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Author

Lovell, Sue, Arab, Reza

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Evaluating the Credibility of Storied Matter in the Context of Agential Realism

Sue Lovell and Reza Arab

Abstract

This study is defined within the context of the critical posthuman project of decentring humanist subjectivity. We argue that because agential realism, and the agency and performativity that go with it, do not enable nonhuman matter to be *accountable*, only human matter, in its intra-active becoming with nonhuman matter, can support an ethical project. Secondly, we map our understanding of Barad's agential realism, explaining the importance of agential cuts in *phenomena-in-their-becoming* that are the *world worlding itself* (Barad, *Nature's Queer* 46), and evaluate ethics, agency and performativity in this material-discursive framework. Thirdly, understanding the material-discursive to underpin storied matter, we engage it via some clarification of narrative, and narrative agency. We conclude that much organic or inorganic nature as nonhuman matter is directional and responsive, so alive and generative and, in this sense, capable of *worlding itself*. However, it does not tell its own stories in the process.

Keywords: Performativity, Materiality, Posthumanism, Storied matter, Agential realism, Narrative agency, Barad

1. Introduction

In 2010, Jeremy Irons narrated “The Majestic Plastic Bag,” a nature mockumentary giving voice to the life cycle of a “most clever and illustrious creature, the plastic bag.” The narrative tracked the bag’s journey after its escape. Deftly, making an ally of the wind, it navigates the human and non-human perils of a city park, reaching the “vast cement rivers of California” by nightfall. Escaping the reeds and branches that trap so many of its kind, and “as at home in the water as it is on land or in the air,” it finds the ocean; avoiding more predators, it swims finally to the Great Pacific Garbage Patch off the west coast of America. There it lives “indefinitely, peacefully co-existing with billions of other petroleum species.”

Although a spoof, this mockumentary raises questions relevant to the material ecocriticism that follows Karen Barad’s (*Agential Realism*) formulations of posthuman performativity known as agential realism. We first ask if it is possible to assign a performative agency to matter without making the term *agential realism* a descriptor for life unfolding as it always has done. In other words, we question the accuracy of calling this process performative or agentic. Secondly, we ask if an ethical dimension in material ecocriticism, understood to emerge from what is materialized through agential cuts, is only the domain of human matter.

Taking up material ecocriticism’s focus on “storied matter” (Iovino and Opperman, *Materiality Agency*; Oppermann, *Material Ecocriticism*; Oppermann, *Nature’s Narrative*), which has evolved from the material turn through its development of the material-discursive, we distinguish between narrative agency and narrative agencies to evaluate the idea that, as Vicki Kirby puts it, “Nature is articulate, communicative, and in a very real sense—intentional” (Kirby 82). We argue that because agential realism, and the agency and performativity that go with it, do not enable nonhuman matter to be *accountable*, only human matter, in its intra-active becoming with nonhuman matter, has an ethical project. This means the notion of storied matter needs some adjustment.

We first give a thumbnail sketch of posthumanism since we understand storied matter to be a response to the agency debates that posthumanism spawns. Secondly, we map our understanding of Barad's agential realism, explaining the importance of agential cuts in "phenomena-in-their-becoming" (Barad, *Nature's Queer* 148). We evaluate ethics, agency and performativity in this material-discursive framework. Thirdly, understanding the material-discursive to underpin storied matter, we engage it via some clarification of narrative, narrative agency and narrative agencies. We conclude that much organic or inorganic nature as nonhuman matter is directional and responsive, so it is lively and generative in this sense. However, *even if this is a form of discursivity, performativity or agency*, it is not intentional or accountable or articulate in the sense of being a site of narrativity that serves a material ecocritical ethics. Finally, we suggest how to move forward in that field.

2. Posthumanism as a Context

This study is defined within the context of the critical posthuman project of decentring humanist subjectivity (Herbrechter; Braidotti, *Posthuman All Too Human, The Posthuman, A Theoretical Framework*; Nayer). The distinction between critical posthumanism and transhumanism is that the latter understands the augmented human as an evolutionary stage approaching the post-human. Transhumanism is "centred in science and technology studies and avers that the activities bound into practices also include those of nonhumans such as machines and the objects of scientific investigation" (Schatzki 11). Transhumanism in progress is an intermediary step in making a certain type of (supposedly) superior human; in culmination, it is a strangely anti-human project. The popular press, however, quickly highlights this type of cyborgian, AI-inflected discourse. Suggestions in the media that humanity itself could be *superseded* because "artificial intelligence could spell the end of the human race" (Hawking in Cellan-Jones) or that "AI will destroy humanity" (Musk in Allen and VanderHei) feed into a misunderstanding of the complexity of posthumanism through an

overshadowing of the critical posthumanism of scholars such as Stefan Herbrechter, who warns that we should neither ‘underestimate’ or fall into the trap of *idealizing* technology.

For Herbrechter (29), *critical* posthumanism is a discourse available as an object of study in a critical manner and a discourse in relation to other discourses, both past and present, through which a worldview is constituted via new form/s of discursively constructed subjectivity (Herbrechter 38-39). Similarly, but with a stronger materialist focus, Rosi Braidotti’s critical posthumanism is “anti-humanist” (Braidotti, *The Posthuman* 38) rather than anti-human; it is a discourse that finds a “powerful source of inspiration” in “ecology and environmentalism” (Braidotti, *The Posthuman* 48-49), whilst seeking a theory of “subjectivity as both materialist and relational” (Braidotti, *The Posthuman* 52); critical posthumanism is in dialogue rather than disengaged from the “positive elements of Humanism” (Braidotti, *The Posthuman* 30). Nayer shares both Herbrechter and Braidotti’s focus on the necessity for a posthumanism characterized by a deeply critical engagement rather than a speculative, popularized, futuristic engagement. He, too, suggests a primary focus on a “*radical decentring of the traditional sovereign, coherent and autonomous human*” (Nayer 2, original emphasis).

