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Doing Science Otherwise: Material Performativity and Posthuman Spacetimematterings in Jeff VanderMeer's Southern Reach Series

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Abstract: Drawing on the work by Rosi Braidotti, Karen Barad and Donna Haraway, this article reads VanderMeer's Southern Reach series from a posthumanist, neomaterialist perspective as a form of postdisciplinary, posthuman inquiry. As I will argue, the series questions mainstream scientific knowledge, the positivism of science and the belief on the unbridgeable separation of the human from every*thing* else. This interrogation is tightly linked in the series to the dismantling of the subject/object, meaning/matter and human/nonhuman dualisms, which is achieved through an emphasis on the performativity and creativity of matter. The series also problematizes time as a linear phenomenon, putting forward a view of time as contingent, emergent and in constant flux. This reading of the series offers a vision of postdisciplinary scholarship in which literary texts have the capacity to interpret, critique and enact scientific paradigms, ultimately fostering an ethics of responsibility for our posthuman times.[1]

Key terms: Jeff VanderMeer, Southern Reach series, critical posthumanism, new materialism, postdisciplinarity

Introduction

Science and literature are narrative forms that human beings produce to explain to ourselves the world around us. They are powerful tools that we have devised in an

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effort to make sense of the complexities of existence. However, they function in very different ways and have been assigned very different roles and value within western society. In the collective imaginary, science aims to uncover the universal principles that govern natural phenomena by using observation, experimentation and verification of empirical evidence. It prioritizes objectivity, repeatability and explanatory clarity at the level of methodology. Literature, by contrast, performs an exploration of human experience of these phenomena, often in emotional rather than rational terms. It operates through affect, imagination and subjective insight with the aim to illuminate the different textures of human existence. Where science abstracts and generalizes, literature immerses and particularizes, delving into the existential and moral significance of phenomena, often with a focus on the inner perspective of individuals. Because of this, literature is seen by many as inferior to science, as less instrumental to society – a merely aesthetic or recreational practice. However, where much science is concerned with describing the rational how of things, literature may be argued to actually be a tool to generate alternative becomings. In this view, literature is not just a cultural product and aesthetic form, but also a site of epistemological intervention whereby literary texts can translate, challenge and perform paradigms of thought.

This view aligns literature with a form of postdisciplinary scholarship within what Rosi Braidotti terms the nomadic or critical posthumanities. In her article "A Theoretical Framework for the Critical Posthumanities" (Braidotti 2019a), she defines them as "new fields of transdisciplinary knowledge" (Braidotti 2019a: 31) that emerge "in the posthuman era, after the decline of the primacy of universalist 'Man' and of supremacist *Anthropos*" (Braidotti 2019a: 43; original emphasis), challenging the Euro- and anthropocentric legacy of humanism and the Enlightenment. In her theorization, the critical posthumanities are part of what she calls "minor science"[2] – creative, experimental and affective forms of knowledge production that are characterized by "nomadic multidisciplinarity" and that "re-territorialize and re-compose the dominant knowledge production systems precisely through creating multiple missing links, opening generative cracks and inhabiting liminal spaces" (Braidotti 2019a: 49). As she argues, for the critical posthumanities, "the driving force for knowledge production is therefore not the quest for disciplinary purity, or the inspirational force of radical dissent, but rather the modes of relation these discourses are able and willing to open up to" (Braidotti 2019a: 44). Literature may well be argued to be a particularly productive partner in these nomadic assemblages for our "posthuman times" (Braidotti 2019b: 1), given its eminently partial, hybrid, multiple and situated nature.

2 In contrast to "royal science", institutionalized, dominant, capital-aligned (Braidotti 2019a: 47).

This vision of postdisciplinary scholarship where literature may play an epistemological, subversive and transformational role as a medium of posthuman thought owes much to Donna Haraway's earlier dismantling of the binaries objectivity/subjectivity and science/art. In her essay "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective" (1988/1991), Haraway laid the grounds for a debunking of the dominant scientific paradigm's claims to objectivity (in contrast, for example, to the subjective nature of literature), arguing that all knowledge is situated; that is, produced from a specific body, location, standpoint and historical moment. She rejects the traditional supposed "view from above" in favor of "the joining of partial views and halting voices into a collective subject position that promises a vision of the means of ongoing finite embodiment, of living within limits and contradictions, i.e., of views from somewhere" (Haraway 1988/1991: 196). Interestingly, in her more recent work, she explicitly embraces storytelling as theory, developing SF – "science fiction, speculative fabulation, string figures, speculative feminism, science fact" (Haraway 2016: 2) – as situated forms of intervention, as tools for "worlding". Furthermore, for Haraway, all knowledge is 'material-semiotic' practice, drawing attention to the fact that knowledge-making involves the symbolic and the linguistic but is not abstract or universal; it always emerges from specific material interactions between bodies.

A similar rejection of the separation of subject of observation and observed object is made by Karen Barad in her seminal book *Meeting the Universe Halfway* (2007), where she claims that "knowing does not come from standing at a distance and representing but rather from *a direct material engagement with the world*" (2007: 49; original emphasis). Her agential realist framework involves the theorization of "physical-conceptual (material-discursive) intra-actions" (Barad 2007: 197), which "signify the mutual constitution *of objects and agencies of observation within phenomena*" (Barad 2007: 197; original emphasis). The emphasis is, thus, also on relationality, on mutuality, as objects and subjects do not preexist their relations, but emerge through specific intra-actions. For Barad, knowledge is a performative practice: it is not a representation of the world, but a form of participation in the world's constant process of becoming, as "different material-discursive practices produce different material configurings of the world" (2007: 184). Also worth considering is Barad's repurposing of the quantum phenomenon of diffraction (earlier introduced by Haraway), which she uses in a metaphorical way as a method for knowing in a posthumanist and relational way, based on a material practice of interference, difference and entanglement: "A diffractive methodology provides a way of attending to entanglements in reading important insights and approaches through one another" (2007: 30). In literature, diffraction allows us to 'read' texts not for what they represent, but for the patterns of entanglement that they generate (with the reader, with the world, with other discourses). Literature becomes a site of

material-semiotic world-making, not a mirror but an apparatus of interference and transformation.

Thus, the work of these theorists shifts knowledge from abstract universalism and a radical separation between the knower and the known to material, relational, situated, embedded and embodied discursive practices of intervention in the world, which literature also performs. Indeed, their respective theoretical approaches are deeply grounded in ethics, focused not just on critique, but also on the actual generation of alternative becomings. Braidotti emphasizes a zoe-centered, relational ethics that is "not just the application of moral protocols, norms and values, but rather the force that contributes to conditions of affirmative becoming" (2019b: 168). Against the mainstream scientific and philosophical tradition, Barad coins the term "ethico-onto-epistemology" to emphasize "the inseparability of ontology, epistemology, and ethics", arguing that this separation "depends on specific ways of figuring the nature of being, knowing, and valuing" (2007: 409). For her part, Haraway grounds ethics on response-ability, "a relationship crafted in intra-action through which entities, subjects and objects, come into being" (2008: 71). Their theories provide a theoretical framework for a view of literature as a form of posthuman inquiry that maps *and* effects contemporary transformations in subjectivity in the current context of posthumanism and post-anthropocentrism through affective and cultural registers.

