

Postgraduate English

www.dur.ac.uk/postgraduate.english

ISSN 1756-9761

Issue 44

Summer 2023

Editors: Francesca Adams and Laura Day

The Post-humus: Decomposition and Circulation in The Overstory by Richard Powers

Rebekah Zammit

rebekahzammit@gmail.com

The Post-humus: Decomposition and Circulation in *The Overstory* by Richard Powers

Rebekah Zammit

Independent Scholar

Postgraduate English, Issue 44, Summer 2023

What I do to the Grass, does to my Thoughts and Me.

—Andrew Marvell



—Olaf Hajek, *The Circle*

Stumbling upon a copy of Richard Powers's *The Overstory* and flicking through its pages, the reader embarks on a meta-literary voyage, downward into the rich, organic layer of humus beneath the fallen leaves, into the entanglement of roots and mycelia of the understory. The reader is swallowed whole into a fertile place of language, where a vegetal intelligence guides the route of matter from roots to seeds in whispers of 'words before words'.¹ Within this space of fiction and indeed everywhere else, living organisms are embedded within a network of relationships built on a dialogue of matter, whereby sustenance and stories are circulated across bodies to be translated into new material. Regardless of 'whether we are paying attention or not', life in all its bodies partakes in this uncanny tango of symbiosis, of feeding and being devoured, of metamorphosis and entanglement.²

Much like humans use science to grasp 'the Earth's intentions', 'trees are doing science' for this same reason.³ Plants and other autotrophic bodies convert light, air, and water into energy through photosynthesis, stabilising climate conditions and nourishing 'less biochemically agile species' to help pollinate flowers and spread seeds.⁴ These vegetal organisms are versed in the language of chemistry which they use to send signals to 'other life-forms in their environment'.⁵ Positive messages with the intention of symbiosis are communicated through palatable matter such as fruits and fragrant flowers, whereas toxins are used to deter consumption. In effect, plants spur the post-humus, or the condition of regeneration, through the organic products of photosynthesis which are circulated within a network of co-evolving bodies. Hence, through a balance of consumption and replenishment, the humus remains fertile.

In *The Overstory*, Richard Powers compiles the wisdom of plants with human interpretations and imagination to address the ideology of a contemporary reality that values comfort and progress at the detriment of other organisms. An anthropocentric agenda is revealed as the culprit behind the hyperconsumption of matter, the widespread condition of plant blindness, and the desensitised instrumentalising of nonhuman bodies, resulting in the erosion of the humus. By returning the vibrancy of life back to the bodies of trees, Powers

¹ Richard Powers, *The Overstory* (London: Vintage, 2019), p. 3.

² Dennis McKenna, 'Foreword', in *The Mind of Plants: Narratives of Vegetal Intelligence*, ed. by John C. Ryan, Patricia Vieira and Monica Gagliano (London: Synergetic Press, 2021), pp. xi–xiv (p. xi).

³ Powers, *The Overstory*, p. 568.

⁴ Autotrophs are organisms that convert inorganic compounds (carbon) into organic matter (simple sugars) for food as opposed to heterotrophs that depend on the organic matter of other bodies for nourishment. – McKenna, 'Foreword', pp. xi–xiv (p. xi).

⁵ Ibid.

exposes the excessive consumption of American forests as the wrong choice for humanity in view of an existence dependent on photosynthesis. For Powers, this problem lies in the hierarchy that idealises ‘the most wondrous products of four billion years of life’, humanity, over life itself.⁶ In response, all lived realities are introduced as a convergence of ‘networks of signalling and communication’ that overlap and invoke ‘mental properties such as intelligence, reasoning, and choice’ across a nature within which humanity is inextricably embedded:⁷

I do not think it too remote that we may come to regard the Earth, as some have suggested, as one organism, of which mankind is a functional part—the mind, perhaps.⁸

Effectively, Powers proposes a rerouted view of the ontós (existence) as ‘a fluid, changing web of purposeful lives dependent on each other’, where the role of humanity, like that of plants, is to continue growing, spreading, and evolving within a network of exchanges.⁹

With reference to the emergent botanical studies and theories of entangled matter by Peter Wohlleben, Michael Marder, Matthew Hall, Jeffrey Nealon, Robin Wall Kimmerer, Suzanne Simard, Merlin Sheldrake, Jane Bennett, and Tim Ingold, this research seeks to delve into the hidden realm of planthood to engage with the fertile layer of humus. This paper considers how consumption and the process of decomposition circulate substances across living organisms so that life communicates through a language of palatable matter and decay. Thus, this study aims to represent the vitality of matter within a system of interdependent organisms where consumption is the primary currency of mortal life. In effect, this paper explores the significance of a fertile humus as the liminal medium from which life emanates and returns to: ‘You were made from soil, and you will become soil again.’¹⁰ As a product, or new material, from photosynthesis and the humus, language is presented as a tool for symbiosis, communicating the stories and meanings of organisms through ingestion and rumination. Hence, in *The Overstory*, planthood and entangled life are unveiled page by page through the act of reading, so that ‘just by holding still’ a continuum of changes is observed

⁶ Powers, *The Overstory*, pp. 592, 613.

⁷ Matthew Hall, *Plants as Persons* (Albany: State University of New York Press, 2011), p. 149.

⁸ Powers, *The Overstory*, p. 315.

⁹ *Ibid.*, p. 567.

¹⁰ This extract is included not for its biblical implications, rather as a reminder of an expected circulation of matter that shifts between the living and the dead without which new life would not be possible. – Genesis 3:19, in *Good News Translation (Today's English Version)*, 2nd edn (Philadelphia, PA: American Bible Society, 1992).

within the characters and landscape as well as in the reader's perception of nature.¹¹ Ultimately, the conversion of the novel's palatable matter into new material within the reader's body suggests that 'there's no other way to protect' vegetal organisms and the integrity of entangled life 'except with our bodies'.¹²

Understanding that humans take time to 'understand green', Powers stages a performance of the entanglement of life in four sections: Roots, Trunk, Crown, and Seeds.¹³ In 'Roots', *The Overstory* begins with eight individual narratives, where the characters' relationships with plants help them recognise something purposeful and communicative within these nonhuman organisms. When the relationships of the human characters are interrupted or severed through the logging of trees, they sense the signals of their plant kin and are pushed to act even though they do not yet understand why. By replying to the signals of trees, the characters actively align themselves with the idea that nonhuman organisms have value beyond human comfort. As the reader progresses through 'Trunk' and 'Crown', the characters' lives are drawn closer together, allowing them to reflect on humanity's excessive consumption of matter and the unsung value of plants and forest communities.

