within patriarchal kinship structures and capitalist markets function as objects of exchange that work to consolidate masculine subjecthood (*This Sex* 170–97, see also Rubin). In modernity, then, we must add the “object” opposed to the “subject” to our chain of equivalences. Clearly, it would be all too easy for this study to become an investigation of all that lies upon one side in this chain of associative oppositions: matter, nature, the sensible, the body, the object, all of which may be gathered under the sign of the feminine. But while they are all interlinked and connected, and in a certain sense form an inseparable complex insofar as they are all bound to the “feminine,” “matter” *as such* has a particular history, a particular genealogy, and a particular set of resonances.

For the explicit thematizing of matter for twenty-first-century feminist theorizing, we must at this juncture turn to a pair of key texts, Judith Butler’s *Bodies That Matter* and Elizabeth Grosz’s *Volatile Bodies*, both written in the early 1990s, that in tandem reckon with, on the one hand, the force of matter as productive activity, as what “comes to matter,” and, on the other, the philosophical reduction of matter to a remainder or reserve, to what has been rendered static and passive in Western thought. While both

these texts principally foreground the body, they together also insist that matter as such must be transvalued, rendered inseparable from force, movement, and history. In bringing this newly animate matter to center stage, they mark a decisive shift in feminist theorizing and arguably also lay the groundwork (along with the key work of feminist science studies scholar Donna Haraway) for movements in the wider theoretical humanities such as posthumanism, speculative realism/object-oriented ontologies, affect theory, and critical animal studies.

For feminist thought, an array of contemporary threads emanate from this moment, including the feminist new materialisms, developments in environmental philosophy and ecocriticism, philosophy of technology, philosophical engagements with neuroscience, gender and transgender theorizing, and critical race theory, especially in the proximity of matter with black life asserted by the early-twenty-first-century US racial justice movement, Black Lives Matter. However, before we turn to the contemporary scene, it will be necessary to get as clear as possible on our terms through tracing a genealogy of the concept of matter in Western thought. It is my contention that in twenty-first-century feminist thought “matter” is rarely precisely articulated, and it is often presented as variously interchangeable with other concepts such as “body,” “the real,” “nature,” “flesh,” “object,” and so on. Its originary articulation still has a great deal to tell us about what is at stake in this concept.

As is well known, the “dawn” of Western philosophy is marked by a turn away from mythology toward naturalistic explanations for the origin and substance of the phenomenal world. Greek mythology and tragedy clearly grapple with the corporeal and material facticity of human life: mortality; origins and genealogy (in which mortals and divinities both play a part); and coming to be, with thematics of sex and gender insistently in the foreground. The first philosophers, by contrast, look to naturalistic explanations, turning to what we now call the “elements” as ways to account for cosmic origins and constitution. We may well ask: what becomes of sexual difference in this turn? Thales names the *archē*—origin and principle—as water, and Anaximenes designates air. Heraclitus looks to *logos* as a figure of unity, but his fragments on the physical world emphasize the agonistic transformations among the elements, foremost of which will be fire in its destructive action. Empedocles will, in turn, speak of the “four roots” (not elements, as per frequent mistranslations), and these are given the names of divinities as well as earth, air, fire, and water, while Anaxagoras will propose a cosmos made up of a mixture of seeds and portions of different stuffs, set in motion and ordered by *nous* or mind, a pure and fine stuff that is forever separate from the mixture of the other materials (but not yet a true dualism). The atomists Leucippus and Democritus offer the *atomos*: the uncuttable and miniscule unit of being, characterized only by shape, position, size, and arrangement, that is contrasted with void. While these varied conceptions swirl in the territory of what we now call “matter,” describing the stuff of the physical universe, the concept of matter *as such* has not yet arisen on the scene.

In terms of the fate of sexual difference in these early, post-mythical conceptions of the physical world, the question remains relatively open. Irigaray, once again, has shown herself attuned to the possibilities of symbolizing a forgotten or as-yet-unthought feminine through her reclamations of the “elemental” in works such as *Elemental Passions*, *Marine Lover of Friedrich Nietzsche*, and *The Forgetting of Air in Martin Heidegger*. Irigaray’s call for thinking the complexities of a phenomenology of fluid dynamics that might correspond to a specifically feminine corporeity and feminine sexual pleasure constitutes a feminist response to Nietzsche and Heidegger, philosophers who have themselves sought

to go back beyond and behind the reign of Western metaphysics installed by Plato and Aristotle. For them, this return to the beyond or hither-side of Plato signals the possibility of reclaiming a conception of being as inherently motile—for Nietzsche, this is conveyed by the Dionysian side of life expressed in the tragic age of Greece: corporeity, music, rhythm, upsurge, loss of boundary, dissolution, ecstasy.¹ For Heidegger, it portends a thinking of Being as essentially in movedness, one in which the movement of emergence into the open is inseparable from a recession into the hiddenness of the root (227). For Irigaray, responding to these philosophers by thinking with water and air opens on to different conceptions of ethics, a sexuete ethics that signifies proximal modes of relationship to the other, and specifically the sexual other, that are a far cry from the rigid separations and easily calculable dynamics given by solid mechanics. Water and air give life and breath, place, containment, movement, freedom, and nourishment to subjects, and yet according to Irigaray are forgotten, just as the maternal body with its life- and oxygen-giving function is likewise eclipsed. Even though Nietzsche and Heidegger push through and beyond metaphysics, their ignorance of the fluid, nourishing, dimension of the elemental is of a piece with their inability to countenance sexual difference.²

Read in a certain light, Empedocleanism, with its emphasis on the always-double movement of separation and joining of the four elemental roots in love and strife without any need for the lack or absence that is void, the ever generative/destructive cyclicality of his cosmos, and his insistent metaphors of flow and counterflow, may be the most Irigarayan of the Presocratic philosophies (see J. E. Butler). Ancient atomism, again, might be said to bear a rather ambivalent relationship to the question of sexual difference: on the one hand it deals purely in the mechanics of solids: atom penetrates void. On the other hand, atomism offers the prospect of an endlessly open, productive, proliferative and evolutionary cosmos: the endless combinatory power of atoms is indeed aligned with feminine generativity, as in Lucretius's *De Rerum Natura*, from the invocation of the goddess Venus at the start of the poem, to the later images of a feminized earth giving birth from her wombs to boundless living forms (*De Rerum* 1, 1–49, 5, 795–827).