It is worth pointing out that the work of these theorists has explicitly focused on, and proved vital in, challenging longstanding scientific and philosophical assumptions about humans, nonhumans and the more-than-human world, another key concern of much recent literary production, especially within the speculative mode. Their posthumanist, neomaterialist projects share a common ethical-theoretical commitment: to problematize the anthropocentric orientations of much twentieth-century thought and to disrupt anthropocentric binaries such as self/other, meaning/matter, culture/nature, human/animal, mind/body, etc. – a task that literature has also engaged with in recent years. In that sense, Ivan Callus has argued that "[l]iterature is integral to, even constitutive of, posthumanism. Many of the posthumanist imaginary's desires and figurations find originary expression there. [...] The posthumanist imaginary is undeniably molded by [literary] depictions" (2022: 674–675).

A special case in point is Jeff VanderMeer's new weird Southern Reach series (2014; 2024). It circles around Area X and a mysterious "Event" (VanderMeer 2014a: 94) that caused a bizarre alteration of the ecology of the area. Since then, the region has been cut off from the outside world by an impenetrable barrier that causes anything that crosses it to instantly vanish, at least apparently. The Southern Reach, a secret government organization tasked with overseeing and researching Area X, sends in expedition after expedition of scientists in an attempt to explain the nature

and origin of Area X. *Annihilation* (VanderMeer 2014a) is told from the viewpoint of the twelfth expedition's biologist, who breathes in spores while investigating the words on the wall of a mysterious tunnel and starts transforming into something else. The second novel, *Authority* (VanderMeer 2014b), is set in the Southern Reach headquarters and follows John "Control" Rodriguez as he assumes the role of new agency director. Overwhelmed by the mass of information and the inexplicable samples brought back from Area X, he also has to deal with his growing attachment to the returned biologist, who insists that she is not the biologist anymore and should be called Ghost Bird. *Acceptance* (VanderMeer 2014c) features several parallel plotlines and a variety of character perspectives. In this book, we are introduced to Saul, the lighthouse keeper, who narrates the events prior to the creation of Area X, including his own inadvertent triggering of the Event and his transformation into the monstrous Crawler. *Absolution* (VanderMeer 2024), published as a prequel, takes us to Area X some time before the appearance of the border and right after it. Composed of three separate novellas, it takes account of scientific experiments and inexplicable events occurring in the area during a team of biologists' deployment to the Forgotten Coast, during Old Jim's tenure as overseer of the area for the secret government organization that will later supervise the Southern Reach agency and during the very first expedition into Area X after the Event.

As this summary suggests, scientific practices and knowledge production figure prominently in the series. Drawing on the work by Rosi Braidotti, Karen Barad and Donna Haraway, this article reads VanderMeer's Southern Reach series from a posthumanist, neomaterialist perspective as a form of postdisciplinary, posthuman inquiry. As I will argue, the series questions mainstream scientific knowledge, the positivism of science and the belief on the unbridgeable separation of the human from every*thing* else. This interrogation is tightly linked in the series to the dismantling of the subject/object, meaning/matter and human/nonhuman dualisms, which is achieved through an emphasis on the performativity and creativity of matter. The series also problematizes time as a linear phenomenon, putting forward a view of time as contingent, emergent and in constant flux. This reading of the series offers a vision of postdisciplinary scholarship in which literary texts have the capacity to interpret, critique and enact scientific paradigms, ultimately fostering an ethics of responsibility for our posthuman times.

Against the Authority of Mainstream Scientific Knowledge

One of the enduring legacies of the Enlightenment and the positivist approach to science is scientism,[3] a term used often derogatively – sometimes endorsed – to refer to the belief that science is the most reliable path to knowledge (Boudry and Pigliucci 2017: 1, 4). This seems to be the approach of the scientists in the twelfth expedition into Area X, who upon hearing the "moans" of some unidentified beast living in the reeds, feel "confident that eventually they would photograph, document its behavior, tag it and assign it a place in the taxonomy of living things" (VanderMeer 2014a: 31) – a claim that exemplifies one of the main characteristics of scientism: "brazen confidence in the future successes of scientific investigation" (Boudry and Pigliucci 2017: 2).

Brazenness certainly guides the earliest expedition of biologists deployed to the Forgotten Coast some years before the creation of Area X, who take possession of "Dead Town" and stop at nothing in the name of scientific pursuit: "At the zenith of their powers that July, the biologists' boot prints outnumbered the tracks of deer and raccoons on the mud flats. The blue caps from tranq darts became a common sight alongside empty beer cans and shotgun shells" (VanderMeer 2024: 18–19). Despite their confidence, things soon begin to go south, shaking the very foundations of their belief system. Particularly disastrous is their alligator experiment, which involves releasing some alligators with a tracking device into a new habitat and seeing whether they will adapt or return to their original locations. When one of these alligators, called the Tyrant, starts to behave in an unexpected manner, the scientists almost begin to question their methods: "'If it wasn't scientific, I would say the alligator has fixated on us as the source of its discomfort and dislocation,' Team Leader 1 wrote" (VanderMeer 2024: 25). An even greater test to their beliefs is posed by hundreds of white rabbits that appear overnight, unnerving the biologists "because [they] felt that [the rabbits] had always been here, and that they belonged here. That it was our conception of what belonged that had been wrong" (VanderMeer 2024: 37). Their panicked solution to the empirical conundrum and threat to all they stand for posed by the inexplicable (by their standards) appearance and existence of the rabbits is to try to exterminate them – with flamethrowers, no less. At this point,

3 To provide just one illustrative example, celebrity scientist Stephen Hawking – a self-proclaimed neopositivist – was often accused of professing scientism for his claim that questions such as "How can we understand the world in which we find ourselves? [...] What is the nature of reality?" are traditionally questions for philosophy, but "philosophy is dead", and because of this "[s]cientists have become the bearers of the torch of discovery in our quest for knowledge" (Hawking and Mlodinow 2010: 1).

"[s]cience and logic had given way to mere hope, prayers, and blessings" (VanderMeer 2024: 47).

After the creation of Area X, the samples that the biologist of the supposed twelfth expedition takes render some puzzling results which, rather than bringing her closer to understanding the area, make her feel "defeated", "unmoored, drifting" (VanderMeer 2014a: 50, 73). Some samples reveal cells that have unusual structures or show certain irregularities, but that somehow still fall within the range of what could be expected; other samples, however, resist any interpretation, such as the hand-shaped organisms that live on the words in the tunnel/Tower, which are revealed to have no cells at all; other samples are simply impossible in biological terms, such as the modified human brain tissue that comes from the skin of the Crawler, the modified human cells in moss and a fox found at an abandoned village, and the normal human cells in the "fibrous green-gold fuzziness" that colonizes one of the expedition members' arm where she has been wounded by the Crawler (VanderMeer 2014a: 133).