Marxist philosopher, Louis Althusser, famously described the interpellation of the sovereign subject as imagining that he had agency “all by himself” (Althusser 169). Capable of self-determination and wilful action, such a subject exercises rational self-reflection on a coherent consciousness entirely transparent to itself. For many years, agency in the social sciences therefore referred to the intention of an agent to do a certain thing or take a certain state of mind — see Emirbayer and Mische for a historical review. Whether subscribing to a transhumanist yearning for augmentation that may ultimately threaten the sovereignty of organic human beings or engaging with a critical posthumanism that refuses this kind of human agency, the question of agency is a structuring preoccupation for posthumanist thinkers.

The structure and agency debate emerged in force in the nineteen nineties. Susan Hekman's postmodern feminism argued that, "[t]he subject who has agency, who constitutes a personal subjectivity, is precisely the autonomous, abstract, individualized subject that is the basis of the Cartesian subject itself" (Hekman, *Gender and Knowledge* 81). She argued, however, that because subjectivity is discursively constructed, it is variously accessible depending (among other things) on ability, sexuality, race, class and gender. Agency is not an attribute; people acquire capacity to exercise it according to how they are able to "utilize the discursive tools available to them" (Hekman, *Moral Voices* 110). The power of discursive positioning through access to cultural, social and economic capital as outcomes of acquiring education, political voice or monetary and institutional power reinforce the apparent agency of those privileged subjects who neatly fit the category of rational human. Traditionally this excludes the mentally ill, criminals, women, children, the colonized or the differently embodied or neurologically endowed...and nonhuman nature.

As posthumanism became a theoretical force at the turn of the twenty-first century, Pickering suggested something like Hekman's articulation, but in relation to materiality, when he suggested that, "material and human agency reciprocally constitute one another" (Pickering 172). In seeking a posthumanist social theory relevant to post World War II developments in cyborg technology, he suggested we be alert to "posthumanist intertwinings of the human and the nonhuman— the construction of subjects for objects, as well as vice versa" (Pickering 173). Indeed, Pickering considers non-human agency a real possibility, insisting that:

"Posthumanism directs our attention to encounters between human and nonhuman agency [...] which would centre on great, enduring, and conspicuously visible sites of encounter of human and nonhuman agency, such as the factory (standing for the whole field of organized production) and the

battlefield (standing for organized destruction) (and even the home in its historic transit from production to consumption)” (Pickering 174).

This is a far cry from the humanist notion of agency as the intention of an actor to do a certain thing or adopt a certain state of mind. The worker in the factory and the machine that she operates clearly *engage one another*: the machine is set in motion by the worker, but the worker is then rendered passive by the machine in terms of production through her own labour or in the respect that she is to be worked as a member of the working class¹, but not altered. The soldier wields the sword, but it is the sword that kills the enemy; they are part of an extended network that, like the context of the factory worker, includes the economics and politics that shape the working or killing engagements. Humans are agents but no longer in isolation or because of the singularity of individual will; the non-humans are constituted as more active than humanist agency would conceive. Although from a humanist perspective, it seems perfectly reasonable to (counter-)argue that a factory does not have the agency to do or to will, or to be self-reflective, this inclusion of the non-human as agentic through the material conditions of social and economic life clearly anticipates a conceptualisation of agency that involves mutual constitution. Barad’s new materialism gives this a scientific basis, and a particular strand of material ecocriticism has adopted some of its principles.

The technological focus that supports the transhumanism of Musk and Hawking, and academically Nick Bostrom, coupled with the increasing loss of human-friendly environments through climate change in what has come to be called the Anthropocene, has reoriented theoretical concerns to the way the material world shapes human identities even as humans as a species dramatically and destructively shift material relations on and of the Earth. Nothing is more material than floods, droughts, forest fires, or a prosthetic body part. In terms of a critical posthumanism, though, what Jane Bennett calls “vital materialism” increasingly manifests as a quality of objects previously only considered as *things*. These *things* are *vital* in the sense

that *they have a capacity for intervention*. Storms, electrical failures, even fat, has what Bennett calls “efficacious powers” (Bennett ix, 31-38, 40-43). Things “not only impede or block the will and designs of humans but also act as quasi agents or forces with trajectories, propensities, or tendencies of their own” (Bennett viii).

Some, such as Lemke, concede the importance of the concept of vitality of things, but criticize limited political prospect of Bennet’s idea (see Lemke 46-47). Lemke argues that “to put it bluntly: there is a lack of materiality in this vital materialism. Rather than endorsing a different politics, it envisions a new ‘ethical sensibility’” (47).

We do not share such critique and argue that networked with the organic or other non-organic things, outcomes of these trajectories, propensities, or tendencies are distributed within and across systems populated by Latour’s (237) mutually modifying “actants” rather than agents in the humanist sense. Agency is refashioned as *distributive agency* with ‘emergent properties’ and “thing-power” (Bennett 2) capable of having an effect (Bennett 21-24).

Humans, too, are understood as located in mutually constituting social, cultural *and* ecological networks where power operates through *ad hoc* alignments and relations of human and non-human, discursive *and* material forces. Through the work of theorists such as Karen Barad in *Meeting the Universe Halfway*, Jane Bennett in *Vital Materialism*, Timothy Morton in *Ecology Without Nature*, Serenella Iovino and Serpil Opperman’s *Material Ecocriticism*, and Stacey Alaimo and Susan Hekman’s *Material Feminisms* the relation of humans to discourse and matter has been reconceptualized.

3. Agential Realism, Performativity and Ethics

Barad has famously asserted that “[l]anguage has been granted too much power” (Barad, *Posthumanist Performativity* 801), and “realism has been too quickly dismissed” (Barad, *Meeting the Universe* 43). Suggesting that “blasphemously agential realism denies the suggestion that our access to the world is mediated, whether by consciousness, experience,

language, or any other alleged medium” (Barad, *Meeting the Universe* 409), she sees her non-representationalist (Barad, *Meeting the Universe* 51-56) understanding of how matter behaves in the sub-atomic quantum domain, as providing “a possible ballast against the persistent positivist scientific and postmodernist cultures that too easily confuse theory with play” (Barad, *Meeting the Universe* 43).

