

Rhizomes: Cultural Studies in Emerging Knowledge

Issue 30 (2016) » <https://doi.org/10.20415/rhiz/o30.e03>

Matter and Meaning

Rebekah Sheldon

Abstract

Across her work, Karen Barad has argued that meaning is a key constituent in mattering. "Matter and Meaning" turns that contention inside out to explore the materiality of meaning-itself. To do so, the essay compares Barad's account of measurement in *Meeting the Universe Halfway* with Gilles Deleuze and Félix Guattari's description of the plane of immanence of concepts in *What is Philosophy?* The essay concludes that the two systems may be productively read through each other to yield a nonrepresentational account of scholarly causality that calls on their shared interest in rhythm.

Introduction: Calling for Thinking

meaning is FORCE. (Brian Massumi, *A User's Guide*, 10)

[1] This essay explores the role of meaning in Karen Barad's agential realism.^[1] In the years since the publication of *Meeting the Universe Halfway*, Barad's challenge to return to matter from the exuberance of social construction has been met by a variety of emergent and established critical orientations. From ecocriticism and affect theory to object-oriented ontology, the extra-discursive world has found pride of place as object of study and as spur to new methodologies. One salutary result has been a broadening of the concerns of humanities scholars to the impingements and the distances of the nonhuman world. The enthusiasm that has greeted this new empiricism, however, has also had the perverse effect of stabilizing the hygienic cordon between meaning and matter whose dismantlement Barad takes as the very task of her book. "Matter and meaning", she writes in the opening sentence of the introduction, "are not separate elements" (Barad, *Meeting* 3). No longer the anti-naturalism of the social constructionist moment, the separation of matter from meaning is now pursued from the other side of the divide. For many of the new realisms, meaning is outmoded anthropocentrism.^[2] In opposition to this tendency, and as a speculative ontology capable of generating new approaches for literary criticism, this essay offers a materialist account of meaning—of meaning as an autonomous force.

[2] Of course, it is far more common to see the meaning/matter pairing expressed through the epistemology/ontology binary. In these terms, we recognize a longstanding argument about the causal structure of representation, the argument Barad enters into so decisively in her "Posthumanist Performativity" with its emphatic first sentence: "Language has been given too much power" (801).

Whether epistemology and its cognates—language, narrative, representation, culture—reflect the given à la naïve realism or generate the weave of assumptions and expectations that make their mark on mute and immutable nature, as they are said to do in social constructionism, or are merely provincial districts in the great tumult of forms-of-life, the question of representational causality has been at the center of the profound theoretical shifts of the past four decades.^[3] And yet a surprising common thread runs through these ostensibly opposed positions: subtending each of them is the assumption that epistemology is uniquely human. Restricted to the anthropos, meaning appears outside the scope of post- or non-human inquiry. While the neurosciences have succeeded in biologizing many aspects of human behavior, meaning retains its sheen of abstraction. Meaning is human, not natural, and thus isn't amenable to the descriptions we might give of natural phenomena. At the very most, these perspectives assert, we might be able to identify the neural basis of discrete processes like memory but these remain firmly bound by the skin as things that happen inside of human actors, even if the 'actor' in question is synaptic.^[4] As this suggests, the restriction of meaning to the human reproduces the bifurcation between nature and culture on new ground. Nature *does*; humans *mean*.

[3] Or, rather, the restriction of meaning to the human reproduces that bifurcation on old ground. In *We Have Never Been Modern*, Bruno Latour describes the interlocked guarantees of what he calls the "modern constitution"; guarantees whose incoherencies work together to draw a veil across the co-constituting labor of nature in the production of the social and the social in the production of nature. Despite the enabling conditions of the laboratory, science purports to uncover nature in its pure state. In this paradigm, the manipulations of lab work merely help to unveil essences that were there from the beginning. Conversely, despite the enormous mobilization of natural resources in the construction of society, the social realm is put forward as the record of the will of men, unaffected by the nature that holds it up. In the teeth of this logic, meaning can only be a second-order epiphenomenon born of conscious self-reflection and restricted to the interior spaces of the mind. It is against this purifying separation, whose rigors generate the classificatory distinctions between *res extensa* and *res cogitans*, nature and culture, the material and the immaterial, that Barad leverages the full weight of contemporary physics.

[4] Barad's insistence on the importance of meaning to mattering, baldly stated in the introduction to *Meeting the Universe Halfway* and reiterated and elaborated in several subsequent articles, has received surprisingly little scholarly attention. This oversight is especially surprising in light of the wide influence her work has had on the new materialisms.^[5] It is the aim of this contribution to rectify what I suspect is far more symptomatic of the continuing legacy of Latour's modern constitution than 'oversight' correctly conveys. I recognize, in other words, that I am swimming a transversal line against the critical tide. By consolidating and synthesizing what I call *materialist meanings*, the first section of my investigation endeavors to explicate the role Barad assigns to meaning in the constitution of materiality. In the second section, I invert this dynamic and ask about *the materiality of meaning itself*. This inversion draws on Barad's recent engagements with Derridean *différance*. At the same time, my intervention draws away from Barad, taking into its ambit the theory of the concept as put forward in Gilles Deleuze and Félix Guattari's *What is Philosophy?* Taken as a whole, this essay should be understood as fundamentally

unfaithful to any of these scholars I have named. It is, instead, a promiscuous borrowing that does not endeavor to explicate an already extant philosophical system but instead sketches out potential new lines of inquiry.