With Plato, everything changes. While the battle of the earthly, war-loving Giants and the peace- and form-loving Gods in the *Sophist* conveys the ontological hierarchy between earth and forms quite clearly, it is in the *Timaeus* that the nascent, albeit still inarticulate, thought of “matter as such” first arises. This latter dialogue is Plato's narrative of the creation and constitution of the cosmos, the story of how the realm of being, that of the forms, eternal, ideal, and perfect, comes to be instantiated as the world of becoming, that of generation and passing away. A significant innovation here is the figure of the *dēmiourgos* or divine craftsman (there is no creator God heretofore in Greek religion or philosophy), who binds layers of the same and the different together, and creates a cosmos in motion, akin to a self-sufficient living creature. And yet, precisely halfway through the dialogue, we stall, and hear a call for another beginning. What is called for is a “third kind,” in addition to being and becoming, and yet this is something hard to think about or speak about: the call gives rise to a tumbling surfeit of figures, even though we are also told it must always be called by the same name, because it never departs from its own proper potential even as it receives the many things that enter into it (*Timaeus* 50c). It is neither being as such, nor a temporal being of the realm of becoming, and it is only knowable, as Plato says, via a kind of “bastard reasoning” (*Timaeus* 52b). We are clearly no longer in the territory of paternal authorization, of legitimate naming or language. Some names and figures that arise in the face of these provisos are as follows: third kind, errant cause, mother, nurse, the scent-free substrate for a fragrant ointment, the gold out

of which a statue is made, a wax tablet that receives imprints. Receptacle, space, place. *Hupodochē, chōra, topos*.³ The thought at work here is that if being is to be instantiated, there must be something for it to be instantiated *in*. Father (being) and son (becoming), after all, require a woman, a mother and a nurse, in order to effect the passage from one to the other: that which receives.

Importantly, Timaeus makes clear that the receptacle is *in motion*. It receives the static mathematical forms, triangles, the two-dimensional planes out of which the elements, three-dimensional figures, will be constructed: tetrahedron, octahedron, icosahedron, and cube compose (respectively) the building blocks of fire, air, water, and earth, and shakes and winnows them out, in a proto-separation and proto-ordering of the cosmos (*Timaeus* 53a). With Plato, the physical story told by earlier thinkers gives way to a metaphysical ontology, and we are newly party to the passage from being to becoming via this strange, errant, and definitively feminine “third kind.” And yet, although we are on the way, we will still not quite have arrived at “matter.”

Matter *as such* first emerges in the thought of Aristotle, where it is called *hulē*, a word that means wood (archaically, a living forest, but in Aristotle’s time principally dead wood, ready for fashioning by the carpenter). We are used to thinking of it as simply contrasted with form—in the case of the bronze sphere, the bronze is the matter, the sphere is the form. The scene of matter’s emergence, however, is rather more complex. At the start of the *Physics*, Aristotle is concerned with how an entity comes to be. He agrees with his Eleatic predecessors that being cannot emerge from non-being—an existing thing must come from something else that pre-exists it. Aristotle has no time for origin myths, the infinite regress does not bother him and he simply accepts the idea of a temporal perpetuity. But nonetheless, things that never existed before do come into being, whether through the workings of art (*technē*) or simply by nature (*phusis*). Introducing his way of thinking, he asks us to consider a man learning the art of music (*Physics* I.7). In such a process, the man’s prior nonmusicality gives way to his musicality. In a manner of speaking, something *has* come from nothing—musicality has come from nonmusicality, A has resulted from not-A; a positive state has come from its absence or privation. But this is only possible because something has been there all along, namely the man, to ground this process as “something which lies under”—a substrate that undergoes a change. But in this case, we’ve simply seen a preexisting being, the man, undergo a change in relation to a nonessential attribute (the man is still essentially himself before and after learning music).

What about the case of the coming to be of an entity itself, qua entity? Here, the structure is the same but the terms change. A non-sphere becomes a sphere. Not-A becomes A, but what allows this coming to be to take place is the *matter* that underlies the change. This is a three-term structure: there is the privation, the form, and the matter that persists through the change. The form-matter composite is nothing more than the endpoint of a three-term teleological process, hence an *entelecheia* or *energeia*, a being at the end, or being in completion (translated as actuality and activity in the Latin scholiasts) (*Physics* I.9). In a sense, matter might also be understood as a kind of potential or *dunamis*, or in Heideggerian terminology something that is “appropriate for . . .” the given thing it will become (thus clay is appropriate for the pot, bricks are appropriate for the house, menstrual blood is appropriate for the mammal), but it encompasses lack, it is able to take on form, and it undergoes this change passively, acted upon always from elsewhere. But note: in the first case, the man is self-evidently the subject, substance, and substrate of the change. In the second, the “substance” or “the being itself,” is really the end-term or

result, and matter relegated to “mere” substrate-hood that enables its appearance. I will propose, then, that the thought of matter is haunted by this originary paternal fullness—that of the primary substance—the man himself, whose place it took—now transposed to the status of an ontological destiny, rendering matter now as mere potentiality and lack.⁴

Given matter’s status as a kind of enabling placeholder, whose only determinacy derives from the thing it is destined to become, the answer to the question “what is the matter” of a thing can be difficult to state. In the case of the sphere, it is certainly the bronze, but one might further decompose this into an element, in this case water. The four elements can, for Aristotle, also transform into one another, leading us to speculate that some ultimate matter must underlie them, but this is not something he ever explicitly considers. Matter remains ever evasive: it cannot be seen, touched, understood, pointed to, as evidenced especially in Aristotle’s anti-atomistic belief in the indefinite decomposability of things (*Physics* 207a 33–5). In the case of living things, there is a further difficulty—we can give a “static” decompositional sense, the “matter” of a man is his flesh, bone, tissues, and blood, but in another sense, a “genetic” sense, it is the matter he was originally derived from, that is, his mother’s menstrual blood.