This can be read as a response to numerous discussions in philosophy (of science) and specifically the allegedly “antirealism” of Thomas Kuhn (see Ghins). The radical view he put forth in *The Structure of Scientific Revolutions* was that “when paradigms change, the world itself changes with them” (Kuhn 111). He refines this argument later in the same book and writes “though the world does not change with a change of paradigm, the scientist afterward works in a different world” (Kuhn 121). This fluidity of worlds gives rise to “the new world problem” (Hacking) as to how we live in a new world whenever there is a paradigm change. The solution for many is nominalism (e.g. Hacking) so this is an example of what Barad (*Posthumanist Performativity* 801) calls granting too much power to language and linguistic categorisations.

Judith Butler’s refusal of a “doer behind the deed” (Butler, *Gender Trouble* 217) makes Butler’s work the epitome of poststructuralists’ linguistic overdetermination of knowledge production. In their introduction to the edited collection, *New Materialisms*, Coole and Frost (6) similarly call too much focus on the epistemological an allergy to *the real* that is characteristic of radical constructivism. They, too, seek a turning away from “language, discourse, [and] culture” and a return “to the most fundamental questions about the nature of matter” (Coole and Frost 3). Coole later understands matter to be *historically* grounded as “the actual, sensuous, corporeal milieu of everyday survival” (Coole 455). Her “capacious historical materialism” seeks to renew critical theory through a “material reckoning of the 21st century”

(Coole 451) that includes a triple focus on embodiment, social and political structures and ecological issues.

Most famously, perhaps, Barad is critiqued by Sara Ahmed for routinely and foundationally presenting “a caricatured understanding of poststructuralism and constructivism as ‘matterphobic’” (Ahmed 34). Ahmed suggests this unnecessarily diminishes the work of previous feminists in science studies establishing Barad as “embarking on a heroic and lonely struggle against the collective prohibitions of past feminisms” (Ahmed 32). Barad’s new materialism is also treated with suspicion by some feminists because “the new materialist longing for [matter’s] agency does not only gauge the possibilities of the im/possible or express a way out of hopelessness, but may also fuel the risk of depoliticization” (Bargetz 188). A capacity to address the situatedness of power relations in present social structures is so important to Susanne Lettow that she goes so far as to recommend that “a critical materialism should renounce *any* ontological turn to matter itself” (Lettow 106, emphasis added) retaining historical materialism’s Marxist focus on a “praxeological perspective that deconstructs ontology [to build...] on the connection between critical epistemology and social critique” (Lettow 115). Chris Calvert-Minor argues that “Barad’s epistemology must retain a particular form of humanism, a humanism that stakes human subjectivity as the locus of rationality and objectivity” (Calvert-Minor 124). Agency as a capacity for making ethical changes to unjust systems is rendered more fragile, or less understood, when matter decentres humans. Similarly, *non-linguistic* performativity is also difficult to grasp as agential realism premised as it is on reworking the relations of the material and discursive.

This all happens in the context of new materialism where “the general consensus seems to be that new materialism embraces a non-anthropocentric realism grounded in a shift from epistemology to ontology and the recognition of matter’s intrinsic activity” (Gamble et al. 118). This is the context in which agential realism is a key concept in Barad’s work.

3.1. Agential Realism

Gregory Hollins states that quantum physics “is not a metaphorical resource for Barad but, rather, underpins agential realism’s articulation of how the material world is brought into being” (Hollin et al. 921). As a prelude to understanding storied matter and narrative agencies, we now outline some of Barad’s core mechanisms of agential realism, reviewing the epistemological insights Bohr gained from quantum physics that so inspired Barad that she elaborated, and quantum leaped them from the sub-atomic to the macro-ontological domain². This is the basis of her onto-epistemology, or what she calls “practices of knowing in being” (Barad, *Meeting the Universe* 185). We also highlight the constitutive and ubiquitous working of intra-action in place of inter-action to engage with her posthuman performativity.

According to Barad, Bohr’s primary recognition from quantum physics was that “*we are a part of the nature that we seek to understand*” (Barad, *Meeting the Universe* 67, original emphasis). We are not detached observers who make no impact on an independent and representable object reality *out there* external to the mind. Just as the determination that a photon is a particle or a wave depends upon the constitutive intervention of the measuring apparatus of the observing scientist, so human engagements with the concepts and materiality of nature have a constitutive role in what nature becomes; *likewise*, humans are also constituted by nature and materiality. This constitutive entanglement is **intra**-action as a causal element rather than **inter**-action. The latter demands separated objects with clear boundaries between them and engagement across the space that forms their separability. Intra-action occurs *within* ontological spaces; here Barad honours Bohr’s quantum terminology so “primary ontological unit[s]” are understood as “phenomena”³ (Barad, *Meeting the Universe* 139). Again, phenomena are not “independent objects with inherent boundaries and properties” (Barad, *Meeting the Universe* 139). Without measurement or observation (by human or nonhuman apparatuses) no intelligibility emerges from phenomena.

Returning to Bohr, Barad understands Bohr's focus on measurement processes in scientific experiments to be a coming together of the *natural* and the *social* that leads to intelligibility:

Bohr starts with a critical examination of measurement processes. Measurement is a meeting of the “natural” and the “social.” It is a potent moment in the construction of scientific knowledge—it is an instance *where matter and meaning meet* in a very literal sense (Barad, *Meeting the Universe* 67, emphasis added).