Throughout 'Crown', the various trajectories and branchings of the novel capture a multitude of human and nonhuman experiences to inspire viable alternatives 'to the unsustainable unlimited growth model' that masks the erosion of the post-humus, or the regeneration of life.¹⁴ In the human characters, action is expressed in different forms from scientific studies, tree activism, and art, to a reworked game series; all addressing hyperconsumption and the instrumentalising of nature. Due to the expansive nature of this novel, a selection of 'conjectures' about life is highlighted to observe the interdependence of bodies and the conditions leading to plant blindness.¹⁵ Since the priority of this study lies in representing the entanglement of life through the consumption and replenishment of matter, the voice of the character Dr Patricia Westerford is frequently prioritised over other characters for her profound interpretation of chemical signals 'into human language'.¹⁶

¹¹ Powers, *The Overstory*, p. 3.

¹² Ibid, p. 325.

¹³ Ibid, p. 568.

¹⁴ 'Decomposition and Decay', *Trees for Life* <<https://treesforlife.org.uk/into-the-forest/habitats-and-ecology/ecology/decomposition-and-decay/>> [accessed 18 December 2021]

¹⁵ Powers, *The Overstory*, p. 568.

¹⁶ McKenna, 'Foreword', pp. xi–xiv (p. xiv).

At the heart of the matter, in ‘Seeds’, Powers presents the collective entanglement of life on Earth as ‘ontologically one, formally diverse’, to borrow a phrase from Gilles Deleuze. This means that life in all its variations is directly connected to itself through a shared mortality, materiality and compatibility between bodies.¹⁷ Thus, as the reader crams in the novel’s last few pages, the seed of Powers’s palatable text is revealed: everything that ‘we have been given [...] will never end’.¹⁸ Now replenished by the vibrant product of plant-human symbioses, the reader is tasked with disseminating and perpetuating the vitality of life as intended by those first cells that stood ‘defiant against the lifeless world’.¹⁹

I. The Insubstantial and Otherwise

Underpinning the discussion on the entanglement of human and nonhuman life lies the problem of human unawareness, particularly in relation to plant life. While some humans are mesmerised by the wonders of the natural world, others seem to go through their days unaffected by the cycles and changes triggered by vegetal organisms. According to Mung Balding and Kathryn Williams, although humans are physically capable of seeing plants, they are limited by ‘biologically based visual, cognitive, and functional processes’ that inhibit the active recognition and connection with plant life.²⁰ This suggests that the problem of unawareness is brought on by a species-level inability to recognise plant life and the collective activity of plants within an entangled, circulatory existence. In 1998, James Wandersee and Elisabeth Schussler spearheaded a discussion on this very concern—plant blindness—which they defined as:²¹

(a) the inability to see or notice the plants in one’s environment; (b) the inability to recognize the importance of plants in the biosphere and in human affairs; (c) the inability to appreciate the aesthetic and unique biological features of the life forms that belong to the Plant Kingdom; and (d)

¹⁷ Gilles Deleuze, *Expressionism in Philosophy: Spinoza*, trans. by Martin Joughin (New York: Zone Books, 1992), p. 67, as cited in Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham: Duke University Press, 2010), p. xi.

¹⁸ Powers, *The Overstory*, p. 625.

¹⁹ Henry Gee, *A (Very) Short History of Life on Earth: 4.6 Billion Years in 12 Chapters* (London: Picador, 2021), p. 7.

²⁰ Mung Balding and Kathryn J. H. Williams, ‘Plant Blindness and the Implications for Plant Conservation’, *Conservation Biology*, 30 (2016), 1192–9 (p. 1194).

²¹ Christine Ro, ‘Why “plant blindness” matters — and what you can do about it’, *BBC*, 2019 <<https://www.bbc.com/future/article/20190425-plant-blindness-what-we-lose-with-nature-deficit-disorder>> [accessed 19 November 2021]

the misguided anthropocentric ranking of plants as inferior to animals and thus, as unworthy of consideration.²²

The findings of their study indicated that elementary and middle school students were keener to learn about animals than plants, leading the researchers to conclude that humans typically form a stronger affinity to animals.²³ Similar studies by Balas and Momsen, Kinchin, and Schussler and Olzak,²⁴ continue to support the conclusion that ‘humans have higher preference, superior recall, and visual detection of animals relative to plants’.²⁵ A poorer education on plants than animals, the perceived homogeneity of plants, their proximity and stationary nature, the non-threatening quality of most plants, and fewer space-, time-, and colour-based ‘differentiators [between plants] for humans to observe’ all contribute to a weaker connection with plant life in favour of animals.²⁶ Consequently, humans who are desensitised to planthood often misunderstand, overlook, and lack awareness of plants’ needs, functions, and experiences.²⁷ This desensitisation raises concerns for the conservation of plants as about ‘one in eight plant species worldwide’ experiences the threat of extinction.²⁸ In truth, this “blindness” extends to all living things that are not vertebrates, meaning that ‘humans seem to be blind to the vast majority of organisms, not just plants’.²⁹

Although ‘humans tend to project higher complex cognitive processes on animals with similarities than those without’, animal life is still preferred for its closeness to the human experience over plant life.³⁰ This means that even though humans may consciously and intellectually recognise the value of plants, ‘culturally this is often forgotten’ and is not

²² James H. Wandersee and Elisabeth E. Schussler, ‘A Model of Plant Blindness’ [Poster-paper] 3rd Annual Associates Meeting of the 15^o Laboratory, (Baton Rouge, LA: Louisiana State University, 1998a).