Here, then, sexual difference returns. The female provides the matter as menstrual blood; the male supplies the form as sperm. Not only that, but the sperm also supplies the “source of motion.” The matter provided by the female is thoroughly identified with the passive substrate that *undergoes* change initiated by the male seed. But immediately a problem arises: whence the female offspring? The famous answer: she is the result of an error in the reproductive process, a mild form of monstrosity. Despite its designation as dead wood, as passive, as molding material, this matter is, for Aristotle, *also* a source of errancy, exemplified by the female offspring as the error which is also necessary, thus symptomatic.⁵ Sexual difference thus fundamentally anchors Aristotle’s metaphysics of form and matter, ensuring that in the case of sexually differentiated natural generation matter and form are paradigmatically separated, so that they might reunite in the womb. The masculine principle conveyed in the sperm here is set to act much as a craftsman upon the “dead wood” of the matter, initiating motion and imparting form. And Aristotle does in fact use in this context the locution “primary matter,” referring to the menstrual blood (*Gen. Anim.* 729a 33).⁶ Aristotle thus repeats Aeschylus’s famous edict spoken by Apollo at the close of the *Eumenides*, namely, that the mother is no real parent to the child, but they are merely strangers to one another (657–61). The paternal appropriation and dispossession of the mother in tragedy is granted full scientific and philosophical imprimatur. And yet, things can go astray . . . the feminine matter turns out not be quite as “appropriate” as its designation would indicate, harboring obscure motions that may work *against* nature’s aims as well as for them. Or indeed, in the case of the feminine offspring, it represents the symptomatic and paradoxical situation in which nature’s aims are both fulfilled and disrupted at the same time (see Bianchi).

The Latin translation of *hulē* as *materia* thus maintains and linguistically enshrines the fundamental relationship of matter and femininity, grounded in the birth of metaphysics and consolidated in the philosophy of Aristotle. Matter, as we have seen, maintains its feminine associations in the atomism of Lucretius, this time in a positive and light of burgeoning entities and flourishing, though Lucretius also refers to atoms as seeds or *semina*, as well as *primordia*, first things. However, matter begins to take on an increasingly venal aura in the syncretisms with monotheistic Christianity of Neoplatonism, its indeterminacy accruing explicit associations with darkness and evil.

The Aristotelian conception of matter, its indeterminacy now tinged by evil, largely prevails throughout the medieval era both in Europe and in the Arab world, though the alchemy practiced in the Arab world, entering into Europe through Spain, with its empirical investigation into the transmutation of metals and its reliance on the highly malleable notion of *prima materia*, also begins to bear on conceptions of the physical constitution of things. Here, too, gendered conceptions persist: some elements are associated with masculinity and the sun, others with the feminine and the moon.⁷ Paracelsus speaks of certain principles as *semina*, after Lucretius, and the alchemists and early chemists also refer to solvents as *menstrua*, substances capable of dissolving and taking apart other more noble kinds of matter (here the venal femininity can be strongly detected, even as the ultimate *menstruum* was the subject of intense research). In Renaissance and early modern Europe, then, figures like Giordano Bruno, Robert Boyle, Pierre Gassendi, and Walter Charleton begin to revivify atomistic theories, with Bruno turning Aristotle radically on his head, arguing in Epicurean-feminist style that *mater-materia* is essential and fundamental, while form is merely a transient guest that occupies it and departs, utterly ephemeral.

From here, theories of matter begin to proliferate. Descartes, for example, believed not in atoms and void but in a plenum in which infinitely divisible parts of matter flow past one another without any gap, an unlikely advocate, perhaps, of a form of fluid mechanics, given his more famous dualist scheme in which mind is definitively separated from the extended world. But this dualism also has the effect of consolidating the dead mechanicity of matter, which must then receive force or motion from without, for Descartes originally supplied by God (II, §36, 240). Newton's laws establish motion as intrinsic to matter through the concept of inertia, though Newton still asserts God as an "active power" in the universe (*virtus activa*, a scholastic conception derived from *vir*, man, also held by Aquinas to reside in male semen), substantially coterminous with all things (Newton 587; Aquinas 1a, Q118, A1, ad. 4). But Newton indeed makes *change* something different again, requiring a mathematically precise causal account. Force, velocity, and acceleration are rendered separate from the bodies they affect, a body being a collection of matter: matter understood as both mass and volume, and mass understood as resistance to acceleration and an index of gravitational attraction. Matter thus becomes, in Newtonian physics, associated with a kind of resistance to force and is therefore opposed to it, and yet, according to Newton's second law, it is something also mathematically inextricable from and even derivable from force, movement, and time: $f = ma$. Rearranging for mass, Mass equals Force divided by Acceleration. Temporality, here, is buried in acceleration, and matter is thus rendered fully knowable, calculable, predictable, and incapable of representing any kind of alterity or offering anything new.

Amongst the burgeoning atomisms, monads, and idealisms of early modernity, the most thoroughgoing materialism of the period is, perhaps unsurprisingly, to be found in the thought of a woman, Margaret Cavendish. For Cavendish, not only does motion inhere entirely in matter, and not in a separate or separable concept like force, but mind and thinking are also thoroughly material phenomena—the physical world is a plenum of active, vital, perceptive, thinking matter. Cavendish, then, may be genuinely designated the true foremother of the feminist new materialisms.