Here, perhaps, we have a hint of what will become the intra-acting material-discursive, “a fundamental entanglement out of which knower and known, words and things come to be separated” (Basile 4). Stepping away from Bohr's subatomic realm for a moment may make this easier to grasp. When we use a ruler, we are using a material object that once had timber or petrochemical forebears, but it is shot through with social meanings materialized in various contexts through specific applications and behaviours that simultaneously facilitate and constrain a ruler's functionality or *identity*. In a piano lesson, it is a punitive device; in a classroom, it becomes a tool generating geometric and mathematical precision; it is also a guide for drawing straight lines across a blank page; children may deploy rulers in imaginative play as swords, drumsticks, or backbones for puppets. A building site configures a *ruler* differently from all these functions making it longer, sturdier, and retractable; a dressmaker needs it to be longer, too, but not too long, and flexibility is desirable. Worldly phenomena, then, in infinitely more complex ways, are constituted through intra-action of material and discursive boundary making practices (Barad, *Meeting the Universe* 208) to make meaning:

It is through specific agential intra-actions that the boundaries and properties of the components of phenomena become determinate and that particular *concepts* (that is, particular material articulations of the world) become meaningful. Intra-actions include the larger material arrangement

(i.e., set of material practices) that effects an agential cut between *subject* and *object* (in contrast to the more familiar Cartesian cut which takes this distinction for granted). That is, the agential cut enacts a resolution within the phenomenon of the inherent ontological (*and semantic*) indeterminacy. In other words, *relata* [objects in relation] do not pre-exist relations; rather, *relata-within-phenomena* emerge through specific intra-actions (Barad, *Meeting the Universe* 139-140, emphasis added).

Concepts are not abstract and disembodied mental representations, but particular material articulations. Here we understand *articulations* as a commonplace term meaning linkages rather than expression.⁴ Material practices resolve indeterminacy both in matter and semantics to create meaning – *that is mattering and relevance through relation, through linkages*. None of this is linguistic; it is discursive and material (Barad, *Meeting the Universe* 148).

Material-discursive practices are an elaboration of Bohr’s measuring devices (apparatuses) through which Barad says, “the very distinction between the social and the scientific, nature and culture, is constituted” (Barad, *Meeting the Universe* 141). Apparatuses intra-act with one another and phenomena³. The *disambiguation* of subjects and objects all occurs *within* phenomena. Any exclusions because of a boundary becomes exteriority *within phenomena* because apparatuses and phenomena are intra-acting; they are entangled without space between them (Barad, *Meeting the Universe* 175-177).

3.2. Performativity

The ongoing material-discursive intra-activity outlined above is the basis of Barad’s understanding of matter’s ongoing *posthuman* performativity:

All bodies’ not merely ‘human’ bodies, come to matter through the world’s iterative intra-activity—its performativity. This is true not only of the surface or contours of the body but also of the body in the fullness of its

physicality, including the very ‘atoms’ of its being. Bodies are not objects with inherent boundaries and properties; they are material-discursive phenomena (Barad, *Meeting the Universe* 152-153, original emphasis).

Intra-activity is constitutive, it is performative and productive, and therefore considered agentic. Without will or intent, it is nevertheless shot through with Bennett’s efficacious power – it has impacts - it has a complex, self-generating, material creativity. Barad claims that she therefore goes beyond Foucault’s conceptualisation of power which he limited to the social domain (Barad, *Posthumanist Performativity* 810); she also specifies that performativity is not a linguistic Butlerian “iterative citationality” (Barad, *Meeting the Universe* 184). No longer passively produced, matter is *itself* productive. This is “*onto-epistem-ology*—again the study of practices of knowing in being” (Barad, *Posthumanist Performativity* 829, original emphasis).

This is a radical divergence from performativity and performatives in the philosophy of language that gained a special semantic content with J. L. Austin’s work. He states that the performative “is derived, of course, from ‘perform’, the usual verb with the noun ‘action’; it indicates that the issuing of the utterance is the performance of an action—it is not usually thought of as just saying something” (Austin, *How to* 6-7), *but to do something by merely saying it*. Austin’s linguistic framework breaks down a speech act into the locutionary act, illocutionary act, and perlocutionary force. The locutionary act is simply the saying of words, for example, “He said to me *Shoot her!*” meaning by *shoot* shoot and referring by *her* to *her*. An illocutionary act relates to what we intend to perform by saying something, for example asking or answering a question, giving some information, an assurance, or a warning (Austin, *How to* 98). An example of this would be, he urged (or advised, ordered) me to shoot her. Finally, the perlocutionary focus is on the effect of the speech act: he persuaded me to shoot her (Austin, *How to* 101). Responses to Austin take up these three levels differently. For Barad,

agential realism's performativity concentrates only on the perlocutionary – does *matter* self-generate or continue to *be*? No other reorientation of performativity, or agency, has had such a focus because performativity has always had two elements in common across its variations: a) its dependence on human linguistic capacities, combined with b) enactment involving the agency to initiate and perpetuate action via speech acts or, as an elaboration, embedded discursive practices.

Language is treated as a system of signs (conventions) or a human mental faculty, and often a combination of both. Austin's formulation of performatives takes on both approaches: It is human because performatives are only comprised of speech verbs uttered in the first person, present tense (Austin, *Philosophical Papers*); it is conventional because performatives are understood based on the presupposition of sincere intentions and felicitous conditions.

Derrida believes this topic is not as straightforward as Austin postulates. Derrida's criticism of Austin is built on the significance of *context* in the theory of performativity (Derrida 14). Derrida maintains the possibility of reiteration which "involves precisely the possibility for every performative utterance (and a priori every other utterance) to be 'quoted'" (Derrida 15-16). This problematizes the conception of the human subject, the interlocutor, with known agential intentions. Derrida goes as far as claiming that "this citationality, this duplication or duplicity, this iterability of the mark is neither an accident nor an anomaly, it is that (normal/abnormal) without which a mark could not even have a function called 'normal'" (Derrida 12). This is, in fact, the essence of linguistic structuralism which posits signs are independent of the interlocutor (agents) within a syntagmatic (linear) and paradigmatic (vertical) axes. Thus, a sign (*mark* in Derrida's words) can be cited and (re)iterated infinitely depending on the structural factors of (con)textual nature.