[5] Divorcing meaning from intention is still a scandalizing endeavor.^[6] Throughout, I take courage from the topographies of meaning scholars routinely employ as a part of our shared idiolect if not as a subject of rigorous self-reflection. When we refer to a style of thinking or a set of assumptions as characteristic of a particular moment, when we call on the urgency of thought—when we say, as we very often do, that something *must be thought* and thought now in order for it to be efficacious—we imply that the recipient of our thought is less our direct auditors (who, after all, often agree with us) than the distribution of ideas. That is, we describe meaning as durationally robust, as existing beyond the moment of enunciation and the scene of reception, and we call on the capacity of thought to enter into composition with and iteratively reconfigure the existing force relations we sometimes also call, with varying degrees of naïveté, *our* discipline. This ubiquitous gesture is rarely subject to serious consideration. Doing so, I suggest, reveals the way in which our investments in the political efficacy of our work already imagine dissemination in excess of communication.

Karen Barad's Materialist Meanings

Theories are not mere metaphysical pronouncements on the world from some presumed position of exteriority. Theories are living and breathing reconfigurations of the world. (Barad, "On Touching" 207)

[6] "Take wood", Brian Massumi writes in his *User's Guide to Capitalism and Schizophrenia*. "Take a cat", we might hear Schrödinger saying. "Take a photon", Barad might suggest. But Massumi starts with wood and a woodworker to explain meaning. The wood is not wood-in-general or the idea of wood. It is a specific piece of wood, with properties it shares with its species, marks made by the period and place of its development, and traces of its own unique life. Some of the signs of these multiple and overlapping histories appear to the woodworker as potential: she reads the grain to determine how best to use that wood given the constraints of her trade, and she makes those signs mean by eliciting the wood's response, turning the wood's properties into culturally recognizable expressions through planing, buffing, shaping, and joining. Massumi calls this "envelopment" (*User's Guide* 10): the material traces of the past subsisting in the present as potential capacities for the future. The timeline chronology that brought that wood into that shop and the future potentials brought to bear by the woodworker and her tools condense into a single point between two discontinuous fields of force. The past subsists in the present, to paraphrase Steven Shaviro, and the future insists in it (67). Or, as Barad writes, "[w]e inherit the future, not just the past" ("Quantum Entanglements" 257).^[7] For the Massumi of the *User's Guide*, meaning happens in the meeting of these two contractions of force as the capacities built by the past are territorialized as a set of expressions in the present, caught up in the becoming-table of the wood.

[7] I begin with Massumi's depiction of wood because in his emphasis on the relational event of meaning, he provides a usefully close counterexample against which to stage Barad's account—at the center of

which is the two-slit experiment and its radical undoing of the metaphysics of individualism upon which so much, including Massumi's example, depends. For where Massumi's description of the slab of wood begins by describing the wood's inherent and inherited qualities, the results of the two-slit experiment thwart the solidity we casually assign to macroscopic objects like cats and wood. "Devices don't disclose preexisting values", Barad writes (*Meeting* 264).^[8] The experiential intuition that, at bottom, cats and trees, and by extension everything else, are static and delimited individuals is simply not borne out by experimental findings. And, as she reiterates, "no empirical evidence exists to support the assertion that there are two different domains of physical laws: one described by quantum physics and another by classical mechanics" (279). In Barad's quantum analysis, the woodworker is entangled with her wood. Without an originary separation, the space or interval of touching closes, and with it, the intermediary role of meaning as the residue of encounter. As in Massumi's depiction, meaning for Barad inheres in and is produced by the event. Unlike his, however, the productivity of meaning renders determinacy inside of indeterminacy. In what follows, I endeavor to bring the role of meaning and its materiality into focus by tracing Barad's reconfigurations of physicist Niels Bohr's relational ontology.

[8] It is useful to begin to do so by disjoining epistemology from meaning. In "Quantum Entanglements: Experimental Metaphysics and the Nature of Nature",^[9] Barad limns this important distinction by comparing Werner Heisenberg's uncertainty principle and Bohr's theory of complementarity. Both men were occupied with the problem of measurement, which the popular versioning of Heisenberg's well-known uncertainty principle sums up as the momentum versus location problem—we can know how fast a particle is moving or where it is, but not both, simultaneously. By contrast, for Bohr the experimental findings don't register a problem of human knowledge (of how much we can know) but rather, and most significantly, reveal a fundamental quality of matter itself—its ontic indeterminacy. The question that sets off these divergent interpretations is wave/particle duality—that is, the question raised by their lack of distinction at the quantum level. This is a haunting question because waves and particles should, by their nature, maintain their distinctiveness. Waves are radiations whose ambit is the totality of the space through which they flow; particles are bits or points of matter, isolated and discrete. Waves can build on and amplify each other; particles exist at a given location. Yet, under certain conditions, particles act like waves.^[10]

[9] Those conditions are central to Barad's unpacking of the epistemology/meaning distinction and so they are worth relating at some length. Waves and particles generate different patterns when recorded. Because a particle is located in space, if a stream of them (electrons, say) are sent through two slits and their location is recorded on a screen, a scattershot pattern should result. One particle passing through one slit strikes one mark, like the pellets from a pellet gun striking a wall. A stripy interference pattern, by contrast, implies a wave-like movement across both slits at once. Portions of the wave radiate out from the slits, their amplitudes intensifying or diminishing each other, producing an undulating pattern. All well and good. Except that particles sent through the double slit apparatus fail to produce as theorized. They form an interference pattern as if a wave. Even more strangely, if a detector is added to the apparatus to determine through which of the two slits the particle actually passed, then the pattern changes to scattershot, as if they were again particles. Finally, if the information collected about which slit the

electron passed through is not conserved—even after the passing in question has already happened and left its trace—then the resulting record displays a wave-like interference pattern, as if the act of erasing the record were itself enough to change not only the nature of matter but also the identity of the past event with itself.