Scientific advances including atomic theory, the periodic table, and Hertz's theory of electromagnetism, with its insoluble disjunction between waves and particles (see Schürmann 28–30), emerge solidly in the nineteenth century only to be supplanted by subatomic particles, relativity, and quantum theory in the twentieth century. In the face of these increasingly complex conceptions of the interrelations between matter and energy,

the weight of feminized materiality seems to recur, again and again, for example, as a consistent trope throughout Simone de Beauvoir's *The Second Sex*, in whose existentialist parlance women are weighed down with excessive being-in-itself, unable to transcend themselves in the activity of the for-itself that characterizes the freedom of men. It appears this philosophical habit is hard to shake, and perhaps, indeed, it is a consequence of philosophical questioning itself. In his recent *The Thought of Matter*, Richard Lee indicates that in Aristotle's critique of Thales, a definitive shift to a philosophical understanding of the physical takes place, in that Aristotle requires not simply that an assertion about the fundamental nature of the world be made, but a *reason* given for that nature (12). In other words, a question is raised about the *source* of the given things that would count as a philosophically adequate explanation, a "why" of it. For Lee, matter cannot be approached philosophically except through the thought of it, through an account which would seek to answer the question of why something is. But does this very gesture of demanding a source, a principle, or explanation that goes beyond the given phenomena also have the effect of divorcing motion from matter and thus rendering it passive? Aristotle will, in his famous theory of the four causes in *Physics* II, designate the *source of motion*, the motive cause or *archē kinēseōs*, as "a father or an advisor"—a masculine subject-presumed-to-know. Is part of the very gesture of philosophical questioning destined to separate force, explanation, thought, and movement, all at once, from matter, and with it instantiate and consolidate the active-passive binary, the soul-body binary, the form-matter binary, the mind-extension binary, the force-matter binary, the transcendence-immanence binary, so amenable to metaphorizing through sexual difference because of the no-doubt existentially resonant mechanics of heterosexual fucking?

The turn to matter and materialism in recent feminist thought thus both grapples and fails to grapple with these fundamental questions. Judith Butler's *Bodies that Matter* responds to the problematic posed by matter for her performative theory of gender by rendering it as *materialization*, that is, as a product and effect of a kind human activity, thus retaining the problematic of mediation that concerns Lee. This activity is that of performativity, which is not reducible to the notion of a conscious act or action that *acts upon* an already constituted passivity, but rather refers to a constant repetition of acts that necessarily conform and fail to conform to standards of normativity they also serve to constitute. Such activity has a regulatory force that impels certain materializations and not others, renders some kinds of bodies intelligible, legible, legitimate, and renders other bodies abject. Certain kinds of matter (typically, human bodies possessing the attributes straight, white, male, able-bodied, etc.) come to *matter* (and exert legislative power) while others fall outside the regulatory limits of legibility, of recognizability, and consequently fail to matter, are foreclosed, suffering a fate that aligns with that of the traditional philosophical conception of matter as unconstructed, inaccessible, indeterminate, and abyssal. In a sense, then, Butler accounts for the force implicit in the philosophical question Lee identifies, one which effects the very normative-abjecting splitting it sets out to explain.

Butler's thought is often contrasted with that of Grosz (e.g., by Cheah). The former is seen as concerned with the human activities of language, norms, and world-making, while the latter is seen as concerned with "real matter" and its ability to push back against and act upon the social, insofar as it is not merely passive and acted-upon, but also must be understood as unruly, restless, and volatile. And yet Butler's emphasis on *force* and its effects also dovetails with Grosz's turn in *Volatile Bodies* toward a Deleuzian-Spinozist ontology of forces and intensities, which leaves the stases, the resistances, the very weight of matter behind. In one sense, then, this resolution of matter into a field of forces and

intensities, powers, impulses, and compulsions has the salutary effect of expanding the field of activity, animacy, or agency, to cover all of being, everything that is or may come to be, in effect to reinstitute motion at the heart of matter and materialization. This is the fundamental move upon which the entire field of the feminist new materialisms is staked.

What does, or really what *can* matter *do* in and for contemporary feminism, if it can indeed be recast as encompassing what it has traditionally been contrasted with: not form, spirit, or mind (so easily cast as mystifications), so much as motion, force, activity, wave, vibration, intensity, animacy, agency, signification (see, e.g., Alaimo and Hekman; Barad; Bennett; Chen; Clough; Colebrook; Hinton and van der Tuin; Kirby; Pitts-Taylor). The feminist political force of transvaluing matter as lively, even as *agentic*, is on one level utterly clear and urgent: that which has been historically cast as passive, feminine, objectal, now is newly understood as harboring the capacity to *act*, to *act with*, to *act upon*, to feel, to initiate events, including events of liberatory political change. No more shall any entity, human or otherwise, physical or metaphysical, be rendered purely passive. The agency traditionally denied to women is reinstalled not only at the level of the human but also at the level of fundamental metaphysics.

What is more, the *new materialisms* signify the renewed possibility of a productive feminist relationship with the natural and physical sciences—from quantum physics to neurobiology and the biology of sex and sexuality, to agriculture, and environmental science—in the wake of a purported earlier feminist avoidance of biology on the grounds that it is already infused with sexist assumptions and cannot but carry with it the threat of essentialism.⁸ Recasting matter, and really the whole realm of nature, as immanently in motion, actively self-organizing (De Landa) rather than fixed and determinate, renders it a participant in the unfolding of history rather than as a threat of stasis, and renders possible a whole range of liberatory feminist engagements that were previously barred.