²³ James H. Wandersee and Elisabeth E. Schussler, ‘Plants or Animals: Which Do Elementary and Middle Students Prefer To Study?’ [Unpublished manuscript] 15^o Laboratory, (Baton Rouge, LA: Louisiana State University, 1998b).

²⁴ Benjamin Balas and Jennifer L. Momsen, ‘Attention “Blinks” Differently for Plants and Animals’, *CBE—Life Sciences Education*, 13 (2014), 437–43; Ian M. Kinchin, ‘Investigating secondary-school girls’ preferences for animals or plants: A simple “head-to-head” comparison using two unfamiliar organisms’, *Journal of Biological Education*, 33 (1999), 95–9; Elisabeth E. Schussler and Lynn A. Olzak, ‘It’s Not Easy Being Green: Student Recall of Plant and Animal Images’, *Journal of Biological Education*, 42 (2008), 112–9.

²⁵ Balding and Williams, ‘Plant Blindness and the Implications for Plant Conservation’, 1192–9 (p. 1193).

²⁶ James H. Wandersee and Elisabeth E. Schussler, ‘Preventing Plant Blindness’, *The American Biology Teacher*, 61 (1999), 82–6 (pp. 84–6).

²⁷ *Ibid.*, (p. 84).

²⁸ *Ibid.*, (p. 82).

²⁹ Sandra Knapp, ‘Are Humans Really Blind to Plants?’, *Plants, People, Planet*, 1 (2019), 164–8 (p. 165).

³⁰ Timothy J. Eddy, Gordon G. Gallup Jr and Daniel J. Povinelli, ‘Attribution of Cognitive States to Animals: Anthropomorphism in Comparative Perspective’, *Journal of Social Issues*, 49 (1993), 87–101; Alvin A. Y.-H. Chan, ‘Anthropomorphism as a Conservation Tool’, *Biodiversity and Conservation*, 21 (2012), 1889–92 (p. 1891).

processed in everyday encounters.³¹ The marked preference within contemporary human culture and discourse towards animals that share similar experiences suggests that the issue of plant blindness is much more than a biological bias.

Historically, Classical views on nature sought to classify and represent ‘visible “living things”’ such that naturalists gave ‘precedence to vegetable values’, or the transparency and generosity of the plant kingdom ‘with all its forms on display’.³² Conversely, animals featured as a spectacle ‘in tournaments, in fictitious or real combats, [and] in reconstitutions of legends’ for their ‘threat or radical strangeness’.³³ Whilst humanity turned to natural history and philosophical speculation on nature to interpret the question of life, in the wake of biology in 1802, ‘the emergence of the science of life’ cemented this traditional shift in preference towards animals.³⁴ Animals appeared to bear ‘more hidden, interior space than plants’ within which the invisible processes of life could be studied to benefit human life.³⁵ Anthropocentric thinking and the disregard for plants has been part of history for many centuries; however, the shift in preference towards animal life magnified the devaluing of plant life. As plant life was largely ‘devalued, instrumentalized, and rendered banal’, philosophical discourse on planthood became ‘fleeting and marginal’, receding from intellectual history.³⁶ This shift suggests that plant blindness is a matter exacerbated by a philosophical lack of interest in plants and a cultural tendency towards animals in the last centuries. Essentially, while a biological limitation may contribute to a poorer perception of plants, the cultural bias and intellectual laziness that pervades contemporary communities worsen the collective understanding of planthood, ultimately reinforcing ‘the [anthropocentric] philosophical prejudice: “Even brute animals are more noble than plants.”’³⁷

³¹ Wandersee and Schussler, ‘Preventing Plant Blindness’, 82–6 (p. 82).

³² Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences*, trans. by Alan Sheridan (New York: Pantheon, 1970), p. 277, as cited in Jeffrey T. Nealon, *Plant Theory: Biopower and Vegetable Life* (Stanford: Stanford University Press, 2016), pp. 5, 7.

³³ Foucault, *The Order of Things: An Archaeology of the Human Sciences*, p. 131, as cited in Nealon, *Plant Theory*, p. 6.

³⁴ Nealon, *Plant Theory*, p. 6.

³⁵ Ibid, pp. 5–6.

³⁶ Michael Marder, *The Philosopher’s Plant: An Intellectual Herbarium* (New York: Columbia University Press, 2014), pp. xiii–xv.

³⁷ Nealon, *Plant Theory*, p. xii; Thomas Aquinas, ‘The Life of Christ: Question 44 Article 4 Objection 1’, in *The Summa Theologica of St. Thomas Aquinas: Part III*, trans. by Fathers of the English Dominican Province, *New Advent* <<https://www.newadvent.org/summa/4044.htm>> [accessed 27 December 2021].

Plant blindness brings into question the role of anthropomorphism in attributing value to nonhuman lives. Since anthropocentric and anthropomorphic thinking assume that the human experience is the ideal, nonhuman bodies are judged and valued on the basis of a hierarchy, a Great Chain of Being, of bodily functions relative to human likeness. However, life is not exclusively human; rather, it is a complex entanglement of materialities within which human and nonhuman lives interact.³⁸ ‘Curing the symptoms of plant blindness’ then requires that humans ‘see ourselves as part of the system, not outside of it with dominion over it’.³⁹