[10] Classical mechanics begins from the metaphysical conviction that the building blocks of reality are stable and knowable. Within that matrix, these results are discomfiting. How discomfiting, however, depends on whether we understand them epistemologically, as Heisenberg does, or ontologically as Bohr and Barad do—and it is in this difference that we can begin to see the lineaments of Barad's own account of meaning. For Heisenberg, there must be a fact of the matter resulting from the inherent properties of the entities involved and the laws that govern their interactions. He conjectures therefore that the production of the pattern (interference or scatter) is not a consequence of the behavior of the electrons – which remain what they are no matter what actions are performed on them—but instead evidences the disturbance caused by measurement itself. Since we cannot peer directly into the quantum level, we require the prosthesis of an experimental apparatus, and this apparatus has effects on the reality it is meant merely to observe. Specifically, the detector that tags which path the electron takes through the two-slit apparatus causes the electron to change speeds at the moment that its position is determined. It appears as a scatter pattern because the apparatus has rendered its position visible. The inability to provide a verifiable answer to the wave/particle nature of matter and light, therefore, has to do with the limits of our reach, the corrupting touch that forces reality to recede from our grasp.^[11] In making the experimental apparatus visible and agential, Heisenberg deviates from classical mechanics. By asserting that reality is both stable and unknowable, however, he sets the grounds for the aggrieved postmodern antirealism with which we are all familiar and which takes epistemological uncertainty as its watch and warrant.^[12]

[11] Bohr's account, by contrast, more closely resembles Derridean deconstruction. Bohr begins by speculating that the problem resides less in the limitations of the technical apparatus than in our conceptual equipment. Concepts like waves and particles purport to correspond to facts of the matter that can be discovered or uncovered by scientific instruments (à la Latour) but whose existence is fundamentally independent of human cognizance. In this paradigm, the reality comes first and the concepts arise to match the reality. Bohr involutes this formulation. Where Heisenberg argues that the apparatus obscures the facts of the matter through disturbance, Bohr contends that the experimental apparatus itself produces—rather than merely reflects with more or less distortion—the qualities that become assignable as definitional properties. It is in the tensile system of entangled relations that unambiguous properties emerge:

We must recognize that a measurement can mean nothing else than the unambiguous comparison of some property of the object under investigation with a corresponding property of another system, serving as the measuring instrument. (Bohr cited in Barad, *Meeting* 342)

[12] It is important to underscore here that this is not the same as the as-structure that Graham Harman

retrieves from Martin Heidegger, in which a thing only ever appears in the form the other can perceive^[13] (*Guerrilla Metaphysics, Weird Realism*). For the two entities and their qualia don't just emerge relationally through each other (the apparatus of one delimiting the range of meanings extant in the other), they solicit each other into form. As Barad explains, within any phenomenon a local determination emerges from the demand spoken by measurement.^[14] Thus there is nothing paradoxical in wave/particle dualism for both are emergent properties of different phenomena. There is no originary fact of the matter to be discovered, so the result is not a consequence of our ignorance. Instead, objective results eventuate from the void of indeterminacy and retain their openness to further permutations.^[15]

[13] For Barad, these emergent performances are the result of reality exploring itself. In her agential realist extension of Bohr's theories, Barad contends that if we are to understand these performances as genuinely ontological—a capacity of being—then they must obtain outside of the laboratory as well. It is not just the experimental apparatus that measures and thereby produces local determinations; rather "'part' of the world becomes determinately bounded and propertied in its emergent intelligibility to another 'part' of the world" (*Meeting* 335) in a ceaseless enfolding anew, a churning invagination of spacetime-mattering in which the human is one of many emergent properties. Barad calls this "knowing as a part of being", an unrestricted "ontology of knowing" (*Meeting* 341) through which reality reproduces itself differentially again. Here we see the crucial divergence from Massumi's woodworking scene. For the point is not that meaning is built into the machine. It is not the case that the machine takes the form of the question we have constructed it to answer and thus torques and constrains the shape of what emerges. Meaning, in other words, is not identical to "culture or history impressing themselves on scientific practices and determining the outcome" (*Meeting* 341). Rather, meaning is the incessant call and response of the universe taking its own measure, of touch touching itself. Thus it is not the case that reality is nothing—void or meaningless—but that reality is everything—void of determinacy and for this reason productive of meaning. Indeed, meaning loses its connection to a particular subject's intention and takes on the qualities of a verb. The world is mattering meaning itself into new form.

[14] In her essay "On Touching", Barad uses quantum field theory to illustrate worlding as exploration. Where once classical physics imagined particles against the backdrop of the void, new findings have confirmed the explanatory elegance of foundational indeterminacy in clarifying the structure of the electron. The problem is this: Electrons are described as spheres covered by negative charge; however, negative charges repulse each other. How then does the electron retain its form? Conceiving of the electron as a single point of negative charge doesn't help either because it creates an infinite interaction with the electromagnetic field of which it forms a part. Speaking through the work of physicist Richard Feynman, Barad explains that understanding how this infinity is possible relies on reconceiving the void as "a jubilant exploration of virtuality" ("On Touching" 210). As it turns out, electrons are ceaselessly engaged in splitting and reabsorbing parts of themselves with the void (212), which is no longer vacuous but full of virtual particles winking into and out of existence, percolating through every possible position. In this sense, she writes, "virtuality is a kind of thought experiment the world performs" (210), an ongoing theorizing as living reconfiguration, a mattering through meaning.