Even more confusingly, the biologist has the feeling that the cells change when she is not looking at them. The same impression is reported by the guest scientists brought to the Southern Reach agency to examine the samples with fresh, unbiased eyes:

> Not a single sample had ever shown any irregularities: normal cell structures, bacteria, radiation levels, whatever applied. But he had also seen a few strange comments in the reports [...]. The gist of these comments was that when they looked away from the microscope, the samples changed; and when they stared again, what they looked at had reconstituted itself to appear normal. (VanderMeer 2014b: 125)

Asked by Control how it is possible that Area X looks so 'normal', Ghost Bird speaks of "counter-shading" (VanderMeer 2014c: 32), a method of camouflage used by numerous animal species and, let it be added, a fascinating form of nonhuman agency in the real world (more on this later). Indeed, it is worth pointing out that there are frequent references throughout the series to Area X's camouflage, disguise, mimicry and pretense. Area X can trick humans. Proof of this is the fact, for instance, that from space the area looks like a normal wilderness, but this is said to be somehow "an optical lie" by Area X (VanderMeer 2014b: 78). Yet, some of the scientists at the Southern Reach agency refuse to acknowledge this: faced with a plant brought back from Area X that quite simply cannot be killed, the only logical answer that one of them can provide is that the plant cannot be a plant. This suggestion is met with exasperation and mockery: "Then why are we *seeing* a plant [...] that *looks like* a plant being a plant. Doing plant things, like photosynthesis and drawing water up through its roots" (VanderMeer 2014c: 218; original emphasis).

The main problem, it seems, is that Area X actively resists being known through conventional scientific methods. What is more, it dispels the illusion of separation

between observer and observed. In that sense, the absence of personal names among the scientists becomes especially meaningful. As the biologist explains, "we were always strongly discouraged from using names: We were meant to be focused on our purpose, and 'anything personal should be left behind'" (VanderMeer 2014a: 9). While *Absolution* provides a satisfactory justification for the agency's later decision to 'ban' names, the effect is a reduction of expedition members – called simply biologist, surveyor, psychologist, etc. – to their scientific functions, emphasizing their supposed detachment from the phenomena that they are meant to study. The same applies to Control, the new Southern Reach director, whose self-given nickname reflects his desperate need to be in command of his surroundings, while it ironically underscores his increasing disorientation and helplessness as he navigates the mysteries of Area X. While the biologist remains unnamed throughout the series, one of the first effects of her 'contamination' by Area X is that she starts to question her belief in the objectivity of science and the usefulness of its tools and instruments. So much so that she soon abandons the microscope that she so desperately had clung to in her attempts to make sense of Area X. She eventually reaches illumination not through science, but through being part of the ecosystem: "I had no heart to take samples, to discover what I already knew: that, in the end, there was nothing a microscope could tell me about the owl that I had not learned from my many years of close interactions and observation" (VanderMeer 2014c: 181). The word 'illumination' is used here with a double meaning, since the process of being transformed by Area X is described throughout the series as the feeling of a "brightness" (VanderMeer 2014a: 83) spreading through your body, taking possession of you. Indeed, another effect of the biologist's contamination is a feeling of radical embeddedness and relationality. As she explains, "the brightness washed over me in unending waves and connected me to the earth, the water, the trees, the air, as I opened up and kept on opening" (VanderMeer 2014a: 160). A similar transformation is experienced by Control as he reaches the bottom of the tunnel/Tower: "There came to Control in that moment of extremity – almost unable to move, unable to speak – an overwhelming feeling of connection, that nothing was truly *apart*" (VanderMeer 2014c: 310; original emphasis). At this moment, as he begins to transform into a pawed animal, "'Control' fell away [...]. John Rodriguez [...] jumped into the light" (VanderMeer 2014c: 311–312), thus accepting his becoming as part of Area X.

The transformation in these characters' subjectivity evokes Braidotti's theorization of the posthuman knowing subject, whom she defines as a "complex assemblage that undoes the boundaries between inside and outside the self, by emphasizing processes and flows. Neither unitary, nor autonomous, subjects are embodied and embedded, relational and affective collaborative entities, activated by relational ethics" (Braidotti 2019b: 46). The brightness as transformative force dissolves psychological and ontological boundaries as the biologist and Control become figura-

tively and literally porous to the environment of Area X. The Southern Reach series refuses to position the human as superior, external, separate and objective observer of natural phenomena, while knowledge within Area X is always partial, subjective, provisional and entangled. No character can achieve intellectual mastery of Area X from a detached position, which mirrors Braidotti's argument that, in the posthuman convergence, knowledge is generated through embeddedness. The biologist and Control thus become 'situated knowers', to borrow Haraway's notion, as they illustrate her claim that "[t]he only way to find a larger vision is to be somewhere in particular" (1988/1991: 196). Leaving behind their stance of observational detachment and superiority over the reality observed, they become physically and psychologically entangled with the ecosystem of Area X, which allows them to *know* Area X.

Moreover, the Southern Reach agency itself represents the failure of disembodied, institutionalized technoscientific authority. Despite its hierarchies, archives, protocols, equipment and government funding, it remains powerless in the face of Area X's unpredictability. After what turns out to be not twelve, but actually thirty-eight expeditions, satisfactory answers – let alone solutions – have not been obtained, and yet the agency clings to failed frameworks of mastery and objectivity, in hopes that "*someone will, through luck or mere repetition, hit upon some explanation, some solution, before the world* becomes *Area X*" (VanderMeer 2014a: 159; original emphasis), with disastrous consequences. This may be read as a critique of the epistemic arrogance of scientific institutions, evoking Haraway's provocative recasting of "modest witness[ing]" (1997: 23).

All in all, it may be argued that the weirdness of Area X does not come from its nature itself, but from humans' and scientific institutions' preconceptions of what nature should be like. The series mocks the scientific apparatus that we have built around ourselves to conceal our embeddedness and entanglement with nature much more so than to provide insights into its workings. Through the metaphor of the brightness, VanderMeer provocatively creates a contrast with the Enlightenment, the Age of Reason, characterized, among other things, by a belief in the pursuit of knowledge through reason. The world of Area X is a world that rejects rationalism and representationalism, a world that refuses to be known from the outside. It requires understanding from within, as part of it. As Barad puts it, "knowing does not come from standing at a distance and representing but rather from *a direct material engagement with the world*" (2007: 49; original emphasis). After all, her theory emerges from a key notion of Bohr's contribution to quantum physics, that "*we are a part of that nature that we seek to understand*" (Barad 2007: 67; original emphasis) – a principle that the Southern Reach series dramatizes, as we will see in more detail in the following section. Scientific methods, instruments and institutions are tools to differentiate and separate us from the nature around us, and to protect us from the actual knowledge of its nearness, its intermeshing with us.