On the other hand, we might want to ask to what extent such transvaluation can be sustained, given the drag of matter's philosophical legacy, that is to say, its passive, dead weight; its indeterminacy and abjection. Matter certainly remains a continuing problem in contemporary physics: the recent search for the fundamental mass-granting particle, the Higgs boson, giving rise less to answers than to further speculations about yet more obscure particles, dark matter, antimatter, and so on. If matter is foreclosed, passive, feminized, abject, abyssal, it also retains a feminized power of fascination, the magnetic enticement of a lure, as a feminist optic is uniquely able to disclose. Might it be the case that this turn to animate matter also covers over the *effect* of an inquiry into matter, forgetting once again the foreclosed remainder of the force of materialization described so vividly by Butler. In closing, then, I will raise some brief concerns arising from the “new materialist” moment.

One of the most widely cited contemporary renderings of matter for feminist new materialisms is the “agential realism” of Karen Barad. In *Meeting the Universe Halfway* Barad turns to quantum physics in order to argue that human knowers and the matter they set out to investigate *both* participate, performatively, in the determination of the being of things. According to her Bohrian model, the results of experiments that track a quantum particle in its diffraction cannot be observed without losing sight of the state of the apparatus itself. No choice is possible between tracing the path of a particle or observing interference effects, thus giving rise to the notions of intra-action and entanglement between observer and observed. Quantum entanglement, further, refers to a dynamic among particles themselves, in which one responds to another, its copy, mysteriously, at a distance. Barad develops the notion of a *phenomenon* as mutually constituted

by ontological and epistemological intra-actions—both matter and knowers engage in performative activity—as well as intra-actions among non-human entities. Barad’s terms here—entanglement, diffraction, intra-action—transposed from the quantum level and applied to everyday relations among humans and their worlds, have seen avid uptake in the contemporary critical humanities. Yet the power of the discourse of ultimate science is still evidently at work here: quantum physics is offered as a master discourse with the power to deliver an account of ultimate reality through empirical means (Barad 35). While the uptake of these terms in the literature often draws on their metaphorical or poetic power, a certain authority also accrues from the status of physics as arbiter of ultimate reality. Moreover, Barad intends this quantum discourse to provide a literal underpinning rather than an analogical model for the appearance of both entities and our knowledge about them (24).⁹ Entities, for Barad, then come to be as a result of “agential cuts” in complex intra-active systems, for which we are in part ethically responsible, providing a compelling link between fundamental ontology and the ethico-political.

Nonetheless, her theory runs into problems. Not only does it require ultimate reliance on physics as a master-discourse (a stance critiqued by feminist epistemologists and philosophers of science, including Harding [43–8], and Haraway who calls the fantasy of a totalizing scientific view the “god-trick” [581–2]). It also extends quantum phenomena, such as the entanglement of particles at a distance, to our everyday, macro world, when, clearly, these do not and cannot occur in this domain.¹⁰ What is more, it assumes a standpoint in which the philosopher stands not outside the matter as observed by the scientist, but, in order for the truth claims made to actually hold, outside the whole performative system of the matter, the apparatus, *and* the scientist who constructs it, in order to gain an “objective” view of these onto-epistemological processes and the “phenomena” which thereby emerge (see Calvert-Minor). In order to accept Barad’s position, we must deny our own enmeshment in the scene as a whole. Finally, and importantly, Barad simply fails to account for the effects discussed earlier, articulated most trenchantly by Butler, in which *materialization* as such—an irreducibly (if not solely) human activity, irreducibly accompanied by human responsibility—has been seen to inevitably produce a remainder, something abject, something abyssal, something venal and feminized: matter.¹¹

Nowhere, it seems, is this production of remaindered, abject, feminized, matter more vividly articulated than in US Black Studies’ focus on the black body, especially captive black body in slavery, whose living legacy is brought to consciousness in contemporary history in the movement called Black Lives Matter. The racial dimensions of matter/mattering have been explored in a new materialist idiom by Chen, and in a postcolonial feminist context by Roy and Subramaniam, and yet the history of modern slavery offers an acute and monstrous vision of a fundamental ambiguity that persists in Western history and thinking between people and matter, and of the mattering of bodies.

It is a philosophical commonplace that slavery renders subjects as objects, turns humans into commodities to be exchanged and put to use, and that this racialized splitting in modernity also inseparably produces white subjectivity as supremacy as both cause and effect of this colonial legacy. But a powerful strand in Black Studies—comprising Hortense Spillers, Saidiya Hartman, Jennifer Morgan, Donna Jones, Alexander Weheliye, Fred Moten, Zakiyyah Iman Jackson, Christina Sharpe, Amber Musser, Diana Leong, among many others—moves away from the violence of this abstraction to bring into focus the *materializations* undergone and experienced by black people. Spillers describes the enslaved, captive body rendered as flesh, or as matter: abducted, processed, shipped, raped, whipped, lacerated, broken, and experimented upon—what she calls the “atomizing

of the captive body” (68). As she notes, this set of systematic operations destroyed not only individual bodies but also all material, generational, and nominal bonds between parents and children, annihilating not just kinship on the symbolic level and thus gender itself in any legible constitution, but, also, profoundly for this thinking of matter/*mater*, the possibility of any material/maternal reproductive connection or continuity (see also Morgan; Jackson). Black bodies, even after emancipation (“in the wake” of slavery as Sharpe puts it), continue to be materialized as systematically immiserated, terrorized, differentially housed, employed, medicalized, and educated, surveilled, policed, judged, incarcerated, expendable, and, of course, killable without accountability: these are the conditions of contemporary black life in the United States, as the Black Lives Matter movement has brought so starkly into relief.