[15] For Barad, meaning—experimenting, testing, tasting, touching, measuring, demanding—is a constitutive behavior of being. In her encounter with Derrida's *Specters of Marx*, she suggests that the meaning-mattering connection makes deconstruction a description of mattering, which in refusing to bear fixed properties (or what Derrida would call "the finally proper name" (*Margins* 27)) demonstrates the " (contingent and temporary) becoming-determinate...of *matter and meaning*, without fixity and without closure" ("Quantum Entanglements" 254, emphasis in original). Barad makes the relationship explicit in a footnote: "Deconstruction is not what Man does (it is not a method)", she writes. Rather, "it is what the text does, what matter does, how mattering performs itself" ("Quantum Entanglements" 268 n. 11). Textuality and mattering are therefore not even formally equivalent, for that assumes that they occupy different registers—idealist and materialist. They are instead identical: mattering meaning. "Nature writes", she concludes. It "scribbles, experiments, calculates, thinks, breathes and laughs" ("Quantum Entanglements" 268 n. 11). In other words, as I have been arguing, mattering is a process of coming-to-meaning across the human/nonhuman, organic/inorganic divide.

[16] Scuttled back into the macroscopic realm, Barad's insistence that "theories are not mere metaphysical pronouncements...[but] living and breathing reconfigurings of the world" ("On Touching" 207) has profound implications for the way that we measure the effects of ideas. Citation metrics reflect a model of dissemination that locates a set of ideas in a single publication whose influence may be charted through other such publications.^[16] In the iterative entanglements of mattering meaning, there is no room for the concept of unproductive or sterile work. The corrosive metrics of .PDF downloads and scholarly citations employ the kind of classical mechanistic thinking that assumes linear causality and one-to-one correlation with no sense of an enabling milieu or simultaneous invention. How do ideas emerge? How do they disseminate?

[17] Barad's meaning-as-mattering helps to put pressure on the just-so story that citation metrics tell about paths of transmission. At the same time, what we have come to identify as Baradian meaning-as-mattering curiously evades the quotidian scholarly denotation of meaning as concept, as an act of thought that fuses heterogeneous components into dynamic equilibrium and that comes to us as a named theory (Derridean deconstruction) with a history and a milieu of its own. That this sense of meaning matters to scholarship in the humanities cannot be doubted for the creation of concepts is not only our task but also our route to social justice. How that movement from concept construction to social difference happens, however, is still thought about in highly individualized scenes of creation and transmission—speaker to auditor, text to reader, teacher to students. Below, I turn to Deleuze and Guattari's discussion of concept constructivism in order to follow through on Barad's suggestion via Derrida that meaning-as-concept has its own autonomous propulsion, virtual but no less material for that. Before I get there, however, I'd like to consider briefly the contribution of affect theory, because it helped to turn our attention away from the linguistic turn, a movement also central to Barad's project. Nonetheless, as I elaborate below, this use of affect consolidated meaning with linguistic idealism. It is also the case, however, that affect theory (in some of its versions) provides an account of the dynamics of duration and dissemination that is useful in restoring the materiality to meaning. The interlude below attempts to disaggregate these effects while preserving the intuition of relational dynamism that affect

names.

Affect: An Interlude

Nothing is passive, but everything is interaction, even gravity. (Deleuze and Guattari, *What is Philosophy?* 154)

[18] Affect has been one of the most successful new paradigms in contemporary humanities scholarship. While its resurgence has been a recent affair, however, its roots go back to Baruch Spinoza, the seventeenth-century Dutch philosopher. In the contemporary period, affect has been taken up as a central conceptual category by Deleuze and Guattari, Daniel Sterne, Silvan Tompkins, Eve Sedgwick, Sianne Ngai, Teresa Brennan, Lauren Berlant, Brian Massumi, and Antonio Damasio, to name only the first-wave of new affect theorists. As a result of this variety of actualizing moments, affect has taken on a range of denotations, including emotion, structure of feeling, sensation, aesthetic category, psycho-physiological response, and force, depending on its genealogical commitments. The most substantive difference between these sometimes agonistic schools concerns the relative centrality of subjectivity to its theoretical construction, with Spinozian-Deleuzian-Massumian models of affect generally tarrying the furthest from the question of subjectivity. Recently, however, the divisiveness of the conversation seems to have waned and been replaced by the consolidation of affect around sentiment—an interesting story about the movements of concepts in its own right. In the wake of this consolidation and the collapse of difference it effected, it has become clear that while contemporary versions of Spinozist affect theory foreground sub- and supra-individual flows rather than subject formation, the very labor of making such an adjustment required a new idealization of meaning.

[19] That we do not think of meaning in Barad's sense, in other words, is due in part to the force affect theory used in dislodging the deep attachment to semiology characteristic of humanities scholarship in the late twentieth-century. Massumi's foundational essay, "The Autonomy of Affect", for example, points to the way that as significant relations of repetition, sound, pattern, and composition in narrative media double and interfere with the explicit meanings conveyed representationally through plot. Massumi is careful to emphasize that both characteristic strategies of texts activate autonomic processes like skin conductivity and heart rate. Despite this, over the course of the essay, affective impingement or the body's relation to itself comes to seem more and more tightly correlated with asignificance. The problem comes from the essay's other purpose: disentangling the binary emotion-affect. Indeed, one of Massumi's key interventions is to show the temporal progression of emotion from affect in the hierarchy of human consciousness. "Emotion", he writes, "is qualified intensity, the conventional, consensual point of insertion of intensity into semantically and semiotically formed progressions, into narrativizable action-reaction circuits, into function and meaning" ("Autonomy of Affect" 88). In what we might call Massumi's physio-affective cartography, then, affective intensity is the animating strike that rises through the body until it reaches its telos as fixed, molar, socially recognizable emotions and meanings. It is important to note the unmarked shift by which what applies to emotions comes to apply to meanings as well. Very reductively put, the essay stabilized the analogical equivalence of form and content for affect and emotion and body and society (i.e. affect::form::body, emotion::content::society). Meanings are thus