The Agency and Creativity of the Matter of Area X

As mentioned above, one of the most puzzling features of Area X is that its materiality actively refuses to cooperate, to become an object of scientific enquiry. In their puzzlement and despair, the scientists in the Southern Reach agency come to the conclusion that "to analyze certain things, an object must allow itself to be analyzed, must agree to it" (VanderMeer 2014b: 118). Allowing, agreeing, intending, surveilling, lying, understanding, acknowledging, manipulating, thinking – and a myriad of similar verbs that are associated throughout the series to Area X – are not actions that one would usually ascribe to a passive "object". Perhaps because of this, as they try to grasp "the sense of *intent* eternal and everlasting that occupies this stretch of land" (VanderMeer 2014c: 54; original emphasis), characters in the series often look for a subjectivity behind Area X, for a central source of agency. This is particularly obvious during Control's conversations with the members of the agency's science division about their hypotheses on the origins of Area X and the border. When he finally enters Area X and before he starts being changed by the brightness, Control refers to the area as the enemy, since for him that concept explains Area X's "intent and focus" (VanderMeer 2014c: 81): "Idly, he wondered what *they* called it – whoever or whatever had created that pristine bubble that had killed so many people. Maybe they called it a holiday retreat" (VanderMeer 2014c: 37; original emphasis). In other words, characters feel the need to locate the agent behind the action. After all, mainstream scientific, philosophical and cultural discourses have traditionally "attribute[d] agency to humans, instinct to animals, and the deterministic forces of nature to everything else" (Alaimo 2010: 143).

On the contrary, the agency of Area X is abstract, indeterminate, distributed and ultimately unplaceable, undermining the humanist conception of agency as tied to an autonomous subject. A similar point has been made by Tom Idema, who reads the original trilogy from an environmental perspective through James Lovelock's figure of Gaia.[4] As he contends, in the trilogy "Gaia seems to have turned against the species responsible for its disturbance. From this angle, Area X is more an actant or character than a narrative setting or background" (Idema 2019: 106). While this reading is indeed compelling, it is actually possible to interpret the area's agency in a less mythical and anthropomorphizing way: quite simply as a representation of the agency and performativity of matter.

4 "[A]n earth system that is akin to an organism in the sense that it is endowed with intentionality, regulating entangled chemical, physical, and ecological processes in order to optimize the conditions for life" (Idema 2019: 106). In *The Revenge of Gaia* (2007), Lovelock compares planet Earth to "a mother who is nurturing but ruthlessly cruel to transgressors, even when they are her progeny" (2007: 188).

Matter has been considered by the dominant Western tradition as a passive substance intrinsically without meaning (Gamble, Hanan and Nail 2019: 111). In contrast, upon entering Area X, the expedition members encounter matter that is far from static or inert and that communicates with them through messages "buried in the transformation itself" (VanderMeer 2014a: 189). They must confront "*strange matter [that] mixes and mingles*" (VanderMeer 2014a: 192; original emphasis), matter that "can manipulate the genome, works miracles of mimicry and biology[.] Knows what to do with molecules and membranes, can *peer through things*, can surveil, and then withdraw" (VanderMeer 2014c: 81; original emphasis). Even before the creation of Area X and the appearance of the border, the Dead Town biologists deployed in the zone start to feel "that something was not quite right with their expedition. [...] That there was influence or coercion, invisible both to the naked eye and to their instruments" (VanderMeer 2024: 26).

On the one hand, as we have seen, Area X changes humans, transforming them into something else within the ecosystem, assimilating them in weird ways and often sending doubles back through the border. This is the case of the biologist, and Control, as we have seen, but also of other expedition members, such as the moaning beast of the reefs, which "was, or had once been, human" (VanderMeer 2014a: 140) and "had the face of the psychologist", while its (his?) "body had the consistency and form of a giant hog and a slug commingled, the pale skin mottled with mangy patches of light green moss" (VanderMeer 2014c: 161). These weird becomings do not just affect human beings, though, but inanimate matter as well: the tunnel/Tower itself – stairs and all – turns out to be an organism made of living tissue that breathes and carries an echo of a heartbeat, and so does a wall in the Southern Reach building after Area X expands and absorbs it. A special case in point is that of advanced technological objects: footage of the first expedition into Area X shows that the camera has turned into some sort of flying creature: "Everyone was dead by then [...]. Yet for a good twenty seconds the camera flew above the glimmering marsh reeds [...]. Dipped and rose, fell again and soared again. With what seemed like a horrifying enthusiasm. An all-consuming joy" (VanderMeer 2014b: 197). In a similar way, an old cellphone that was brought back from Area X and that Control takes to his house appears to move like a small rodent when it is not being watched. Even more unnervingly, the first expedition member's rifles turn into "some kind of prehistoric narrow long fucking gar with strange eyes, their hands fused to those creatures, the texture like a flaring slime-covered pinecone" (VanderMeer 2024: 386). This accounts for the Southern Reach agency's later decision to ban advanced technological equipment and weapons in subsequent expeditions.

On the other hand, the area crucially also changes every time something or someone comes into contact with it, although, as Benjamin Robertson aptly puts it, "the manner in which it registers such effects cannot be perceived or understood by

human techniques" (2018: 120). The ecosystem that is Area X reveals some peculiar manifestations as a result of its encounter with humans. As we have seen, human cells are found by the biologist in moss and a dead fox in the abandoned village, and she records a dolphin "[staring] at me with an eye that did not, in that brief flash, resemble a dolphin eye to me. It was painfully human, almost familiar" (VanderMeer 2014a: 97). A particularly puzzling case in point is that of the translucent parasitic organisms that live among the words on the wall of the Tower. These are described by the biologist as being "shaped like tiny hands embedded by the base of the palm. Golden nodules capped the fingers on these 'hands'" (VanderMeer 2014a: 24–25). Later, when she finds them colonizing the dead body of the anthropologist, she claims not to know whether "they were protecting her, changing her, or breaking her body down" (VanderMeer 2014a: 171). Another interesting example of human and more-than-human material encounters is the fact that the doubles of the members of the eleventh expedition return with inoperable, systemic cancer, dying within six months. This expedition takes place right after the director's secret visit to Area X, and we soon learn that the director has cancer that is quickly spreading through her body. It is also hinted that the psychologist of a previous expedition may have undergone such a grotesque transformation into a creature in perpetual agony while being assimilated by Area X because of what he brought to Area X. In contrast, what the biologist takes to Area X is a capacity to "melt into [her] surroundings" (VanderMeer 2014a: 173). She is someone who is "empathic more toward environments than people" and "becomes embedded to an extraordinary extent" (VanderMeer 2014b: 156–157), which might explain her successful assimilation by Area X into a creature that shows "the glory of good design, of intricate planning" (VanderMeer 2014c: 196).