While being critical of Austin's postulation, Derrida's arguments on performativity nevertheless share the general approach to performatives. Derrida sheds light on the priority of the contextual elements of a performative utterance (versus agential aspect) in the general theory of performativity without de-basing the fundamentals of performativity: its human-centredness (which materialists want to sidestep or diminish to give matter more purchase) and enactment (linked to the illocutionary as a form of agency).

Derrida's work on performativity is continued by Butler in her performative theory. Where Derrida adds context to the equation, Butler introduces power relations to the context and defines performative acts as "forms of authoritative speech: most performatives, for instance, are statements that, in the uttering, also perform a certain action *and exercise a binding power*" (Butler, *Bodies That Matter* 171, emphasis added). Her approach moves towards a posthuman perspective when she adds that "this [performative act] is less an 'act', singular and deliberate, than a nexus of power and discourse that repeats or mimes the discursive gestures of power" (Butler, *Bodies That Matter* 171). This is an elaboration, then, of Derrida's citationality and Foucault's fields of power relations (Butler, *Excitable Speech* 2-3) that, by remaining in the privileged field of discourse (as a marker of what may and may not be said in various contexts shot through with power relations) undercuts its posthuman drift towards intra-activity—discursively dictated utterances continue to make the *agential cuts*.

Butler criticizes the Austinian approach, demanding to know why there is no clear consideration of the "perlocutionary element" (Butler, *Performative Agency* 151). This is a shift, like Barad's, to a focus on the importance of effect rather than intention: such a shift serves materialists very well by eliminating performativity's need for *accountable intentionality* as a component of personal or systemic agency. Butler is explicit when she points out that, "[a]fter all, Austin made clear that certain kinds of performative speech acts could only have 'effects' if certain kinds of conditions were first met. [...] The success of a

perlocutionary performative depends on good circumstances, even luck, that is, on an external reality that does not immediately or necessarily yield to the efficacy of sovereign authority” (Butler, *Performative Agency* 151). This is where she relies on the contextual critique of Derrida to highlight the argument that “it is not that an identity ‘does’ discourse or language, but the other way around—language and discourse ‘do’ gender” (Salih 56), because “gender proves to be performative, that is, constituting the identity it is purported to be” (Butler, *Gender Trouble: Feminism* 33).

Butler praises Sedgwick’s take on performativity in the domain of queer theory (Butler, *Bodies That Matter* 20) because they “ask us not only to consider how a certain theory of speech acts applies to queer practices, but how it is that *queering* persists as a *defining moment* of performativity” (Butler, *Bodies That Matter* 224). Butler argues that performative acts are forms of authoritative speech because in the uttering, one performs a certain action and exercises a binding power (Butler, *Bodies That Matter* 225). Performativity for Sedgwick is situated within the “epistemology of the closet” which aims to *denarrativize* previous narratives on same sex relations “by focusing on a performative space of contradiction that they both delineate and, themselves performative, pass over in silence” (Sedgwick 48). She argues performativity is authoritative and intentional and resembles forces of narratives which are passed over and *performed* by subjects. Sedgwick also identifies “performative aspects of texts” as “sites of definitional creation, violence, and rupture in relation to particular readers, particular institutional circumstances” (Sedgwick 3). Her definition still locates performativity and agency in human capacities through its focus on the illocutionary (intention) of writers and their relations with their readers, who effectively engage and enact the text to *queer* and thereby displace discursively dominant established narratives.

Searle, unlike Derrida and Butler, was a linguist following Austin’s tradition. He labels Derrida’s criticism as a failure in understanding of Austin’s performativity (Searle, *Reiterating*

the Differences 198). While Searle goes back to Austin to define what performatives really are, he offers a unique explication of the concept: “some illocutionary acts can be performed by uttering a sentence containing as expression that names the type of speech act, as in, for example, ‘I order you to leave the room.’ These utterances, and only these, are correctly described as performative utterances” (Searle, *Consciousness and Language* 158). Like Sedgwick, then, the level of the speech act that is prioritized is the illocutionary level as the bedrock of the performative. Searle however makes the discussion exclusive to the field of linguistics: he merely focuses on the satisfactory and adequate conditions for performatives with a special attention to the intention of speakers, as it is a characteristic of the philosophical field of pragmatics.

The locutionary, illocutionary and perlocutionary levels of a speech act make performativity complex, and critiques focus on one or the other level to problematize the concept according to various prioritising of intentionality or effects/outcomes. Austin in his later lectures in *How to Do Things with Words* argues that “to perform a locutionary act is in general, we may say, also and *eo ipso* to perform an *illocutionary* act” (Austin, *How to* 98), and then adds that “to perform a locutionary act, and therein an illocutionary act, may also be to perform an act of another kind ... [to] produce certain consequential effects upon the feelings, thoughts, or actions of the audience, or of the speaker, or of other persons (Austin, *How to* 101). In other words, saying anything is in essence performing a speech act, as it consists of a locutionary act, an illocutionary, and a perlocutionary force.

Nevertheless, all critiques centre performativity in language and discourse, and all link it to enactment as a form of human agency. *Only Barad* seeks a posthuman performativity that reorients performativity and a concurrent form of agency towards matter. She writes:

I propose a specifically posthumanist notion of performativity—one that incorporates important material and discursive, social and scientific, human and nonhuman, and natural and cultural factors. A posthumanist account calls into question the givenness of the differential categories of ‘human’ and ‘nonhuman,’ examining the practices through which these differential boundaries are stabilized and destabilized (Barad, *Posthumanist Performativity* 808).