diminished, attenuated translations of the forceful strike of affect. Arrested in the head, meanings and feelings require transduction back into the order of the affective if they wish to continue to circulate productively. Affect is mobile where meaning is stable, sensory where meaning is social, deterritorializing where meaning is reterritorializing. In this way, the affect-emotion distinction increases the difficulty of seeing how meanings might move beyond the human frame and, more curiously still, makes the human the privileged recipient and activator of affects, meanings, and emotions.

[20] For as necessary as this work is in calling attention to the role of asignificance, it has obscured affect's applicability to the movements of meaning. Stepping back from Massumi's pairing of the affect-emotion binary with form-content and body-society, it becomes clear that the activation of the human sensorium is only one in a universe of possible impingements. Distanced from the question of reception, affect names "a state of the body as induced by another body" or, more precisely, "the passage from one state to another state as increase or decrease of potential-power through the action of other bodies" (Deleuze and Guattari 154). Crucially, in naming the passage between states as a part of the economy of the affective, this description also foregrounds the wellspring of virtuality—rendered here as "potential-power"—tapped by each concrescence. In this broader denotation, then, affect might almost be taken as a synonym for Barad's materialist meanings. After all, insofar as Baradian intra-actions always involve entangled materialization, they also involve a passage from one actualization to another. It is perhaps not so surprising, then, that these same passages find Deleuze and Guattari, in their examination of affect in *What is Philosophy?*, also turning to the example of the electron. Anticipating Barad's description, they write that a state of affairs "cannot be separated from the potential through which it takes effect" (153) and like Barad they identify this potential with the "chaotic virtuality" (153) through which electrons individuate.

[21] Here, though, Deleuze and Guattari depart from Barad. It is already doubtful that Barad would use a term like "chaotic" to describe virtuality.^[17] The elaboration that follows this example furthers this divide by implying a relational dynamism that exceeds the terms of the relationship. Here is the passage from which I have been quoting:

A potential or power is found to be associated with such a state of affairs. ...This is because the state of affairs actualizes a chaotic virtuality by carrying along with it a *space* that has ceased, no doubt, to be virtual but that still shows its origin and serves as absolutely indispensable correlate to the state of affairs. ...It is through this potential that it can confront accidents, adjunctions, ablations, or even projections, as we see in *geometric* figure: either losing or gaining variables, extending singularities up to the *neighborhood* of new ones, or following bifurcations that transform it, or passing through a *phase space* whose number of dimensions increases with supplementary variables or, above all, individuating bodies in the *field* that it forms with the potential. (153-54, emphasis added)

[22] I have emphasized through italicization the language of space that runs through this description. Where Barad's account of the no-longer-vacuous void picks out virtual particles, Deleuze and Guattari's chaotic virtuality is an extended plane or field whose dynamism contorts the process of individuation. There is a topological manifold whose limits, thresholds, and tendencies are performatively enacted with

and through the singularities that actualize as bodies. This is not the same as saying that matter acts as a "substrate" for other forces, as Barad worries (in Dolphijn and van der Tuin 59), but instead that tensile relations produce dissipative permutations, ripples that are not bound as bodies. So where Barad complicates causality through the quantum eraser experiments and their demonstration that the past and the future are both open to be iteratively reworked, Deleuze and Guattari do so by suggesting that the causal consequences of any particular action endures beyond its initial strike and disseminates in directions not wholly anticipatable by its original configuration. This is contingent dynamism, reliant on but exceeding entangled relations between bodies, what we might well call autonomized affect. And for Deleuze and Guattari, the field of pre- and trans-individual dynamism characterizes the iterative reconfigurations of *concepts* equally as much as it does of *bodies*.

[23] Through her critique of the metaphysics of individualism, Barad centralizes meaning as enactment, but she does so at the cost of its relationship to its cognates: idea, concept, knowledge. What kind of enactments do meanings perform? How do concepts disseminate and what happens to them when they do? What accounts for the duration of an idea, its suddenly accelerated spread or loss of prestige? How do changing concepts create changed social conditions? Foregrounding meaning as a property of intra-actions makes these questions harder to answer and so obscures the material becomings proper to epistemology. Yet if it is the case that all things intra-act in their differential powers and are iteratively reconfigured in the intra-action, if all mattering is the event of meaning-mattering, then concepts too have forms of becoming that are proper to them and irreducible to individual knowers. Indeed, Barad already signaled the potential for such an analysis in her physicalization of deconstruction, though she herself does not perform such an analysis. So despite the fact that Barad and Deleuze and Guattari are not using entirely congruent ontologies, I turn in the next section to the Deleuzo-Guattarian notion of the concept as a way of modestly extending (and in so doing inevitably deforming) Barad's radical reworking of mattering-meaning to the materiality of meaning-itself.