These entangled material agencies resonate with posthumanist neomaterialist understandings of matter as agentive and performative, as a "shifting entanglement of relations" (Barad 2007: 224) and, more specifically, with physicist Karen Barad's agential realist framework, dramatizing her claim that "all real living is meeting. And each meeting matters" (2007: 352). For Barad, agency is not a property of things, but "the ongoing reconfigurings of the world" (2007: 141). Rejecting the usual term 'interaction', which according to Barad implies that there are separate individual agencies or relata preceding their encounter, distinct material agencies emerge only through their intra-action, which she defines as "*the mutual constitution of entangled agencies*" (2007: 33; original emphasis). As she explains, matter

> is agentive and intra-active. Matter is a dynamic intra-active becoming that never sits still [...]. Matter's dynamism is generative not merely in the sense of bringing new things into the world but in the sense of bringing forth new worlds [...]. Bodies [...] are not simply situated in, or located in, particular environments. Rather, "environments" and "bodies" are intra-actively co-constituted. Bodies ("human," "environmental," or otherwise) are integral "parts" of, or dynamic reconfigurings of, what is. (Barad 2007: 170)

In the Southern Reach series, Area X and the ecosystem that exists within its boundaries are shown to be engaged in an endless process of transformation, and all involved matter – human beings, nonhuman animals and Area X itself – is intra-actively (re)constituted through its encounter as part of the world's becomings. As such, the series dismantles the subject/object and human/nonhuman dualism, doing away with the mainstream scientific belief in separation between the human agent and the passive inertness of everything else. The series dramatizes the mutual constitution of entangled human and nonhuman agencies, bringing to the fore the posthuman subject's relationality, embodiedness and embeddedness to the multiple ecologies that co-constitute us.

The matter of Area X is not just performative, it is also creative – it generates meanings, despite the evident problems the characters have to interpret them. One of the most apparent and puzzling ways of doing so is through appropriation of human language. While exploring the tunnel/Tower, the biologist discovers "dimly sparkling green vines progressing down into the darkness" that form "words, in cursive, the letters raised about six inches off the wall" (VanderMeer 2014a: 23; original emphasis). They are made of a type of fungi, give off a loamy smell and sway "like sea grass in a gentle ocean current" (VanderMeer 2014a: 24): "*Where lies the strangling fruit that came from the hand of the sinner I shall bring forth the seeds of the dead*" (VanderMeer 2014a: 23). The words, we learn, are being written by the Crawler. As Saul is being assimilated by Area X, his diary entries (in *Acceptance*) start to be infiltrated by this strange sermon. He used to be a Christian preacher before becoming the lighthouse keeper in the Forgotten Coast, and these words, evocatively Biblical, have been remixed from the human source that was Saul and turned into an instrument of nonhuman communication. As Andrew Strombeck aptly puts it,

> [t]hese words contribute to, but also form part of, the area's inscrutability, binding language to the nonhuman reality of Area X. VanderMeer reminds readers that texts serve as a crucial hinge between humans and nonhumans, even as he points readers to ways in which language itself functions in an inhuman way. (2019: 1372)

In a similar vein, Dunja Mohr uses Katherine Hayles's notion of 'Unthought', nonconscious cognitive capacities within and beyond the human, to argue that "Area X embodies a form of nonconscious cognition and its active information processing and assessment of other materialities constitute forms of unthought the narrative's consciousness then draws upon" (2021: 175). Rather than translating or clarifying the nonhuman presence of Area X, its use of language marks the limit of human understanding. The characters' perception (and the narrative itself) becomes permeable to this form of cognition and communication, as if the human mind were not decoding Area X, but rather being rewritten by it.

Indeed, in an even more estranging move, the words spew spores that infect the biologist and trigger her transformation into part of Area X as she is "trying to parse the lingual meaning", "tricked into thinking that words should be read" (VanderMeer 2014a: 24, 25). The meaning of the words is not readily apparent to her at first but, crucially, the message itself is conveyed by the actual combination of the linguistic and the material. The same is true of the hundreds of expedition journals that somehow end up in a small room at the top of the lighthouse, forming "a moldering pile" that in places has "turned to compost", colonized by insects (VanderMeer 2014a: 111). As the biologist puts it, "[s]lowly the history of exploring Area X could be said to be turning into Area X" (VanderMeer 2014a: 112). Finally, the diaries that make up part of the text that we are reading – the biologist's and those of Saul as he is transforming into the Crawler, of the psychologist/Director, written, it seems, by her double as she lies dying on the beach by the lighthouse, and arguably of Lowry, one of the members of the first expedition – are a further form of nonhuman meaning-making by Area X, written as they are by characters that can no longer be considered simply human, having been colonized and transformed by the agency of Area X. These examples draw attention to the discursivity of matter and the materiality of language.

Linguistic messages are not the only form of communication that Area X engages in, though. Throughout the series, there are numerous references to the brightness communicating either between bodies that are being assimilated by Area X or between these bodies and Area X itself. For instance, when the biologist goes back to the tunnel/Tower, she sees "*light*. The edges of a sharp, golden light that emanated from a place beyond [her] vision, [...] and the brightness within [her] throbbed and thrilled to it" (VanderMeer 2014a: 172; original emphasis). Even more compellingly, after being injured by the Crawler, the psychologist/Director is prevented by the brightness within her from shooting the biologist: "Some communication, some trigger between the wound and the flame that came dancing across the reeds betrayed your sovereignty" (VanderMeer 2014c: 4). The bodies of the characters are said to be messages of Area X themselves. Not just that of the Crawler, as we have seen, Ghost Bird, the biologist's double that returns through the border, recognizes too that she is "a message incarnate, a signal in the flesh" (VanderMeer 2014c: 37), and so are all the doubles sent back. This leads Ghost Bird to wonder, "what if an infection was a message, a brightness a kind of symphony? As a defense? An odd form of communication?" (VanderMeer 2014c: 189–190), even if these messages are not being received or understood by humanity.

All these examples evoke Barad's belief that "matter and meaning are not separate elements. They are inextricably fused together" (2007: 3). For her, like for VanderMeer, "the common belief that discursive practices and meanings are peculiarly human phenomena won't do" (Barad 2007: 148). These forms of material meaning-

making and communication by Area X also disrupt the matter/meaning and nature/culture dualisms. These divides, which establish the two categories as clearly delineated and mutually exclusive, have been widely contested by posthumanist neomaterialist critics, who acknowledge that "thinking and the capacity to produce knowledge is not the exclusive prerogative of humans alone, but is distributed across all living matter" (Braidotti 2019b: 50–51). Similarly, in Barad's agential realist account, "*discursive practices are specific material (re)configurings of the world through which the determination of boundaries, properties, and meanings is differentially enacted*" (2007: 148; original emphasis). This is clearly true of Area X in its encounter with the human world. As Ghost Bird realizes when she enters the tunnel/Tower, "each word [was] a world [...]. Each sentence a merciless healing, a ruthless rebuilding that could not be denied" (VanderMeer 2014c: 287).