Here, the “new materialist” move in which abjected and objectified matter is now newly understood as encompassing force, motion, vitality, vibrancy, and agency would seem to be a salutary development, just as it has been for feminism and political theory. And given the litany of passive verbs appearing in the previous paragraph, it would be hard to argue with the value of a newly animate and agentic conception of matter with which to counter the many social and physical violences inflicted by whites and by white supremacy upon black people. Not only, as Leong argues, does the “new materialism” fail to account for, and is far from able to dismantle, a highly persistent oppressive arrangement (2017), but the association between black bodies (as “matter”), black cultural practices, and a certain vitality also has a long and much theorized history that significantly precedes this “new” movement. Zora Neale Hurston’s poetic and performative engagement in black religious practices such as Obeah, for example, foregrounds the slippage of the boundary between animate and inanimate that harnesses the power of things as a “tactic for gaining power” (Biers 173). The *Négritude* poets, especially Leopold Senghor and Aimé Césaire, in turn, articulated an immanentist ontology of force that may be read in concert with the life philosophies of German Romanticism, Nietzsche, Bergson, and even, *avant la lettre*, Deleuze and Guattari: Donna Jones relates that they “imagined themselves a carriers of positive difference and affirmed the productivity of their own desire,” with Césaire in particular fully cognizant of the *breaks* in duration imposed by the Atlantic slave trade, denied by Bergson’s conception of an unbroken *durée*, as well as a “polymorphous and incessantly creative nature” harking back to Heraclitus (Jones 170, 176).

Another strand in this tradition also emphasizes the extent to which black bodies have also been produced, through slavery and its aftermath, as precisely motile, vital, and vibrant, as pleasurable spectacle, as a seemingly bottomless affective resource for whites—an intrinsic element of white supremacy and capitalism’s antiblack racializing consumerist calculus.¹² Hartman describes how slaves were made to dance, sing, and “step it up lively” on demand for white owners and buyers, in the coffle, at the market, and on the plantation. Weheliye, in turn, develops Spillers’s notion of *pornotroping* in representations of slavery, in which the sexualized and violated black body is enjoyed in the very excess of its embodied reaction to violence, as the “heartrending shrieks” of the whipped and suffering person, especially as rendered in film, are both testament to horrific violence and yet also libidinally invested (104). Arguably, the black body has always already been produced, spectacularly so, for white supremacy as the very “vibrant matter” touted so guilelessly by the new materialisms: productive, reproductive, creative, musical, rhythmic, physically vital, and endlessly resilient.

The binds persisting here for the modern black subject have been perhaps most famously explored by Franz Fanon in *Black Skin, White Masks*, for whom all the resources

of African life and culture, so richly represented by the *Négritude* poets, are inevitably processed through the violent hierarchies of white supremacy. Ambiguities, remainders, and difference do not, however, fail to persist: matter's trace? Fred Moten attunes us to the alchemical and poetic possibilities incipient in black performance, in mourning, in the voice where "the shriek turns speech turns song," (*In the Break* 22) and yet also remains wary of any discourse of possible transcendence, "unless transcendence is understood as immanence's fugitive impurity" (*In the Break* 755).¹³ Zakiyyah Iman Jackson in turn reads the black mater(nal), foreclosed by ontology, as holding the potential to destabilize or rupture the reigning order (in a way that mere "vibrant matter" could not) (5; see also Leong).

If, as Moten claims, blackness is indeed "prior to ontology ... ontology's anti- and ante-foundation, ontology's underground, the irreparable disturbance of ontology's time and space," ("Blackness" 739) might there be space also, here, for a thought of matter? Not one that yearns for paternal and metaphysical substantiality, nor that confidently proclaims atoms and void, nor that trusts that modernity's scientific tools or twenty-first-century philosophical designations can deliver its truth and determine its ontological place. Rather, such a thought never stops attending to how matter is remaindered, discarded by philosophical thinking as thought's absence, a thinking that represents less an ontological *other* (bound to reappear as abyss, or lure, or flesh—sign of European cannibal consumption) than an *otherwise* of thought. The philosophical call that evoked it is the call for an origin (*archē*), something elemental (less something compositional, but, in Empedoclean parlance, roots or *rhizomata*, common to all things). Mattering, the gerund that signifies temporality, is still far from an "idle pun" (J. Butler 7), but discloses a certain fugitivity, a call to consciousness and responsibility that evades—endlessly—all claims to knowledge, sense, definition, and determination.¹⁴

NOTES

- 1 What is less well known is that Nietzsche owes his conception of the Dionysian to J. J. Bachofen, for whom the conception is fundamentally associated with the feminine.
- 2 Arguably, Heidegger's reliance on vegetal metaphors in his rendering of *phusis* aligns with a similar emphasis on vegetality in Irigaray's recent work (see Irigaray and Marder).
- 3 The subsequent tradition, both ancient and modern, will foreground the name of *chōra*: space, field, position, territory, land, countryside, but *chōra* is just one of the many names given by Plato to this third kind.
- 4 Claire Colebrook (2008) will revalue this lack in potentiality as virtuality, and a powerful source for feminist politics; to my mind it is overdetermined by the substantial fullness it is destined toward (Aristotle says matter reaches out to form just as the female reaches out to the male [*Physics* I.9, 192a, 16–18, 23–4]).
- 5 See Bianchi. Something of Plato's designation of the "third kind" as "errant cause" may persist here, though Aristotle does address Plato's receptacle in the *Physics*, stating that Plato believes that matter (*hylē*) and space (*chōra*) are the same, and place (*topos*) and space (*chōra*) are also the same (*Physics* 209b 13–17).
- 6 This locution can, in other contexts, refer to the most immediate or "proximate" matter something is made out of—the bricks for a house, for example—but in this context there are grounds for understanding it in a more fundamental sense. See Bianchi, 37.
- 7 Parallels may also be found in ancient Chinese alchemy (see Cooper 137–9).