The Materiality of Meaning

Thought is its own peculiar reality rather than a reflection of something other than itself. The task, then, is to understand the reality of ideas, which cannot be explained by a science of bodies. (Sharp 63)

[24] Published in translation in 1994, a decade prior to *Meeting the Universe Halfway*, Deleuze and Guattari's late work *What is Philosophy?* poses the question of meaning from the perspective of content but without thereby rendering it idealist, representationalist, or anthropocentric. Their privileged term is *concept* and the creation of concepts is for them the single occupation of philosophy. Against the prevailing sense that philosophy must have something to do with the contemplation and communication of universal truths, Deleuze and Guattari posit the creation of concepts as a kind of craft or constructivism that is responsive first of all to the internal balance of the concept and secondly to the range of extant concepts that function as its milieu. Concepts, then, are not a reflection of a pre-existent reality in need of systemization, nor a series of postulates ordered by transcendent logic, and still less opinions about a state of affairs.^[18] These notions of philosophy make the nonconceptual world the

primary genesis for concepts and turn philosophy into another knowledge-producing field. By contrast, the Deleuzo-Guattarian concept is a singularity: it is not in reference to anything but itself and its milieu. It does not seek to systematize knowledge for more general distribution but to capture thought and give it form. Rather than the pre-existent world, then, Deleuze and Guattari begin with thought in its chaotic state, or what they elsewhere render as the infinite speed into which "thought plunges" (42).^[19] Concept-creation binds and delimits the chaos by shaping the infinite speed of thought into internally consistent, intensively fused blocs, a process they call "chaosmos" (208). Despite this stratifying work, concepts remain tethered to chaos and its infinite speeds. "The concept is a form or force" (144), they write, though elsewhere they specify the work of the concept as a matter of territorialization, capture, and containment of force by form. Concepts are formed force; their force is the force of the infinity from which they take shape and which they never cease surveying, formed into an intensive ordinate, and given speed, shape, and direction.

[25] Before there can be concepts, therefore, there must be an initial binding or weaving of the infinite speeds of chaos, which in giving concepts a milieu also generate a set of original constraints or diagrams. Concepts emerge into and shift the splay of what Deleuze and Guattari call the "Omnitudo" or the "plane of immanence of concepts" (35), which they compare to "a moving desert that concepts come to populate" (41) and to "a sieve stretched over the chaos" (43). The movements of chaos "constitute its variable curvature, its concavities and convexities, its fractal nature" and at the same time give rise to "retroactions, connections, and proliferations" (38). Like the Earth's mantle—Deleuze and Guattari also compare the plane of immanence to the "ground", "Earth", and "foundation" (41)—the plane is roiled by the primordial forces that underlie it and from which it is composed; like the ocean, concepts surge and fall, wave-like, while the plane "rolls them up and unrolls them" (36) in a model that denies the very spatial categories of above and below that it calls forth. (As these versions suggest, Deleuze and Guattari have no problem with analogy since any analogy veers inexorably toward catachresis.) Whether of the Earth, and therefore producing construction metaphors, or as watery regions of "absolute surface or volumes" (20) composed of the same materials as the plane itself, the point is the same. These waves or tectonics form the plane's features, which concepts must navigate. But concepts also deform its topography by forming and contouring it, producing energetic zones and setting in motion new dynamic constraints. At the same time that concepts take form in the dynamics of the plane of immanence, they also enter into affective relations with each other, jostling, tugging, torqueing, dispersing, and parasitically invading each other. For this reason, the history of their movements is neither identical with nor entirely separable from the cultural and intellectual histories of their production, which they endure beyond. In "spasms", "shocks" and "bursts" (82), the plane roils with the agon of concepts' movements and the restlessness of the chaos they bind.

[26] Rather than a reflection of extrinsic truth or falsity, a concept matters in how it relates, for its capacity to enter into relations with other concepts and for the kinds of events those relations will produce—which is fundamentally a matter of form. Some concepts group together, attracted by a shared resonance, catalyzing each other into high-intensity fields; some are negative or antipathetic or repulsive, engendering "regions of low or empty intensity on the plane... continually cut[ting] themselves off,

creat[ing] discordances, and sever[ing] connections" (Deleuze and Guattari 76). Concept construction is therefore strikingly future-oriented as each new entrant shifts the metastable splay of the whole. And yet, because concepts are radically open to iterative reconfiguration by movements in Omnitudo that not only change the affordance for the future but also radically reconstitute the past, it is not possible to wholly calculate the events a particular concept will enact. This is not only a matter of chance, or what Deleuze and Guattari call the "dice throw on the site that qualifies the event and makes it enter into the situation" (152), but much more importantly is the effect of the new splay itself, which opens new problems by generating new relations of contiguity, reveals new gaps and groundlessnesses, calls for new thought to stabilize or dislodge, fill-in or bifurcate the plane. And it is because the plane passes transversally through me, rendering the thinker an image of the thought, that thought can "find itself" again (64). There is a reason we feel the modulations of our discipline: thinking intuits movement.

Conclusion

[27] In summary, then, meaning is material in the sense that it is dynamic, autopoietic, relationally thresholded, and open to affect. Where Barad's salutatory insistence on the coproduction of meaning and mattering tends to background meaning except insofar as it sculpts mattering, Deleuze and Guattari offer an image of meaning's own autonomous vitality without fully explicating in what sense that vitality might work on and be worked out as lived experience. In other words, Deleuze and Guattari's very insistence on the autonomy of thought from the extrinsic world leaves open the problem of social change. If it is the case that "philosophical enunciations...produce movement by thinking" (Deleuze and Guattari 64), it would seem from the preceding description that such movement is limited to the Omnitudo, whose range may mean very little to the project of social justice to which many of us commit our intellectual labors. Separating concept creation from knowledge production makes apparent how deeply invested we are in persuasion as the path to a more just future, with its implication of one-by-one dissemination and a clear line of causation from personal belief to world-making praxis. The concept of the concept in *What is Philosophy?* implies that such clear routes of transmission give too little credence to the permutations that dissemination will enact on a concept as it intra-acts with the enactments already underway in the Omnitudo. Yet Deleuze and Guattari's speculative and philosophical description of this intra-action leaves it open to the charge of idealism. I would like to end with the suggestion, then, that the answer to the riddle of social change may lie in diffracting Deleuzo-Guattarian concept constructivism through Barad's agential realism. I conjecture that it is in the pattern its diffraction casts that the plane of immanence of concepts loses its appearance of isolation and becomes a part of the ongoing becoming of the world.