Performativity is linked to the production of the matter of *all* bodies and is elevated from the linguistic domain to the metaphysical, arguably becoming something *different all together*. She in fact calls it a “performative metaphysics” where “agency is not an attribute but the ongoing reconfigurings of the world” (Barad, *Posthumanist Performativity* 818) so that materiality, *nature* itself is neither a passive surface awaiting the mark of culture nor the end product of cultural performances (Barad, *Posthumanist Performativity* 827).

3.3. Ethics

Even though ethics are traditionally associated with human rationality, Barad claims agential realism’s self-sufficient generativity or performativity, has an ethical dimension because “different agential cuts materialize different phenomena – different marks on bodies – our intra-actions do not merely effect what we know [. . .]; rather, intra-actions contribute to the differential mattering of the world” (Barad, *Meeting the Universe* 178). Boundaries inevitably include some things at the expense of cutting others, hence delivering ethical and political dimensions to Barad’s onto-epistemology that are the outcome of myriad, ongoing intra-actions creating possibilities that:

aren’t narrowed in their realization; new possibilities open up as others that might have been possible are now excluded: possibilities are reconfigured

and reconfiguring. There is a vitality to the liveliness of intra-activity, not in the sense of a new form of vitalism, but rather in terms of a new sense of aliveness. The world's effervescence, its exuberant creativeness, can never be contained or suspended. Agency never ends; it can never 'run out.' The notion of intra-actions reformulates the traditional notions of causality and agency in an ongoing reconfiguring of both the real and the possible (Barad, *Meeting the Universe* 177).

Through agential cuts, agential realism claims "an epistemological-ontological-ethical framework that provides an understanding of the role of human *and* nonhuman, material *and* discursive, and natural *and* cultural factors in scientific and other social-material practices" (Barad, *Meeting the Universe* 26, original emphasis). Gregory Hollin and his co-writers acknowledge such cuts as "generative of particular sets of ethical responsibilities" but emphasize "the importance of *re-orienting* ethical questions away from valorizing entanglement and towards the ethical implications of cuts" (Hollin et al. 933-934, emphasis added). In this way, Hollin's and his colleagues, attempt to reintroduce intentionality to prompt accountability through an awareness of the impacts of the illocutionary – *intentions* must still matter if there is to be any ethical dimension – it is not enough that intra-activity is the posthuman performativity of a generative "world worlding itself" (Barad, *Nature's Queer* 46). Indeed, if entanglement collapses the three levels of linguistic and discursive performativity into the materiality of the perlocutionary, breaking with the very terms of every other critique, can it still be called performativity? Why not simply call agential realism life's processes reacting to the environment – as they always have, with sentience (sense awareness) but without intention or sapience (wisdom or knowledge), sometimes successfully and at other times disappearing in the face of non-felicitous configurations? If the material world, as nature, both quantum and macro, is the outcome of "exuberant creativeness, [that] can never be

contained or suspended” (Barad, *Meeting the Universe* 177) there is no room for non-human agency (as opposed to the actions of actants) as an outcome of individual, group or system intentions. We see the Anthropocene as a savage and simple acknowledgement of this capacity for nature to reactively persist at a global scale in largely unstoppable, extreme ways damaging to a humanity of which it knows nothing, and for which it cannot care. This does not mean that nature is not generative. Organic or inorganic nature as nonhuman matter is clearly responsive to the demand to *be*; this makes it alive and generative and capable of *worlding itself* when conditions are appropriate to continuation. However, we question whether this *is* performativity or agency when it is not intentional or accountable or articulate in the sense that it can support a material ecocritical ethics⁵.

4. Material Ecocriticism’s Storied Matter

In 2012, Iovino and Oppermann emphasized that new materialisms “brought innovative ways of considering matter and material relations that, coupled with reflections on agency, text, and narrativity, are going to impact ecocriticism in an unprecedented way” (Iovino and Oppermann, *Materiality Agency* 75). To answer the question, “[o]n what ground is it possible to connect these two levels—the material and the discursive—in a non-dualistic system of thought?” (Iovino and Oppermann, *Materiality Agency* 76) they mapped out the features of the newly emerging field of material ecocriticism. There was a twofold recognition of the way in which ecocriticism understood the agency of matter.

The first was to examine “the way matter’s (or nature’s) nonhuman agentic capacities are described and represented in narrative texts” (Iovino and Oppermann, *Materiality Agency* 79-80). To consider non-human agency, Iovino and Oppermann use Thomas Hardy’s fictional Egdon Heath in *The Return of the Native* rather than socially produced environmental discourses. The literary convention of personification is reoriented through Iovino and Oppermann’s ecocritical concerns:

Hardy's literary description of this agentic force is significant in that Egdon Heath 'acts' as a sentient being equal to human intentional acts and intelligence. It 'listens' for example, and 'awaits something' in anticipation of a crisis; it is self-conscious of being a spot that 'returns on the memory of' human beings who act in congruity with it (Iovino and Oppermann, *Materiality Agency* 80).

Although the focus is on the representation of the non-human, Iovino and Oppermann's *modus operandi* remains dependent on their reading of the writer's act: Hardy's literary description. His representation of Egdon Heath remains an object produced by a human (now recognized as embedded in a network of forces), then subjected to human analysis to elucidate the cultural work accomplished. The ecocritical reading (unlike Hardy's writing) is contingent upon *suspending* personification to understand the heath as *a sentient being* separately from personification's standard mechanism of applying a descriptive comparison. Identifying non-human sentience as a capacity to sense and react really depends upon observing the reaction and understanding (if possible) what triggered it whilst including the observer intra-actively in the evaluation. Some non-humans *are* recognisably sentient: we now understand, for example, that "fungal connections transmit signals from one tree to the next" (Wohlleben 10) enabling the ecosystem to react to material conditions such as drought or insect infestations. Egdon Heath, however, is personified by Hardy – then attributed a monolithic identity by an ecocritical reading that subsumes its multiplicity and diversity into a singular Egdon Heath identity so the sentience of Egdon Heath is in a qualitatively different category; it is a "sentient being *equal to* human intentional acts and intelligence" (emphasis added). This moves beyond identifying *representations* of thing-power or recognising Egdon Heath as a force operating within a network of forces. It attributes humanist agency, replete with intentionality, to the nonhuman. As an early example of eco-critical interpretation at work, then, it overstates the

quality of sentience as though only *intentionality comparable to that of humans* is effective. This undercuts the very premises it is attempting to support.