In *The Overstory*, Richard Powers introduces plant blindness in ‘Roots’, where the reader observes the human characters learn and become conscious of their entanglement with plant life through their affinity with particular organisms. Nicholas Hoel grows up under the artistic influence of a sentinel chestnut tree ‘stretching and patting about for something in the sky’, Mimi Ma’s worldview is tied to the Fusang, ‘a magical mulberry tree’ coaxing her towards ‘things to come’, and Adam Appich makes sense of the world through the patterns introduced by a maple tree.⁴⁰ Ray Brinkman ‘disguised as Birnham [sic] Wood’ chases after Dorothy Cazaly, who together morph into ‘Baucis and Philomen’ in old age.⁴¹ Douglas Pavlicek is saved by a ‘one-tree forest that has grown up [...] just in time to break his fall’, and Neelay Mehta follows the path of the Banyan seed as it spreads and probes, filling his mind with stories of hungry code.⁴² Olivia Vandergriff dies and is revived by pine, the tree of ‘Now’, to find ‘them’—‘huge, living sentinels’ speaking of the need for change.⁴³ And Patricia Westerford listens to the stories ‘of Ovid’s *Metamorphoses*’ and the chemical whispers of trees putting ‘forth fresh cells’ to textualise the stories of under.⁴⁴

As the characters engage with nature and form relationships with particular plants, planthood is unveiled to the reader as a personhood that accounts for the ‘volitional, intelligent, relational, perceptive, and communicative’ capacities of vegetal organisms.⁴⁵ While some characters in *The Overstory* take longer to recognise plant personhood, their process of understanding continues to sustain Powers’s apologia for the respect and

³⁸ Bennett, *Vibrant Matter*, p. 112.

³⁹ Knapp, ‘Are Humans Really Blind to Plants?’, 164–8 (p. 167).

⁴⁰ Powers, *The Overstory*, pp. 15, 32, 55, 60.

⁴¹ “Birnham” here refers to Birnam Woods from Shakespeare’s *Macbeth*.; Powers, *The Overstory*, pp. 84, 575, 620.

⁴² *Ibid*, pp. 102, 117, 119.

⁴³ Powers, *The Overstory*, pp. 32, 195, 197, 264.

⁴⁴ *Ibid*, pp. 147, 171, 177.

⁴⁵ Hall, *Plants as Persons*, p. 100.

preservation of these organisms. One such character, Adam Appich, goes through the process of ‘unblinding’ (a conscious awareness of planthood as opposed to plant blindness) several times in his life so that Powers demonstrates the distractions in human life that overpower our attention to plants.⁴⁶

As a young boy, Adam is curious about the similarities between his siblings and the trees that live ‘behind the house’.⁴⁷ From ‘identical green puffballs’ his perception of these trees sharpens so that Adam becomes aware of the patterns across living organisms, seeing himself reflected in his maple that ‘turns red’ just like him.⁴⁸ And although he later learns that these physical patterns are not necessarily connected, it is the possibility of meaning in patterns that draws him to look closer.⁴⁹ Once his (and the reader’s) attention is trained to see plants more clearly, he also begins to notice other organisms that would otherwise have been ignored: ‘there are more lives up here, in his one single maple, than there are people in all of Belleville’.⁵⁰

‘Swift and cunning’ ants and their colony intelligence capture his interest.⁵¹ He notices that ‘nobody’s in charge’ directing their colony towards a goal, yet somehow ‘in the absence of a surveyor’ the ants adapt and reorganise themselves according to the changes in their environment, always holding to a shared purpose.⁵² Purpose is revealed in the patterns of their movements and the flexibility of their behaviour, and soon, Adam believes that the collective intelligence of ‘colonies and hives’ is superior to human intelligence.⁵³ He concludes that humans are ‘an aberrant experiment’ that nature will phase out of existence owing to the lack of sensitivity they demonstrate to kin (human or nonhuman) and their faulty sense of direction and purpose:⁵⁴

A seed that lands upside down in the ground will wheel—root and stem—in great U-turns until it rights itself. But a human child can know it’s pointed wrong and still consider the direction well worth a try.⁵⁵

⁴⁶ Powers, *The Overstory*, p. 295.

⁴⁷ *Ibid*, p. 58.

⁴⁸ *Ibid*, pp. 58, 60.

⁴⁹ *Ibid*, pp. 60–1.

⁵⁰ *Ibid*, p. 65.

⁵¹ *Ibid*, pp. 66–8.

⁵² *Ibid*, pp. 67–8.

⁵³ *Ibid*, p. 70.

⁵⁴ *Ibid*.

⁵⁵ *Ibid*, p. 72.

The comparison between a colony of ants or a hungry seed and a human child almost convinces the reader to agree with Adam on humanity's abnormal nature, but then, even a hungry human child would not turn away food without reason. Stragglers are present in all forms of life—in humans, they are those who pick the “wrong” direction; in trees, they are those who ‘dawdle before they stretch upward’.⁵⁶ Such behaviours are ‘a question of character’ that develop through personal experiences, meaning that even when faced with the same conditions, humans and plants may decide differently.⁵⁷ While this level of individual choice is not recognised by Adam or other characters in *The Overstory*, it is valuable to consider how vegetal organisms, like humans and animals, can display different behaviours even when growing in identical conditions.

Adam's false impression of humanity fades when he learns that human behaviour ‘possesses hidden but knowable patterns as beautiful as anything he once witnessed in insects’:⁵⁸

Like humans, ants form close associations with the bacteria that live inside them, and with other animals round about. They actively cultivate gardens of fungi. They tend domesticated flocks of aphids, which they harvest for the honeydew they secrete. Social organization is a trait linked with success.⁵⁹

In effect, Adam gleans the patterns of life across distinct ‘types of being’.⁶⁰ These patterns then suggest that while living organisms ‘have different ways of going about their lives, [...] there is no radical ontological schism between plants, animals, or humans’.⁶¹ Adam observes the transmutable quality of ontology, whereby the commonalities in behavioural patterns of different human and nonhuman individuals and communities are implicit of the entangled materiality across all living beings. The source of this entanglement stems from our shared ancestry, ‘no more than scummy membranes across microscopic gaps in rock’—‘a single, fluke, self-copying cell’ sieving minerals for survival.⁶² The evolution of different forms of life turned ‘poison gas and volcanic slag into this peopled garden’ where contemporary

⁵⁶ Peter Wohlleben, *The Hidden Life of Trees: What They Feel, How They Communicate*, trans. by Jane Billinghurst (Vancouver: Greystone Books, 2016), p. 35.

⁵⁷ Wohlleben, *The Hidden Life of Trees*, p. 152.