[28] By way of an initial sketch I want to turn very briefly to look at Barad's little essay on nothingness (*Measure of Nothingness*). Without meaning to speak of idealism, Barad's account of nothing goes some way to discredit the opposition of abstract thought to direct action. Her target is instead the nothingness of nothing, that is, the oppositions between something and nothing, form and formlessness, finite being and infinite series. To make her case, Barad relates some of the premises of quantum field theory that demonstrate how matter arises from the vacuum. "According to quantum field theory", she explains, "the

vacuum can't be determinately nothing because the indeterminacy principle allows for quantum fluctuations of the quantum vacuum" (*Measure of Nothingness* 9, emphasis hers). To exemplify this principle at the macro scale, she asks us to picture the surface of a drum. Because of its surface tension, hitting the surface of the drum generates vibrations across the drumhead. In like fashion, strikes to the quantum field will resonate, ramify, distribute, and dissipate in displacement waves across the field. Because of special relativity, which stipulates that energy is matter, "a field vibrating at a particular frequency or energy is equivalent to the existence of particles of matter with particular mass" (11). Matter's apparent solidity, that is, not only emerges from but *is* fluctuations in the field. Nothingness, then, would be perfect stillness. As it turns out, however, "there simply is no determinate fact of the matter...even in the absence of external disturbances" (11). Stillness is not the absence of movement but the dynamism of its passing-into-being from virtual indeterminacy. Crucially, this dynamism does not require an animating external strike. The void fluctuates; the void is fluctuation; and matter is merely the becoming-determinate of the void. This is quantifiable, Barad tells us. Virtual particles attend every finite point particle and together the "vacuum self-energy" and the "bare electron" engender matter, a process responsible for effects like the Lamb shift (15). Her conclusion is that the vacuum exhibits a "desiring orientation toward being/becoming" (13). "The vacuum is flush with yearning", she writes (13).

The quiet cacophony of different frequencies, pitches, tempos, melodies, noises, pentatonic scales, cries, blasts, sirens, sighs, syncopations, quarter tones, allegros, ragas, bebops, hiphops, whimpers, whines, screams, are threaded through the silence, ready to erupt, but simultaneously crosscut by a disruption, dissipating, dispersing the would-be sound into non/being, an indeterminate symphony of voices. (*Measure of Nothingness* 13)

[29] Field, speed, virtuality, concept; field, vibration, virtuality, matter: suddenly Barad doesn't feel so far from Deleuze and Guattari. Their two approaches begin to seem not just compatible but complementary. Diffracting them, we might say: concepts are formed force arising from the virtual self-energy of the Omnitudo and the strike of new vibrations. We might say: ideas syncopate the plane into determinate shape and scream it into formlessness. We might say: matter sounds; concepts vibrate. We might say: an agentially realist concept constructivism is one that experiments with meaning-mattering and natureculturing through the lure of nonrepresentational composition. We might say, ideas matter. We might say, ideas are matter. We might say, no ideas but in syncopation, frequency, vibration, punctuation, and refrain. We might make some noise.

Works Cited

"Affect: An Exchange." *Critical Inquiry*. Chicago Journals, 2015. Web. 30 May 2015.

Bakker, R. Scott. *Neuropath*. New York: Tor, 2009.

Barad, Karen. "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter." *Signs: Journal of Women and Society* 28.3 (2003): 801-31.

—. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*.

Durham, N.C.: Duke University Press, 2007.

—. "Quantum Entanglements and Hauntological Relations of Inheritance: Dis/continuities, SpaceTime Enfoldings, and Justice-to-Come." *Derrida Today* 3.2 (2010): 240-68.

—. "On Touching: The Inhuman That Therefore I Am." *differences*. 25.5 (2012): 207-223.

—. *What is the Measure of Nothingness? Infinity, Virtuality, Justice*. Ostfindern, G.R.: Hatje Cantz Verlag, 2012.

De Landa, Manuel. *A New Philosophy of Society: Assemblage Theory and Social Complexity*. London: Continuum, 2006.

Deleuze, Gilles, and Félix Guattari. *What is Philosophy?* New York: Columbia University Press, 1994.

Derrida, Jacques. *Margins of Philosophy*. Trans. Alan Bass. Chicago: The Chicago University Press, 1982.

—. *Specters of Marx: The State of Debt, the Work of Mourning and the New International*. New York: Routledge, 1994.

Dolphijn, Rick, and Iris van der Tuin. "Matter Feels, Converses, Suffers, and Desires: An Interview with Karen Barad." *New Materialism: Interviews and Cartographies*. Ann Arbor, M.I.: Open Humanities Press, 2012.

Harman, Graham. *The Quadruple Object*. Winchester, UK: Zero Books, 2011.

Hayles, N. Katherine. *How We Think: Digital Media and Contemporary Technogenesis*. Chicago: University of Chicago Press, 2012.

Latour, Bruno. *We Have Never Been Modern*. Trans. Catherine Porter. Boston: Harvard University Press, 1993.

Massumi, Brian. *A User's Guide to Capitalism and Schizophrenia: Deviations from Deleuze and Guattari*. Minneapolis: University of Minnesota Press, 1992.