The strength of this first way for ecocriticism to recognize the agency of matter is that it spotlights a method central to ecocriticism as a then emergent field: *things* hitherto undervalued become the focus of critical attention. Despite its over-reach, it is a form of training for ecocritical thinkers that sensitizes them to possibilities. Such acts of reading (as a verb) produce fresh *readings* (the noun) as new networked objects for further engagement with a different and valuable emphasis.

Iovino and Oppermann's second way to understand the agency of matter, in 2012, was to recognize that "matter itself becomes a text where dynamics of 'diffuse' agency, and non-linear causality are inscribed and produced" (Iovino and Oppermann, *Materiality Agency* 80). This approach *is* different. Oppermann's sole authored chapter of *Material Ecocriticism* develops this interpretation of the agency of matter. There she appropriately calls the capacity for matter to persist, mutate and/or combine with other forms of matter "radical revisions" (Oppermann, *From Ecological Postmodernism* 21) of the way we understand materiality *as* relational or mutually constituted through dynamic entanglements. This interpretation has become the grounds on which ecocriticism now takes storied matter as a central tenet and method: to carry a story at all, matter must become a text *inscribed and produced*. As indigenous peoples have been doing for centuries, we begin to see landscapes as texts establishing meaningful (networked) relationships with them. The *landscapes* may also be social, political, cultural, religious and ideological – simultaneously. So, Barad's generativity must be able to be applied to these forms of materiality, too – and for ecocritics, particularly in relation to ways that centre the non-human or explain how to live in a sustainable world.

We have no problem with material eco-criticism's desire for the world to be textualized materiality. Even language is beautifully recognized as material when poet and philosopher, Denise Riley says: "This phrase 'the materiality of language,' would customarily imply that language *owns its histories of force*. It has political effects as it carries its own affect" (Riley 27, emphasis added). The complexity of language, and its development into or away from discourses, can also be described and understood as the entanglement of the material-semiotic, to reference Haraway (11), or the material-discursive to reference Barad (*Meeting the Universe* 34).

We would argue, however, that in the domain of eco-criticism and, for the most part Barad's domain of (meta)physics, inscription and production remains a sentient *reaction* to forces at play within phenomena – not directed through Nature's sapience, its conscious intent or application of knowledge. Textuality is produced by Latourian actants within systems. Jane Bennett describes such an actant as "a source of action that can be either human or nonhuman; it is that which has the efficacy, can do things, has sufficient coherence to make a difference, produce effects, alter the course of events" (Bennett viii). It is, in other words, Latour's attempt "to pry some space between the idea of action and the idea of human intentionality" (Bennett 103).

So, for ecocritics, the textuality of *matter* has priority; the necessity to acknowledge the nonhuman does the work of diffusing agency by uncoupling it from its status as a human attribute and freeing it into circulation amongst human and nonhuman networks. Even poststructuralist decoupling of agency from human intentionality and its relocation in discourse is reconfigured because in ecocritical thinking agency is not confined to being a variously available or unavailable *tool* within human generated networks of political, social and cultural power. Agency is therefore made more complex as it is distributed across systems with multiple actants *whilst retaining* the capacity to be something individuals *have* or *lack* according to their

location in multiple networks. When agency is uncoupled from intention, human structures and teleological impulses that serve ideological agendas, a space is constituted for the recognition that human and nonhuman, organic and inorganic ecologies and networks structure complex outcomes *for all matter* whether it be organic, inorganic and institutional practices. Consequently, the increasing impact of the material turn means that in ecocriticism non-human as well as non-organic things, have become textualized.

We have no problem with these ideas. It is accurate, we think, to suggest that matter and agency are quickened through this conceptualisation of *matter as text* even while recognising the textuality of matter *remains* a human conceptualisation. Opperman acknowledges this via Vicki Kirby's question: "Does Nature require a human scribe to represent itself?" (Oppermann, *From Ecological Postmodernism* 26). Kirby's answer is no, and she goes as far as to say, and Oppermann (*From Ecological Postmodernism* 28) to quote, that "[n]ature is articulate, communicative, and in a very real sense – intentional".

Kirby is criticising the modern representational theory of mind in what one might call a Hegelian fashion. Hegel was also critical of representation (*Vorstellung*) which was used as a keyword in phenomenology by Kant "covering mental acts and is usually translated as *representation*" (DeVries 119). For Kant, *Vorstellungen* (plural) are whatever is "*placed before the mind*" so "there is no gap between having a *Vorstellung* and understanding it" (Rosen 251). For Hegel, however, representation (*Vorstellung*) is picture-thought (a form of understanding) as he explains in the *Phenomenology of Spirit*: "Beyond the alienated world of culture seems to stand the unreal world of pure insight or thought. Consciousness does not, however, recognize that it is its own thought that occupies the transcendental medium, but rather fills it with *Vorstellungen*, picture-thoughts. The world beyond is a religious picture-world, unreal but conceived as real" (Hegel § 527, p. 561). *Vorstellung*, hence, is a medium between sense and thought, and correspondingly between a mere subjectivity and a true objectivity (Clark 26).

Thus, while *Vorstellung* is a dialectical course stretching from intuition to thought, *Darstellung* is the presentation of the system itself (Sallis 66). *Darstellung* (presentation) presents a speculative realism. There is also *Gegenwärtigung* (imagination) in his philosophy that is the agency of imagination and the faculty that determines how we philosophize. Elaborating on how *movement* is explained, for instance, in science, Hegel writes: “Understanding ... sticks to the inert unity of its object, and the movement falls only within the Understanding itself~ not within the object” (Hegel §155, p. 95).