⁵⁸ Powers, *The Overstory*, p. 76.

⁵⁹ Gee, *A (Very) Short History of Life on Earth*, p. 221.

⁶⁰ Matthew Hall, *The Imagination of Plants: A Book of Botanical Mythology* (Albany: State University of New York Press, 2019), p. xxvii.

⁶¹ Hall, *Plants as Persons: A Philosophical Botany*, p. 11.

⁶² Gee, *A (Very) Short History of Life on Earth*, p. 6; Powers, *The Overstory*, p. 156.

bodies now experience this familiar present.⁶³ Through a shared ancestry, the entanglement of patterns that feature across organisms is indicative of a shared desire for survival through the continued performance of changes on the material world to satisfy bodily needs.

According to Timothy Clark in his essay on ‘Phenomenology’, the consciousness of one’s physical needs and sensations, or bodily sentience, structures the lived experience of reality. By engaging through the body and attributing meanings ‘in terms of possibilities of warmth or cold, nourishment or threat’, all living things participate ‘in a world already full of incipient “meaning” and implication’.⁶⁴ A ‘basic common intelligibility’ shared ‘between creatures’ then suggests compatibility across the bodies of different living organisms through their engagement with the material.⁶⁵ By this, Clark contends that the perception of spaces and terrain through bodily sentience allows for many intelligible meanings to form, for example, ‘what looks to a squirrel like a safe route through the trees will look to a heron as [a] difficult barrier to be avoided’.⁶⁶ These distinct perceptions imply that each living organism is aware of its own abilities and limitations within the material world. Moreover, since to know a body is to ‘know what it can do’, close relationships may allow organisms to observe patterns and guess at the preferred route of others.⁶⁷

Just as Adam builds a relationship of knowing with the ants, he builds one with humans, where he comes to observe the patterns of humans within their environment. That which is substantial to an individual is foregrounded within their environment⁶⁸ so that for Adam, the maple and ant colonies that once drew him to study patterns fade into the recesses of his memory once he becomes engrossed in studies of human behaviour. Therefore, more than an issue of biological limitation, which assumes that the processing capacity afforded by human brains causes us to overlook plants,⁶⁹ plant blindness is a consequence of culture and politics. Effectively, the prioritising of human-centred preoccupations at the exclusion of all else inevitably limits human sensitivity to the significance of plants.

⁶³ Powers, *The Overstory*, p. 156.

⁶⁴ Timothy Clark, ‘Phenomenology’, in *The Oxford Handbook of Ecocriticism*, ed. by Greg Garrard (Oxford: Oxford University Press, 2014), pp. 276–90 (p. 281).

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism And Schizophrenia*, trans. by Brian Massumi (Minneapolis: University of Minnesota Press, 1987), p. 257, as cited in Bennett, *Vibrant Matter*, p. xii.

⁶⁸ This significance may also be attributed to inorganic materials, relationships with other organisms, and even immaterial objects provided that they are considered valuable to the individual.

⁶⁹ Wandersee and Schussler, ‘Preventing Plant Blindness’, 82–6 (pp. 84–5); Tor Nørretranders, *The User Illusion: Cutting Consciousness Down to Size*, trans. by Jonathan Sydenham (New York: Viking, 1998), p. 126.

As human culture phases out the intrinsic value of plants and entangled life by prioritising the instrumental benefits of materials, humans become blind to nature. Simply put, instrumentalism reduces plants and nonhuman lives to objects valued for their human-benefitting function and thus suppresses the evaluation of the excessive commodification ‘of organic substances’.⁷⁰ In *The Hidden Life of Trees*, Peter Wohlleben argues against the instrumentalising of one’s environment by noting that ‘an organism that is too greedy and takes too much without giving anything in return destroys what it needs for life and dies out’.⁷¹ However, since humans are part of an entangled materiality, their commodification and overconsumption of natural resources destabilise the living conditions of many ecosystems, not just human life.

The effects of resource erosion are observed in the rapidly depleting soil composition and the lessened diversity of species inhabiting forests as a consequence of ‘the use of heavy machinery and plantation monocultures’.⁷² In the novel, Dr Patricia Westerford argues for the retention of ‘rotting logs and snags’⁷³ in forests to sustain the fungi, microorganisms and insects that aid decomposition and new growth.⁷⁴ Deforestation of old-growth and the clearing of fallen trunks not only affects the lives of forest dwellers but also seemingly distant biomes, as evidenced by Katsuhiko Matsunaga’s work on the essential relationship between forests and oceans.⁷⁵ As the acids of decomposed tree leaves ‘stimulate the growth of plankton’, revitalising the ‘fish and oyster stocks’, the commodification of forests is associated with negative repercussions on ocean ecosystems.⁷⁶ Awareness of the human activities bringing about ‘the degradation of the world’s ecosystems’ may prompt changes to lessen resource erosion.⁷⁷

For Adam Appich, ‘cognitive blindness will forever prevent people from acting in their own best interests’ because humans are primed to act on biases by which they ‘assume that everyone else *must be right*’.⁷⁸ However, contrary to this belief, the act of ‘unblinding’ is

⁷⁰ Wohlleben, *The Hidden Life of Trees*, p. 242.

⁷¹ Ibid, p. 113.

⁷² Ibid, p. 243.

⁷³ A snag is a dead or partially dead tree that is still standing, possibly within a body of water.

⁷⁴ Powers, *The Overstory*, p. 353.

⁷⁵ Powers, *The Overstory*, p. 174; Wohlleben, *The Hidden Life of Trees*, p. 245.

⁷⁶ Wohlleben, *The Hidden Life of Trees*, p. 245; Jim Robbins, ‘Why Trees Matter’, *New York Times*, 2012 <<https://www.nytimes.com/2012/04/12/opinion/why-trees-matter.html>> [accessed 5 December 2021].

⁷⁷ Chan, ‘Anthropomorphism as a Conservation Tool’, 1889–92 (p. 1891).