—. "The Autonomy of Affect." *Cultural Critique* 31 (Autumn 1995): 83-109.

Morton, Timothy. *Realist Magic: Objects, Ontology, Causality*. Ann Arbor, M.I.: Open Humanities Press, 2013.

Sharp, Hasana. *Spinoza and the Politics of Renaturalization*. Chicago: University of Chicago Press, 2011.

Shaviro, Steven. *Post Cinematic Affect*. Hants, U.K.: Zero Books, 2010.

Notes

1. My gratitude to the editors of this volume as well as to the Center for 21st Century Studies at the University of Wisconsin-Milwaukee for ongoing support. This essay benefited enormously from the generous attentions of Julian Gill-Peterson, Joseph Varga, Monique Morgan, and Peta Hinton as well as from conversation with Jamie Skye Bianco and Richard Grusin. While all mistakes are my own, I could not have asked for better readers.
2. For example, Manuel De Landa calls on us to "put language last" in his *A New Philosophy for Society* (16). However, I recognize that the terms of this debate are not universal; they are happening in specific disciplinary locations and their impact is at best uneven. That they have effects regardless is one of the theoretical contentions of this essay. One notable exception, for instance, is panpsychism.
3. From a different perspective, deconstruction construed as the free play of signification led to a distrust of and exhaustion with meaning structures in general.
4. It would be compelling, though outside of the scope of this essay, to compare the account of meaning offered here to the "apocalypse of meaning" that animates R. Scott Bakker's *Neuropath* (57). Very briefly, Bakker's Dr. Thomas Bible spells out a neurological understanding of selfhood he calls "The Argument", whose central tenet is that "every experience is a product of neural processing"(60). The plot of the novel is driven by his best friend, who abducts people and neurologically rewires them to commit outrageous acts of self-harm. Indeed, the novel itself is explicitly framed as a salvo in The Argument. In his "Author's Note" Bakker writes, "What follows is a fictional story based on actual trends and discoveries.... Though things have not yet become quite so disturbing, at least this much is clear: we are not what we think we are." One other place to look for this emphasis on embodied cognition is N. Katherine Hayles' *How We Think*.
5. This is particularly ironic given how much of Barad's work is inspired by the misrecognition of the contributions of Niels Bohr in the physics community.
6. Of particular interest in this connection is the dialogue between Ruth Leys and William Connolly in *Critical Inquiry* ("Affect: An Exchange").
7. Timothy Morton gives this an object-oriented versioning in his *Realist Magic*, when he argues that "the meaning of an object is in its future, in how it relates to other objects, included those objects that are its parts" (n.p.).
8. Indeed, this idea is so central to the purpose of the book that its evocation even precedes the matter-meaning assertion. In the preface, Barad writes, "This is a book about entanglements. To be entangled is not simply to be intertwined with another, as in the joining of separate entities, but to lack a separate, independent existence" (*Meeting* ix). Elsewhere in her monograph, she explains this position as particularism: "the view that the world is composed of individuals and that each individual has its own roster of nonrelational properties" (333).
9. Chapter 7 of *Meeting the Universe Halfway*.
10. As will become clear, this expression is inexact. I leave it here for the sake of the argument's coherence.
11. Schrödinger's description of entanglement poses this relationship somewhat differently. In his explanation, the problem resides in the lack of an exterior space from which to view the facts of the matter. In entering the experimental arena, the scientist and her sensorial capacities become entangled with and add another set of influences on the experiment's putative object (see Barad, *Meeting* 281-84 for a detailed account).
12. And in this we can hear some of the tessellations breaking up Latour's modern constitution insofar

as Heisenbergian antirealism limits the scope of human knowledge and so enables the suspicion that culture influences the process of scientific experimentation.

13. See pages 58-9 in Harman 2011.
14. Barad goes on to explain that it is at this point that a classical description can be given of the phenomenon, as if the phenomenon were not an entangled phenomenon at all, but two discrete subsystems interacting. Though it is outside of the scope of this essay, this relation of classical to quantum description might go a long way toward explaining the acrimoniously competing ontologies of object-oriented ontology and new materialism. This is suggested to me particularly by Timothy Morton's contention in *Realist Magic* that "any system requires 1+n entities external to it for it to exist and to be measured" (n.p.). For Morton and OOO, despite the promise of weird causalities, classical descriptions better describe reality.
15. As we will see momentarily, the void is not very void-like.
16. These measure then shape prestige practices in university promotion and tenure policies.
17. Indeed, it is not for nothing that the idea of chaos fits oddly next to Barad's quantum mechanical perspective. Deleuze and Guattari frequently evoke chaos theory through terms like phase space, fractal, bifurcation, and singularity. Although quantum mechanics and chaos theory tend to be used to describe different scales of phenomenon (particle behavior on the one hand and macro-level systems on the other), and while quantum mechanics is indeterminate while chaos theory is determinate but nonlinear, there is no formal reason why they should be incompatible. Still, they engender different intuitions. It is worth remarking, for example, that Deleuze and Guattari's use of principles from chaos theory, which emphasize unpredictable future consequences of current actions, throw into relief Barad's focus on concrete arrangements of bodies in space.
18. That concepts are not primarily a matter of reflection or reference, then, does not mean that they lack content, just as their relationship with chaos does not mean that they are the product of the heroic struggle of the solitary genius. Rather, concept creation responds to the distribution of concepts on the plane and the problems made thinkable thereby.
19. This refinement in phrasing crucially locates thought outside the thinker.

Cite this Article

<https://doi.org/10.20415/rhiz/030.e03>