- 8 On these renewed engagements, see Franklin, Chen. A genealogical debate has ensued as to whether twentieth-century feminism truly failed to engage with the sciences. The claim is perhaps made most firmly by Alaimo and Hekman (*Introduction*), thrown into question by Ahmed, and defended by Davis.
- 9 It is worth noting that the same ambiguity between analogy and literal, material, basis is found in Lucretius, when he invokes the atomic swerve or *clinamen* as the explanation for human free will.
- 10 See Lee Smolin, *Time Reborn*, 162. For an excellent overview see Seely, esp. on Derrida and matter as radical alterity or *différance*.
- 11 For Barad, matter is constituted by a “congealing of agency ... a stabilizing and destabilizing process of iterative intra-activity” (151), but there is no strong account of the philosophical and political mechanisms by which such congealings themselves are produced, and which produce their hierarchizing effects in turn.
- 12 See Ngai, esp. chapter 2, “Animatedness.”
- 13 James critiques the sonic dimensions of new materialism—its reliance on notions such as vibration and resonance—from a Black Studies perspective as inherently neoliberal and exclusionary.
- 14 Such a formulation both does and does not go beyond Derrida’s consideration of matter as radical alterity and thus as *différance* (64), also discussed by Seely (11).

WORKS CITED

- Ahmed, Sara. “Imaginary Prohibitions: Some Preliminary Remarks on the Founding Gestures of the New Materialism.” *European Journal of Women’s Studies* 15 (2008): 23–39.
- Alaimo, Stacy, and Susan Hekman. “Introduction: Emerging Models of Materiality in Feminist Theory.” *Material Feminisms*. Bloomington: Indiana UP, 2008, pp. 1–20.
- Alaimo, Stacy, and Susan Hekman, eds. *Material Feminisms*. Bloomington: U of Indiana P, 2008.
- Aquinas, Thomas. *Summa Theologiae: Questions on God*. Ed. Brian Davies and Brian Leftow. Cambridge: Cambridge University Press, 2006.
- Bachofen, Johann Jakob. *Myth, Religion, and Mother Right*. Trans. Ralph Manheim. Princeton, NJ: Princeton UP, 1967.
- Barad, Karen. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, NC: Duke UP, 2007.
- Behar, Katherine, ed. *Object-Oriented Feminism*. Minneapolis: U of Minnesota P, 2016.
- Bennett, Jane. *Vibrant Matter: A Political Ecology of Things*. Durham, NC: Duke UP, 2010.
- Bianchi, Emanuela. *The Feminine Symptom: Aleatory Matter in the Aristotelian Cosmos*. New York: Fordham UP, 2014.
- Biers, Katherine. “Practices of Enchantment: The Theatre of Zora Neale Hurston.” *TDR: The Drama Review* 59.4 (2015): 67–82.
- Bruno, Giordano. *Cause, Principle and Unity, and Essays on Magic*. Ed. Richard J. Blackwell and Robert de Lucca. Cambridge: Cambridge University Press, [1584] 1998.
- Butler, James Eric. “Effluvia: Empedocles Studies.” *Epochē* 9.2 (2005): 215–31.
- Butler, Judith. *Bodies That Matter: On the Discursive Limits of “Sex.”* New York: Routledge, 1993.
- Calvert-Minor, Chris. “Epistemological Misgivings of Karen Barad’s ‘Posthumanism.’” *Human Studies* 37.1 (2014): 123–37.
- Cavendish, Margaret. *Observations upon Experimental Philosophy*. Ed. Eileen O’ Neill. Cambridge: Cambridge University Press, 2001 [1668].

- Cheah, Pheng. "Mattering." Review of *Bodies That Matter: On the Discursive Limits of "Sex"* by Judith Butler. *Volatile Bodies: Toward a Corporeal Feminism* by Elizabeth Grosz. *Diacritics* 26.1 (1996): 108–39.
- Chen, Mel Y. *Animacities: Biopolitics, Racial Mattering, and Queer Affect*. Durham, NC: Duke UP, 2012.
- Cixous, Hélène. "Sorties: Out and Out: Attacks/Ways Out/Forays." *The Newly Born Woman*. Ed. Hélène Cixous and Catherine Clément and trans. Betsy Wing, Minneapolis: U of Minnesota P, 1986, 63–132.
- Clough Patricia, Ticineto with Jean Halley, eds. *The Affective Turn: Theorizing the Social*. Durham, NC: Duke UP, 2007.
- Colebrook, Claire. "On Not Becoming Man: The Materialist Politics of Unactualized Potential." *Material Feminisms*. Bloomington: Indiana UP, pp. 52–84.
- Cooper, Jean. *Chinese Alchemy: Taoism, the Power of Gold, and the Quest for Immortality*. San Francisco, CA: Weiser Books, 2016.
- Davis, Noela. "New Materialism and Feminism's Anti-Biologism: A Response to Sara Ahmed." *European Journal of Women's Studies* 16.1 (2009): 67–80.
- de Beauvoir, Simone. *The Second Sex*. Trans. Constance Borde and Sheila Malovany-Chevallier. New York: Vintage Books, 2011.
- De Landa, Manuel. "Nonorganic Life." *Incorporations*. Ed. Jonathan Crary and Sanford Kwinter. New York: Zone Books, 1992. 129–67.
- Derrida, Jacques. *Positions*. Trans. Alan Bass. Chicago, IL: U of Chicago P, 1981.
- Descartes, René. "Principles of Philosophy." *The Philosophical Writings of Descartes*. Trans. John Cottingham, Robert Stoothoff, and Dugald Murdoch. New York: Cambridge University Press, [1649] 1985.
- Fanon, Franz. *Black Skin, White Masks*. Trans. Charles Lam Markmann. New York: Grove P, 1967.
- Federici, Silvia. *Caliban and the Witch: Women, the Body, and Primitive Accumulation*. Autonomedia, 2004.
- Franklin, Sarah. "The Cyborg Embryo: Our Path to Transbiology." *Theory, Culture & Society* 23.7–8 (2006): 167–87.
- Grosz, Elizabeth. *Volatile Bodies: Toward a Corporeal Feminism*. Bloomington: Indiana UP, 1994.
- Haraway, Donna. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14.3 (1988): 575–99.
- Harding, Sandra. *The Science Question in Feminism*. Ithaca: Cornell UP, 1986.
- Hartman, Saidiya V. *Scenes of Subjection: Terror, Self-Making, and Slavery in Nineteenth-Century America*. Oxford: Oxford UP, 1997.
- Heidegger, Martin. "On the Essence and Concept of $\Phi\upsilon\sigma\iota\varsigma$ in Aristotle's Physics B,1." Ed. William McNeill and trans. Thomas Sheehan. *Pathmarks*. Cambridge, MA: Cambridge University Press, 1998, pp. 183–230.
- Hekman, Susan. *The Material of Knowledge: Feminist Disclosures*. Bloomington: Indiana UP, 2010.
- Hinton, Peta, and Iris van der Tuin. "Preface." *Women: A Cultural Review* 25.1 (2014): pp. 1–8.
- Hinton, Peta, and Iris van der Tuin, eds. "Feminist Matters: The Politics of New Materialism." Special issue of *Women: A Cultural Review* 25.1 (2014).
- Hird, Myra J. "Feminist Matters: New Materialist Considerations of Sexual Difference." *Feminist Theory* 5.2 (2004): 223–32.
- Irigaray, Luce. *Elemental Passions*. Trans. Joanne Collie and Judith Still. New York: Routledge, 1992.