⁷⁸ Powers, *The Overstory*, pp. 76, 291, 294.

possible when considering the historical ‘transformation of social identit[ies]’.⁷⁹ In short, if humans were truly trapped within their biases, then ‘in-group realignment would never happen’, and human culture would remain the same.⁸⁰ Since this is not the case, *The Overstory* challenges its reader to explore their ‘Adam’s curse’⁸¹ alongside Adam and become open to the ‘moral authority that lies beyond the human’.⁸² Then, the widespread ‘bystander effect’ regarding human overconsumption may be curtailed by supporting the ‘moral decisions’ that ‘any reasonable person in our society thinks is crazy’ or ‘odd or frightening or laughable’ but which may bring about positive change in the ‘progression of consciousness’.⁸³ Thus, Powers suggests that ‘a new, nonhuman moral order’ may trigger a positive social transformation by investing a sense of value into the material reality we live in.⁸⁴ Characters with ‘transformative potential’ are enlisted in this novel to support the personhood of nonhuman lives by speaking for them.⁸⁵

*It is no answer to say that streams and forests cannot have standing because streams and forests cannot speak. Corporations cannot speak, either; nor can states, estates, infants, incompetents, municipalities, or universities. Lawyers speak for them.*⁸⁶

Hence, the “lawyers” in *The Overstory* are those who listen to the stories told in the language of silence,⁸⁷ sharing them through scientific papers, activism, living art, and repurposed mechane.⁸⁸ In doing so, an attempt is made to preserve old-growth and dead matter in support of something larger than humanity—the post-humus, or the regeneration of life.

⁷⁹ Powers, *The Overstory*, pp. 295–6.

⁸⁰ *Ibid.*, p. 296.

⁸¹ “Adam’s curse” bears a dual meaning here: 1) (Biblical reference) Upon eating from the Tree of Knowledge, humans became blind to life in that their knowledge turned to serve itself rather than to serve life; 2) (Foreshadowing) Adam Appich is cursed by humanity’s blindness and goes through life perpetually shifting between blindness and un-blindness, trapping himself within knowledge.

⁸² Powers, *The Overstory*, pp. 143, 297.

⁸³ *Ibid.*, pp. 292, 295–7, 313.

⁸⁴ Powers, *The Overstory*, p. 297.

⁸⁵ *Ibid.*, pp. 295, 350.

⁸⁶ Whilst “standing” is used here to refer to a respected position in the eyes of the law, Powers also uses this term to refer to the right of trees to remain standing, that is to say, to remain uncut.; *Ibid.*, p. 313.

⁸⁷ The “language of silence” here refers to the wordless exchanges made between organisms within a physical space imbued with individual and collective meanings.

⁸⁸ “Mechane” alludes to the Ancient Greek theatrical crane used to hoist the “Deus” figure onto the stage to save the hero. In the context of *The Overstory*, the mechane refers to Neelay Mehta’s *Mastery* game series that seemingly hoists players into a godlike position. As noted later in this paper, Neelay repurposes this series to educate players on growing worlds rather than individuals.

II. Interdependence, Mortality and Permanence

In *The Overstory*, the reader is introduced to Patricia Westerford, a plant ecologist, dendrologist, and field biologist—‘Queen of Chlorophyll’—whose consciousness of planthood begins in early childhood, where ‘her woodlands world’ and ‘woody citizens’ draw her attention to the individuality of different tree species.⁸⁹ While most of her peers remain ‘plant-blind’, mistaking ‘a black walnut’ for ‘a white ash’, Plant-Patty is inspired by her father’s teachings to question and observe.⁹⁰ In the company of trees, Patricia becomes aware of her own body and materiality, ‘her back crawling with chiggers, her scalp with ticks, her mouth filled with leaf duff [...] her nose lined with spores, [and] the backs of her thighs bitten Braille by wasps’.⁹¹ Prompted by the awareness of her bodily needs, she comes to appreciate how other organisms are also aware of and act on *their* needs. Subsequently, her gaze turns to observe ‘in all other “objects” the miracle of expression’ as bodily sentience effects interactions with others.⁹²

‘A secret suspicion [...] that trees are social creatures’ urges Patricia to study the ‘volatile organic compounds’ of old-growth ‘and what these gases do to the neighbors’.⁹³ Her experiments return with remarkable results: ‘wounded trees send out alarms that other trees smell’.⁹⁴ By stumbling upon this conversation of scent, Patricia understands that ‘life is talking to itself’.⁹⁵ Trees ‘have a completely different way of communicating’; they smell chemical compounds, register ‘visual and electrical signals’, as well as react to frequency (and grow towards ‘a frequency of 220 hertz’).⁹⁶ Plants can rely on ‘twenty different [known] senses’ to adjust their behaviour depending on ‘continuous subtle changes’ above and below ground.⁹⁷ The partaking in communication with other organisms demonstrates the sensory intelligence of nonhuman life, which is especially noted in their ability to form collaborative relationships by interpreting their environment. As her findings invariably prove that trees

⁸⁹ Powers, *The Overstory*, pp. 141–2, 150.

⁹⁰ *Ibid.*, p. 143.

⁹¹ *Ibid.*, p. 155.

⁹² Maurice Merleau-Ponty, *The Phenomenology of Perception*, trans. by Colin Smith (New York: Routledge and Kegan Paul, 1981), p. 197, as cited in Bennett, *Vibrant Matter*, p. 5.

⁹³ Powers, *The Overstory*, pp. 153–7.

⁹⁴ *Ibid.*, p. 158.

⁹⁵ *Ibid.*

⁹⁶ Wohlleben, *The Hidden Life of Trees*, pp. 6, 12–3; Monica Gagliano, Stefano Mancuso, and Daniel Robert, ‘Towards Understanding Plant Bioacoustics’, *Trends in Plant Science*, 17 (2012), 323–325; Daniel Chamovitz, *What a Plant Knows: A Field Guide to the Senses of Your Garden – And Beyond* (London: Oneworld Publications, 2013), pp. 87–110.