The world of Area X is a world that insists on explaining itself directly to other agents. Interestingly, however, the messages that Area X sends can only be fully understood by the characters once they have been assimilated by Area X, as we have seen. The biologist's encounter with the Crawler allows her to build a narrative of the origins of Area X, which proleptically proves to be quite accurate. The same is true of Control, whose exposure to the living matter that surrounds him in the agency's "samples cathedral" makes him more and more attuned to what Area X communicates via "the striations of the fur of a dead swamp rat [...]. What susurrations or utterances might verbalize all unexpected from a cross section of tree moss or cypress bark" (VanderMeer 2014b: 126). Also Old Jim reaches illumination after his contamination by a "cloud of golden particles" breathed out by the Tyrant (VanderMeer 2024: 297), which allows him to begin to understand Area X's power to warp time (more on this in the next section) as "the dust that wasn't dust overtook him. The dust was just another kind of language" (VanderMeer 2024: 298).

In short, the Southern Reach series presents Area X as a site of dynamic, intra-active materiality that challenges conventional scientific notions of agency, communication and subjectivity. Far from being a passive setting or necessarily anthropomorphized antagonistic force, Area X emerges as an actor in its own right – one that thinks, communicates and transforms both itself and everything it encounters. Drawing on posthumanist neomaterialist thought, the series undermines mainstream scientific views on the more than human world, dissolving traditional boundaries between subject and object, meaning and matter, culture and nature. The need to emphasize those distinctions more often than not emerges from our own fear to accept our entanglement with the material agency and creativity of the world. What we find in Area X is a weird dramatization of 'nature' pushing back and reclaiming the human as part of it. Through its strange and often unsettling manifestations of agency and meaning-making practices (linguistic and otherwise), Area X draws attention to the performativity and creativity of matter, emphasizing

against mainstream scientific thought the posthumanist, neomaterialist claim that agency and meaning are not the sole province of humans, but are co-constituted through entangled encounters.

Rhizomatic Time and Spacetimematterings in Area X

A special case in point regarding Area X's creative, agential materiality is that of the characters' visions and hallucinations, which may be understood as yet another form of communication by the area, while they illustrate another key way in which the Southern Reach series undermines mainstream scientific knowledge and the rule of rationality. For example, right after Saul becomes infected, he has a dream in which he sees "the fiery green-gold of words on the wall, being wrought before his eyes by an invisible scribe. Even as he knew the words came from him, had always come from him, and were being emitted soundlessly from his mouth" (VanderMeer 2014c: 107). He will indeed become the scribe after his transformation into the Crawler (whom we meet in *Annihilation* during its encounter with the biologist). Similarly, after her *vis-à-vis* with the Crawler, the biologist sees "an enormous monster that rose from the waves to bear down on our camp" (VanderMeer 2014a: 8), thus witnessing her own future change (narrated in *Acceptance*). These visions that proleptically allude to future events operate as an uncanny form of foreshadowing. In so doing, they also point at a rhizomatic understanding of time (in Deleuze and Guattari's sense),[5] both at the external or narrative level and at an internal or thematic one.

On the one hand, the narrative resists linearity and, because of this, what we know is always open to revision: what readers learn in *Annihilation* about Area X through the biologist's eyes is refracted in *Authority*, which shifts focus to the aftermath of the twelfth expedition and the broader history of exploration of the area through a supposed birds'-eye view. Any little insight that readers feel they have managed to gain is re-complicated in *Acceptance* as we simultaneously learn about Saul's triggering of the Event that gave rise to Area X thirty years prior, about Control and Ghost Bird's incursion into the area in the 'present-time' of the narration after the border has begun to expand, and about the psychologist/Director's second-person retelling of the events, which loops back to the timeline of *Annihilation*. In that sense, the books of the original trilogy are not linear sequels in the traditional

5 Famously laid out in *A Thousand Plateaus* (Deleuze and Guattari 1980/1987).

way (as VanderMeer's innovative decision to publish them within the same year also suggests), but a form of rhizomatic multiplicity in which understanding grows horizontally rather than vertically, as nodes connecting back and reconfiguring the other(s). This "pieced quilt" (Deleuze and Guattari 1980/1987: 477) is further complicated by the publication of *Absolution*, a prequel written 10 years after the original trilogy, which tells us, among other things, of experiments and odd activity occurring along the Forgotten Coast decades before the appearance of the border, as well as about the first expedition into Area X.

Thus, knowledge is always provisional, more so given the author's confirmation that he is working on yet another Southern Reach book.[6] The series scrambles the chronology as narrative time mercilessly warps story time,[7] mirroring the confusion that the characters feel and enhancing the reader's own disorientation and the sense of the inscrutability of Area X. In full new weird spirit, the series leaves us with more questions than answers as we try to piece together the different threads and the temporalities of the mystery, often second-guessing our own assessments. Just to provide an example, in *Authority*, Control describes Cheney, a scientist in the Southern Reach agency, as wearing "a brown leather jacket" (VanderMeer 2014b: 107), and as someone who "displayed the remnants of a body builder's physique, as if he had once been fit, but that this condition [...] had receded – and then reconstituted itself in the increased thickness around his waist – but in receding had left behind a still solid chest, jutting forward through the white shirt, out from the brown jacket" and who was "partial to beer" (VanderMeer 2014b: 110). The description seems unimportant enough, especially with so much going on in the book, and first-time readers are most likely to make little of it, since Cheney is by no means an important character. But then, in *Absolution*, the Medic, a member of the original expedition of biologists sent to the Forgotten Coast before the creation of Area X and who was somehow involved with the secret federal institution that will later oversee the Southern Reach agency, is described as "a heavy-set barrel of a man in a leather jacket [...]. He had the gait and build of someone who lifted weights but also drank a lot of beer, with a potbelly jutting from the bottom of his shirt, a jacket bursting tight across the shoulders" (VanderMeer 2024: 173). We also learn in *Absolution* (VanderMeer 2024: 401) that the phrase "[a] bird can be a bat" which Cheney tells Control near the end of *Authority* (VanderMeer 2014b: 277) happens to be a hypnotic command, and the Medic often engages in hypnosis in *Absolution*. In order

6 "yeah there's another southern reach book and it will blow your mind, from Cass / Hargraves POV, since now done with weepy toxic male POvs [sic]" (VanderMeer 2025a; Bluesky post May 1). "These will appear in a Southern Reach book I will announce soon, not as decoration but as narrative" (VanderMeer 2025b; Bluesky post June 24).

7 See Genette (1972/1980: 33, 35).

to be the same person, Cheney would have to be in his seventies, but Control tells us that he is "[f]ifty-something" (VanderMeer 2014b: 53). While their similar descriptions and use of hypnotic commands could just be a coincidence, it seems unlikely – very little is coincidental in the Southern Reach series – and it might be more reasonably (?) interpreted as a product, once again, of the weird performativity of Area X, with Cheney being reconstituted as a double of the Medic after the latter is assimilated by the area.