- Irigaray, Luce. *The Forgetting of Air in Martin Heidegger*. Trans. Mary Beth Mader. Austin: U of Texas P, 1999.
- Irigaray, Luce. *The Marine Lover of Friedrich Nietzsche*. Trans. Gillian C. Gill. New York: Columbia UP, 1991.
- Irigaray, Luce. *This Sex Which Is Not One*. Trans. Catherine Porter. Ithaca: Cornell UP, 1985.
- Irigaray, Luce. *Speculum of the Other Woman*. Trans. Gillian C. Gill. Ithaca: Cornell UP, 1985.
- Irigaray, Luce, and Michael Marder. *Through Vegetal Being*. New York: Columbia UP, 2016.
- Jackson, Zakiyyah Iman. "Sense of Things." *Catalyst: Feminism, Theory, Technoscience* 2.2 (2016): 1–48, <http://catalystjournal.org/ojs/index.php/catalyst/article/view/74/212>. Accessed December 21, 2017.
- James, Robin. *The Sonic Episteme*. Durham, NC: Duke UP, forthcoming.
- Jones, Donna V. *The Racial Discourses of Life Philosophy: Négritude, Vitalism, and Modernity*. New York: Columbia UP, 2010.
- Kirby, Vicki. *Telling Flesh: The Substance of the Corporeal*. New York: Routledge, 1997.
- Lee, Richard A. Jr., *The Thought of Matter*. Lanham, MD: Rowman & Littlefield, 2017.
- Leong, Diana. "The Mattering of Black Lives: Octavia Butler's Hyperempathy and the Promise of the New Materialisms." *Catalyst: Feminism, Theory, Technoscience* 2.2 (2016): 1–35, <http://catalystjournal.org/ojs/index.php/catalyst/article/view/100/203>. Accessed December 21, 2017.
- Marx, Karl. "The German Ideology, Part 1." *The Marx-Engels Reader*, 2nd edn. Ed. Robert C. Tucker. New York: W. W. Norton, 1978, pp. 146–200.
- Meißner, Hanna. "New Material Feminisms and Historical Materialism: A Diffractive Reading of Two (Ostensibly) Unrelated Perspectives." *Mattering: Feminism, Science, and Materialism*. Ed. Victoria Pitts-Taylor. New York: New York UP, 2016, pp. 43–57.
- Morgan, Jennifer L. *Labouring Women: Reproduction and Gender in New World Slavery*. Philadelphia: U of Pennsylvania P, 2004.
- Moten, Fred. "Blackness and Nothingness (Mysticism in the Flesh)." *South Atlantic Quarterly* 112.4 (2013): 737–80.
- Moten, Fred. *In the Break: The Aesthetics of the Black Radical Tradition*. Minneapolis: U of Minnesota P, 2003.
- Musser, Amber Jamilla, *Sensational Flesh: Race, Power, Masochism*. New York: New York UP, 2014.
- Newton, Isaac. *The Principia: Mathematical Principles of Natural Philosophy*. Trans. I. Bernard Cohen, Anne Whitman, and Julia Budenz. Berkeley: U of California P, [1687] 1999.
- Ngai, Sianne. *Ugly Feelings*. Cambridge, MA: Harvard UP, 2005.
- Pitts-Taylor, Victoria, ed. *Mattering: Feminism, Science, and Materialism*. New York: New York UP, 2016.
- Roy, Deboleena, and Banu Subramaniam. "Matter in the Shadows: Feminist New Materialism and the Practices of Colonialism." *Mattering: Feminism, Science, and Materialism*. Ed. Victoria Pitts-Taylor, New York: New York UP, 2016, pp. 23–42.
- Rubin, Gayle. "The Traffic in Women: Notes on the 'Political Economy' of Sex." *Toward an Anthropology of Women*. Ed. Rayna Reiter. New York: Monthly Review P, 1975, pp. 157–210.
- Schürmann, Reiner. *Broken Hegemonies*. Trans. Reginald Lilly. Bloomington: Indiana UP, 2003.
- Seely, Stephen. "The Spirit of (the) Matter: Deconstruction, Meta/Physics, and the 'New' Feminist Materialism," *philoSOPHIA: a Continental Feminist Society 9th Annual Meeting*, Conference Presentation. Paper on file with the author, May 16, 2015, Atlanta, GA: Emory U.
- Sharpe, Christina. *In the Wake: On Blackness and Being*. Durham, NC: Duke UP, 2016.

- Smolin, Lee. *Time Reborn: From the Crisis in Physics to the Future of the Universe*. Boston: Mariner Books, 2013.
- Weheliye, Alexander. *Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human*. Durham, NC: Duke UP, 2014.
- Zinkernagel, Henrik. "Niels Bohr on the Wave Function and the Classical/Quantum Divide." *Studies in History and Philosophy of Modern Physics* 53 (2016): 9–19.