⁹⁷ Merlin Sheldrake, *Entangled Life: How Fungi Make Our Worlds, Change Our Minds and Shape Our Futures* (London: The Bodley Head, 2020), p. 150.

within a woodland community form part of an airborne chemical network, Patricia becomes a forerunner for ‘the moral authority that lies beyond the human’.⁹⁸

The character of Patricia Westerford was inspired by the German forester Peter Wohlleben and Suzanne Simard, ‘a pioneer on the frontier of plant communication and intelligence’, amongst other figures.⁹⁹ Their work within forests reveals ‘a web of interdependence, linked by a system of underground channels’ through which ‘different tree species are in contact with one another, even when they regard each other as competitors’.¹⁰⁰ In the novel, Patricia acts as an interpreting voice for this network, first listening for the language of silence in forests and then amplifying it in her writing. The ‘massed symphonic choruses’ emanating from the understory of old-growth teach her about how individual organisms come together to communicate through material exchanges, cycling resources through the soil—humus.¹⁰¹

Soil is the medium within which mycorrhizal fungi form symbiotic relationships,¹⁰² ‘joining individual trees into intercommunicating forests’.¹⁰³ Patricia suspects that ‘cultivated trees behave differently than trees in a forest’ and soon finds her answer in the conversation below ground.¹⁰⁴ Relationships between plants and mycorrhizal fungi are described in terms of ‘a mutualism-to-parasitism continuum’ whereby both organisms operate through ‘give-and-take’ depending on preferences and individual bodily needs.¹⁰⁵ These organisms are ‘bound in an “intimate, reciprocal dependence”’ whereby the fungus acts ‘like a “wet nurse”’

⁹⁸ Powers, *The Overstory*, pp. 145, 158, 297.

⁹⁹ ‘About Suzanne Simard’, *Suzanne Simard* <<https://suzannesimard.com/about/>> [accessed 1 December 2021]; Tim Lusher, ‘The man who thinks trees talk to each other’, *The Guardian*, 2016 <<https://www.theguardian.com/environment/2016/sep/12/peter-wohlleben-man-who-believes-trees-talk-to-each-other>> [accessed 1 December 2021].

¹⁰⁰ Suzanne W. Simard, *Finding the Mother Tree: Uncovering the Wisdom and Intelligence of the Forest* (London: Allen Lane, 2021), p. 4; Wohlleben, *The Hidden Life of Trees*, pp. 10–11; Suzanne W. Simard, David A. Perry, Melanie D. Jones, David D. Myrold, Daniel M. Durall, and Randy Molina, ‘Net Transfer of Carbon between Ectomycorrhizal Tree Species in the Field’, *Nature*, 388 (1997), 579–82.

¹⁰¹ Powers, *The Overstory*, p. 167.

¹⁰² ‘Mycorrhizas are beneficial fungi growing in association with plant roots, and exist by taking sugars from plants “in exchange” for moisture and nutrients gathered from the soil by the fungal strands. The mycorrhizas greatly increase the absorptive area of a plant, acting as extensions to the root system.’ – ‘Mycorrhizal Fungi’, *The Royal Horticultural Society* <<https://www.rhs.org.uk/biodiversity/mycorrhizal-fungi>> [accessed 8 December 2021].

¹⁰³ Robert Macfarlane, *Underland* (London: Penguin, 2020), p. 11; Simard et al., ‘Net Transfer of Carbon between Ectomycorrhizal Tree Species in the Field’, 579–82.

¹⁰⁴ Powers, *The Overstory*, p. 154.

¹⁰⁵ Sheldrake, *Entangled Life*, p. 237.

drawing nourishment for the plant in exchange for sugars and shelter.¹⁰⁶ Fused together, a multitude of plants and fungi create ‘vast, complex and collaborative systems [...] in which organisms are inextricably embedded’.¹⁰⁷ Essentially, ‘the “living whole” of the natural world’ is defined by this characteristic so that life is a ‘net-like, entangled fabric’ continuously transforming itself.¹⁰⁸ Patricia’s discovery of these ‘vast trading networks of goods, services, and information’ inevitably validate her suspicion that the concept of community is not exclusively human.¹⁰⁹

Patricia Westerford finds that ‘trees [in natural forests] create an ecosystem that moderates extremes of heat and cold, stores a great deal of water, and generates a great deal of humidity’, allowing all members to ‘live to a ripe old age [...] in this protected environment’:¹¹⁰

Trees, for their part, store extra sugar in their fungi’s synapses, to dole out to the sick and shaded and wounded. A forest takes care of itself, even as it builds the local climate it needs to survive.¹¹¹

In ancient forests, familial bonds form through the ability of plants to recognise themselves, their kin and interspecific partners as distinct from competitors and pests.¹¹² This is important for plants to strengthen communication with friends and supply them with resources. Dominant trees with sizable canopies and a well-established fungal-root connection provide a maternal ‘influence in the upbringing of the youngsters’ and are thus described as “mother trees”.¹¹³ These great mother trees nurture their young through the underground mycorrhizal network, ensuring that their eventual successors build a firm contact with partners and receive necessary sustenance.¹¹⁴ Essentially, mother trees form extensive food channels with their

¹⁰⁶ Sheldrake, *Entangled Life*, p. 143; Albert B. Frank, ‘On the nutritional dependence of certain trees on root symbiosis with belowground fungi (an English translation of A.B. Frank’s classic paper of 1885)’, trans. by James M. Trappe, *Mycorrhiza*, 15 (2005), 267–75.

¹⁰⁷ Sheldrake, *Entangled Life*, p. 167.

¹⁰⁸ Wulf, Andrea, ‘Humboldt’s Cosmos’, in *The Invention of Nature: The Adventures of Alexander von Humboldt, The Lost Hero of Science* (New York: Alfred A. Knopf, 2015), chp. 18, as cited in Sheldrake, *Entangled Life*, p. 167; Tim Ingold, ‘The Sustainability of Everything’, as part of *Pluralizing The Anthropocene – Virtual Colloquium* (Sci-Tech Asia: University of Coimbra, 15 February 2021) <<https://www.youtube.com/watch?v=yav1hb2RQwc>>.