These examples show how the series' emphasis on the provisionality of meaning and its rejection of linearity result in a fundamentally different way of knowing, one that stands in stark contrast to the structured rationality of science. Where scientific knowledge depends on a clear sequence (hypothesize, test, conclude, report), the Southern Reach series unfolds in a rhizomatic rather than linear manner, and meaning is layered and always deferred. Against the scientific method's demand for closure and causal explanation, the Southern Reach series invites interpretive open-endedness, where meaning is always contingent and in flux.

This also takes us to the second way in which the Southern Reach series puts forward a rhizomatic understanding of time, as events are shown to be not isolated but multiple and interconnected across contexts, like nodes in a network. As we saw in the first section, the downfall of the Dead Town biologists is brought about by the arrival of hundreds of white rabbits. The scientists are incapable of coming to terms with them through rational means, due to their odd behavior and to the fact that some of them carry recording cameras around their necks. The cameras that are retrieved, which are said to look "ancient" (VanderMeer 2024: 47), show something different to whoever watches them, including, impossibly, footage of future events:

> "It changed. Each time it changed". [...] Sam didn't see much, or she wouldn't talk about it. [...] "She said it showed everybody disappeared, gone". "You mean dead? It showed the biologists she was with dead?" [...] "No, it showed the coast, like overhead, and there ... there was just *no one here*". [...] "And what did you let Drunk Boat see? That killed him?" [...] "He saw his own death". (VanderMeer 2024: 168; original emphasis)

We learn in *Authority* that around 10–15 years after the Event and the appearance of the border, two thousand rabbits, some of them with tiny cameras attached to their necks, were herded into the border as an experiment by Southern Reach scientists "in a reflexive act of frustration at the lack of progress" (VanderMeer 2014b: 55). Thus, the presence of the white rabbits in the Dead Town biologists' camp is in itself a direct effect of Area X's warping of time, as one (failed) scientific experiment interferes with an earlier one, also causing it to fail.

Time travel, or, more accurately, actions in the present that have an effect on the past, are precisely at the center of *Absolution*. The most puzzling and elusive plotline in the novel involves a mysterious figure called the Rogue that confronts

the Dead Town biologists, years later faces Old Jim and whose dead body is found by Lowry, one of the members of the first expedition into Area X. This recursive presence suggests not mere time travel, but a collapse or entanglement of timelines. We are led to interpret this figure as being Whitby, one of the scientists in the Southern Reach agency that the members of the first expedition have just left behind – after teasingly promising that "[he]'ll be there in spirit" (VanderMeer 2024: 315) – and that Control meets in *Authority* too, thus coexisting in different moments of the past, the present and the future. He is said to be "[a]n agent of the future acting on the past, but lost in the variables" (VanderMeer 2024: 298; see also 417). His aim is to avoid "the future colonizing the past, as if every moment had a permeability that could neither be denied nor controlled" (VanderMeer 2024: 298). The problem is that "what they called Area X [...] wanted the past, too [...]. So that there could be no future but its future, no ability to adapt" (VanderMeer 2024: 419). Importantly, the Rogue/Whitby is not trying to stop Area X, as "Area X would never not happen" (VanderMeer 2024: 419) – which does away with the hackneyed agent-from-the-future-sent-to-change-the-past-to-save-the-present classical SF plot – but "just mak [ing] sure everything happened as it had already happened. That the Area X Lowry had fucking experienced was the best possible outcome [...]. But if it colonized the past, then everything would get worse, worse, worse" (VanderMeer 2024: 419–420; see also 298).

The main plot in the series' fourth novel thus puts forward a diffractive understanding of time that evokes Karen Barad's notion of 'spacetimemattering', whereby the past and the future are constantly reconfigured through the present. For Barad, "[t]ime is not a succession of evenly spaced individual moments", nor "a background uniformly available to all beings [...] against which change and stasis can be measured" (2007: 180). Instead, in her agential realist account, "spatiality and temporality must also be accounted for in terms of the dynamics of intra-activity" (Barad 2007: 180). Building on the results of the delayed-choice quantum eraser experiment – where the decision on what to observe can be made after, which affects the behavior of the particle retrospectively – she argues that "the past is never left behind, never finished once and for all, and the future is not what will come to be in an unfolding of the present moment" (Barad 2007: 181). In this view, "it is the intra-play of continuity and discontinuity, determinacy and indeterminacy, possibility and impossibility that constitutes the differential spacetimematterings of the world" (Barad 2007: 182). Thus, for Barad, time and space are not pre-existing elements, but emerge through relational processes of intra-action. Time is no longer seen as absolute and external; it becomes distributed, diffracted and emergent, not a backdrop for human existence, but a product of specific material configurations that cannot be separated into discrete moments. The Rogue/Whitby's actions can be read as intra-actions, not simply intervening in a fixed timeline but participating in

the ongoing material reconfiguration of space-time. His attempt to stabilize a particular version of the future resonates with Barad's notion that "the past and the future are enfolded participants in matter's iterative becoming" (2007: 181). The Rogue/Whitby and Area X do not simply exist in time and space, but actively produce and reconstitute temporal and spatial relations through their intra-action, thus rewriting the past and foreclosing the future.

Overall, VanderMeer's Southern Reach series dismantles mainstream scientific understandings of time, putting forward instead a rhizomatic and diffractive model of temporality, both at an external or narrative level and at an internal or thematic one. Through its merciless warping of story time, the series thwarts the readers' desire for closure, causality and teleology, emphasizing the provisional nature of knowledge and the volatility of meaning. On the other hand, past, present and future are articulated as being entangled, positioning time not as a linear sequence, but as property of what Barad calls spacetimematterings. In so doing, the series disrupts the epistemological grounding of mainstream scientific thought, reorienting the reader towards an alternative, more speculative and open-ended mode of knowing – more fitting to the complexity and uncertainty of living in entanglement with the more-than-human world, as "critters of an ongoing past, present, and future" (Haraway 2016: 71).

Conclusion: The Ethics of Doing Science Otherwise

As I hope the analysis above has shown, Jeff VanderMeer's Southern Reach series disrupts traditional epistemological paradigms rooted in Enlightenment rationalism and mainstream, institutional science. The series presents Area X as a phenomenon that resists conventional scientific inquiry and that dissolves the boundary between observer and observed, and the Southern Reach agency as the epitome of failed institutionalized technoscientific arrogance. In contrast, knowledge is only available to those situated posthuman knowing subjects who embrace their material entanglement to the world around them. The series further articulates Area X as a site of radical material performativity and creativity, challenging conventional and anthropocentric scientific beliefs about agency, meaning and subjectivity. Finally, the series advances a rhizomatic, diffractive and emergent conception of time through its rejection of narrative linearity and its emphasis on the provisionality of meaning, while it draws attention to how the past and the future are intra-actively reconfigured through the present. In so doing, the series puts forward an alternative way of knowing and being in the world that inflicts a heavy blow to human exceptionalism, unsettles the structured rationality and anthropocentrism of mainstream science and dismantles the subject/object, meaning/matter and human/nonhuman dualisms.