Hegel is clear about the distinction between the perceiver and the matter. “The difference [of matters] exists only in thought. That is to say, what has been posited in the foregoing is in the first instance only the Notion of Force, not its reality” (Hegel §136, p. 82). Force, for Hegel, is a movement that the posited *matters* take as independent and then directly pass over into unity, and their unity directly unfolds its diversity, and this once again reduces itself to unity (Hegel § 136, p. 81). Therefore, in Hegelian philosophy, it is clear that “this movement is nothing else than the movement of perceiving, in which the two sides, the percipient and what is perceived, are indistinguishably one in the apprehension of the True, and yet each side is at the same time equally reflected into itself, or has a being of its own, Here, these two sides are moments of Force” (Hegel § 136, p. 82).

This we do dispute: nature is not RE-presenting – it is not impression managing, nor is it communicating anything other than its own generativity: it is *presenting* its own instancy. It is manifesting. This is so even when what is made manifest is also recognized as mediated by intentional human intervention or inevitable physical consequences and unintended or unanticipated outcomes of human actions – such as the conditions of the Anthropocene. A material text such as the pages of a book, ink on the pages, spaces in the margins, does not *narrate* a story that *it intends* to share. Communication is the heart of narratives or stories – not simply expression of instancy.

Erin James, a narrative theorist sympathetic to ecocriticism, makes this point with clarity using various definitions of narrative but pointing out that they all “contain events sequenced in a timeline [...and] emphasize the essential role of the rhetorical situation of the narrative in the representation of those events, or the fundamentally important presence of a narrator and a narratee” (James 2). James Phelan, a leading American narrative theorist, expresses the human dimension of narrative by defining it as, “the act of somebody telling somebody else on a particular occasion for some purpose that something happened” (Phelan 8, 218) This means that when ecocriticism asserts that an outmoded notion of intentional agency for matter, making everything *storied matter*, it becomes difficult to accept this assertion *as a happening beyond human interpretation*. That interpretation emerges from the entanglements of readers with text/s. To deny matter intentionality is not to deny that it can be *read*; it is to insist that it is not sapient. Attaching agency to narrative, or calling matter narrative agencies, suggesting that “the world displays its eloquence shimmering with meanings from the interplay of material and discursive dynamics” (Opperman, *Nature’s Narrative* 291) repeats the mechanism we saw with Egdon Heath. There personification is disavowed to render the heath sentient. Here, *narrative agencies* and *storied matter* disavow the difference between text and narrative to argue for the narrative agency of matter. Denying this is not to renew the separability of the material text and the discursivity of narrative because both are, indeed, deeply imbricated with one another, with the reader and within and across cultural networks of production and reception, practices of interpretation and meaning-making. Narratives and non-human object-texts remain as entangled actants (no intentional agency) in such a material-discursive without the need for matter to summon any *eloquence shimmering with meanings*. At best, as James points out in highlighting the relationship of matter and narrative, “ice cores, tree rings, and geologic strata” *do* bear that foundational pre-requisite of narrative: a temporal dimension. Nevertheless they:

cannot perform or tell narratives themselves; their texts do not feature narrators and narratees, nor do they feature other hallmarks of narrative, such as focalization, representation of the consciousness of characters, metalepsis, metanarration, heteroglossia [...] they contain a foundational property of narrative while lacking others. They provide human storytellers with a basic temporal blueprint for a narrative, and thus draw attention to the intra-activity that material ecocriticism foregrounds (James 3).

5. Conclusion

It is precisely intra-activity that ecocriticism should highlight and, as James says *foreground*. It is sufficient that ecocriticism attends closely to the sentience of the non-human rather than assign it a human-like sapience. It is important, too, to limit human hubris and use intra-activity to highlight and foreground our own animal-like sentience. That would bring home to us the importance of environment, of sustainable practices, of humble discourses about the power of the world in which live - to remind ourselves that we depend upon its capacity for healthy self-replication. Barad has offered a mechanism to engage nature, but materiality is more than her understanding of nature's processes. The Marxist understanding of social processes and formations as materiality needs to be incorporated into and developed in relation to environment as a refusal of nature as an expendable, exploitable resource. The greatest *profit* is to be found in clean air, pure water and relations of production that do not alienate humans from the world that supports their well-being. And yes, stories really do matter, those we imagine and assign to the non-human, those we come to recognize as the world worlding itself, and those that circulate in our culture as material-discursive ways to mend the world humanity is pushing towards the tipping points. Unless changing those political and ideological *stories*

are identified, understood and changed, the latest extreme weather event will remain the most material headline.

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¹ There are numerous accounts of this in the Marxist literature. Among the most relevant ones is Lukács' concept of reification, for instance, that postulates commodity stamps its imprint upon the whole consciousness of man.

² See Hollin et al. for a critique based on this scalar shift.

³ Indeed (and confusingly) apparatuses can be phenomena themselves. (Barad, *Meeting the Universe* 146, 208) See p. 146 in particular for six characteristics of apparatuses theorized beyond Bohr's conception.

⁴ By commonplace we mean the layperson's non-philosophical understanding of linkages (e.g. an articulated truck, the linking of railway carriages) and expression (the putting of ideas into communicable words, images or structures) as opposed to Robert Brandom's rationalist expressivism where it is through logical inferences *as* 'linkages' that articulation as 'expression' can occur.

⁵ We are aware that this questioning as expressed excludes the materiality of social systems in a Marxist sense. Whether the same can be said for institutional systems in terms of their agency and performativity is less relevant to our focus on the ecocritical, though arguably an interesting way forward for ecocriticism in terms of changing the stories that are discursively prevalent in relation to the Anthropocene's challenges.