This analysis of the Southern Reach series as a cultural product that does science otherwise offers a vision of postdisciplinary scholarship in which literary texts have the capacity to interpret, critique and enact established scientific paradigms. Literature thus emerges as not simply a narrative medium, but also as an epistemological force that might help explain the entangled complexities of our posthuman condition. What is more, the series' engagement with posthumanist, neomaterialist thought illustrates how literature may intervene in, and co-construct, alternative modes of becoming. In so doing, it invites readers to reconfigure their own assumptions in response to an interconnected world, ultimately fostering an ethics of responsibility for our posthuman times.

Ethics is, indeed, at the core of much posthumanist, neomaterialist thought. For Haraway, material-semiotic practices include an ethical dimension. Because all knowledge is situated, responsibility and accountability are central to epistemology. As she provocatively puts it, "[i]t matters what stories we tell to tell other stories with; it matters what knots knot knots, what thoughts think thoughts, what descriptions describe descriptions, what ties tie ties. It matters what stories make worlds, what worlds make stories" (Haraway 2016: 12). Barad similarly draws attention to the intertwining of ethics, knowing and being, which she calls "*ethico*-onto-epistem-ology" (2007: 185; original emphasis), since "each intra-action matters [...] because the becoming of the world is a deeply ethical matter" (2007: 185). Her agential realist framework makes clear the need for "an ethics of responsibility and accountability not only for what we know, how we know, and what we do but, in part, for what exists" (Barad 2007: 243), for a "posthumanist ethics, an ethics of worlding" (Barad 2007: 392). As for Braidotti, the recomposition of minor science in the critical posthumanities is sustained by a neo-materialist ethics of affirmation (2019a: 53), whose impact is political: "it is about what kind of affirmative assemblages we are capable of sustaining, knowing that their political force lies in actualizing 'collective imaginings'" (2019a: 47–48). Postdisciplinary formations as Braidotti theorizes them, of which literature may be seen as a part, are assemblages that enact and embody an ethics of situated knowledge, affective engagement, and transformative potential. Ethics and accountability are, thus, built into the very structure of knowing: how we choose to observe, measure and narrate the world literally makes the world.

Literature, in this view, is an active participant in the world's constant process of becoming, due to its power to offer an alternative way of understanding *and* making the world. Jeff VanderMeer's Southern Reach series becomes a speculative site of intervention in which new collective imaginaries might take root, effecting powerful transformations in subjectivity. Literature's role in these postdisciplinary assemblages, then, lies in its capacity to enact the kind of epistemological and ethical recomposition that posthumanist and neomaterialist thinkers advocate. In sum,

the Southern Reach series exemplifies a mode of cultural production that performs science otherwise – ethically, speculatively and entangled with the material-semiotic conditions of the world. It is a literature of worlding, one that insists on the significance of how we tell and what we tell.

Works Cited

Alaimo, Stacy. 2010. *Bodily Natures: Science, Environment, and the Material Self*. Bloomington, IN: Indiana University Press.

Barad, Karen. 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, NC: Duke University Press.

Boudry, Maarten and Massimo Pigliucci. 2017. Introduction. In: Maarten Boudry and Massimo Pigliucci (eds.). *Science Unlimited? The Challenges of Scientism*. Chicago, IL: The University of Chicago Press. 1–10.

Braidotti, Rosi. 2019a. "A Theoretical Framework for the Critical Posthumanities". *Theory, Culture & Society* 36.6: 31–61.

Braidotti, Rosi. 2019b. *Posthuman Knowledge*. Medford, MA: Polity.

Callus, Ivan. 2022. "Literature and Posthumanism". In: Stefan Herbrechter, Ivan Callus, Manuela Rossini, Marija Grech, Megen de Bruin-Molé and Christopher John-Müller (eds.). *Palgrave Handbook of Critical Posthumanism*. Cham: Palgrave Macmillan. 673–702.

Deleuze, Gilles and Felix Guattari. 1980/1987. *A Thousand Plateaus: Capitalism and Schizophrenia*. Trans. Brian Massumi. Minneapolis, MN: University of Minnesota Press.

Gamble, Christopher N., Joshua S. Hanan and Thomas Nail. 2019. "What Is New Materialism?" *Angelaki: Journal of the Theoretical Humanities* 24.6: 111–134.

Genette, Gérard. 1972/1980. *Narrative Discourse: An Essay in Method*. Trans. Jane E. Lewin. Ithaca, NY: Cornell University Press.

Haraway, Donna J. 1988/1991. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective". In: Donna J. Haraway. *Simians, Cyborgs and Women: The Reinvention of Nature*. New York: Routledge. 183–202.

Haraway, Donna J. 1997. *Modest_Witness@Second_Millennium. FemaleMan_Meets_OncoMouse: Feminism and Technoscience*. New York: Routledge.

Haraway, Donna J. 2008. *When Species Meet*. Minneapolis, MN: University of Minnesota Press.

Haraway, Donna J. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham, NC: Duke University Press.

Hawking, Stephen and Leonard Mlodinow. 2010. *The Grand Design*. New York: Bantam Books.

Idema, Tom. 2019. *Stages of Transmutation: Science Fiction, Biology, and Environmental Posthumanism*. New York: Routledge.

Lovelock, James. 2007. *The Revenge of Gaia: Why the Earth Is Fighting Back – and How We Can Still Save Humanity*. London: Penguin Books.

Mohr, Dunja. 2021. "Tentacular Narrative Webs: Unthinking Humans in Jeff VanderMeer's *Southern Reach* Trilogy". In: Louise Economides and Laura Shackelford (eds.). *Surreal Entanglements: Essays on Jeff VanderMeer's Fiction*. New York: Routledge. 169–191.

Robertson, Benjamin J. 2018. *None of This Is Normal: The Fiction of Jeff VanderMeer*. Minneapolis, MN: University of Minnesota Press.

Strombeck, Andrew. 2019. “Inhuman Writing in Jeff VanderMeer’s Southern Reach Trilogy”. *Textual Practice* 34.8: 1365–1382.
VanderMeer, Jeff. 2014a. *Annihilation*. New York: Farrar, Straus & Giroux.
VanderMeer, Jeff. 2014b. *Authority*. New York: Farrar, Straus & Giroux.
VanderMeer, Jeff. 2014c. *Acceptance*. New York: Farrar, Straus & Giroux.
VanderMeer, Jeff. 2024. *Absolution*. London: 4th Estate.
VanderMeer, Jeff. 2025a. “yeah there’s another southern reach book and it will blow your mind, from Cass / Hargraves POV, since now done with weepy toxic male POVs”. *Bluesky* May 1. <https://bsky.app/profile/jeffvandermeer.bsky.social/post/3lo5bwzbm4k2b> [accessed 5 January 2026].
VanderMeer, Jeff. 2025b. “These will appear in a Southern Reach book I will announce soon, not as decoration but as narrative”. *Bluesky* June 24. <https://bsky.app/profile/jeffvandermeer.bsky.social/post/3lscovy32is2g> [accessed 5 January 2026].