¹⁰⁹ Powers, *The Overstory*, p. 272.

¹¹⁰ Wohlleben, *The Hidden Life of Trees*, pp. 4, 155.

¹¹¹ Powers, *The Overstory*, p. 276.

¹¹² Hall, *Plants as Persons*, pp. 149–50.

¹¹³ Wohlleben, *The Hidden Life of Trees*, p. 33.

¹¹⁴ Simard, *Finding the Mother Tree*, pp. 167–8, 258–62.

young and avoid crowding their roots, leaving space for them to grow.¹¹⁵ This familial relationship indicates that mother trees recognise the genetic similarity in their seedlings and thus give preference to them over others.¹¹⁶

Fundamentally, ‘everything depends on everything else’ since, without communication, it would be impossible for living things to exist beyond their short, individual timeframes; accordingly, all contact within the forest is imbued with meaning.¹¹⁷ While plants prioritise their relatives and fungal partners, fungi within underground networks are ‘intent on compromise’ to maintain the continued stability of the entire biocoenosis:¹¹⁸ ‘A chain is only as strong as its weakest link’.¹¹⁹ As such, mycorrhizal fungi choose to aid the exchanges of materials and messages amongst a diversity of plant species to safeguard the inflow of resources. These conditions ‘facilitate co-operation and also competition’, which are ideal for producing food and cycling materials.¹²⁰ A diversity of interacting organisms ensures a balance of abilities and resources are available within the soil-ed community, or forest biocoenosis,¹²¹ effectively indicating that achieving comfort and survival is most efficient when the effort is shared. In primaeval forests, connections between new growths and ‘century-old trees [...] mean the difference between life and death’.¹²² The continued survival of a community depends on the generosity of larger bodies that share ‘a third or more of the food’ they make with their partners so that materials are carefully recycled in the forest community.¹²³

In the dense understory below the giant hemlocks, firs, and spruces of the Western Cascades, Patricia bears witness to the decay churning out life-giving sustenance.¹²⁴ A

¹¹⁵ Suzanne Simard, ‘How trees talk to each other’, *TED*, 2016 <https://www.ted.com/talks/suzanne_simard_how_trees_talk_to_each_other?language=en#t-15612> [accessed 6 December 2021].

¹¹⁶ Refer to Simard’s field experiments regarding these findings. – Simard, *Finding the Mother Tree*, pp. 258–62.

¹¹⁷ Powers, *The Overstory*, p. 353.

¹¹⁸ A biocoenosis may be described as ‘the interacting organisms living together in a habitat, a diverse community inhabiting a single biotope’. – Craig R. Sloss, Kira E. Westaway, Quan Hua, and Colin V. Murray-Wallace, ‘An Introduction to Dating Techniques: A Guide for Geomorphologists’, *Treatise on Geomorphology*, 14 (2013), 346–69.

¹¹⁹ Wohlleben, *The Hidden Life of Trees*, pp. 18, 53.

¹²⁰ Sheldrake, *Entangled Life*, p. 237.

¹²¹ A forest biocoenosis is a biotic community of living plants, animals and microorganisms present in a forest. – ‘Forest Biocoenosis’, *Encyclopedic Dictionary of Landscape and Urban Planning*, ed. by Klaus-Jürgen Evert, Edward B. Ballard, David J. Elsworth, Iciar Oquiñena, Jean-Marie Schmerber, and Robert E. Stipe (Berlin: Springer, 2010), p. 250 <https://doi.org/10.1007/978-3-540-76435-9_4992>.

¹²² Simard, *Finding the Mother Tree*, pp. 166–7.

¹²³ Powers, *The Overstory*, p. 272; Wohlleben, *The Hidden Life of Trees*, pp. 4–5.

¹²⁴ Powers, *The Overstory*, p. 168.

decadence of decomposition invokes the post-humus, or the regeneration of life, through the redistribution and circulation of materials:

The sheer mass of ever-dying life packed into each single cubic foot, woven together with fungal filaments and dew-betrayed spiderweb leaves her woozy... Death is everywhere, oppressive and beautiful.¹²⁵

Patricia is held by an uncanny dance between the living and dead whereby the humus—the liminal medium—is animated by the fervour of decomposition: ‘everything climbs over everything else’.¹²⁶ Organisms ‘live and breathe in the space that decomposition leaves behind’ so that ‘the dead keep the living alive’ within a delicate balance between consumption and replenishment.¹²⁷ The consumption of materials plays a vital role in ‘the world’s ongoing generation and regeneration’ process by sustaining new forms of materiality.¹²⁸ The replenishment¹²⁹ of resources through the decomposition of matter contributes to the conservation of life by restoring nutrients to the humus and equalising the consumption rate, perpetuating the post-humus. Just as consumed matter requires time to be transformed into new material, replenishment through decay lies on a spectrum of time so that some materials are soon on their way to becoming humus, while others, like fallen logs, snags and peat bogs, may last centuries.

In *The Overstory*, the beginning of decay is observed on ‘the ceramic skins’ of Nick Hoel’s ‘buried treasure’, where upon digging up his art, he discovers that ‘bacteria, fungi, invertebrates—living workshops down in the underground horizons—have spattered patinas across the sculptures in a masterpiece of blooms’.¹³⁰ Conversely, his ‘real prize’, the Hoel ‘multigeneration photo project’, remains untouched by these organisms, preserved in a time capsule.¹³¹ Since the rate of decay depends on the activity of decomposers, the quantity and complexity of the material, and the physical conditions within the environment, manipulating such factors can extend the life cycle of a material as observed naturally within boglands and

¹²⁵ Powers, *The Overstory*, p. 169.

¹²⁶ Ibid, p. 168.

¹²⁷ Sheldrake, *Entangled Life*, p. 195; Powers, *The Overstory*, p. 529.

¹²⁸ Tim Ingold, *Being Alive: Essays on Movement, Knowledge and Description* (London: Routledge, 2011), p. 26.

¹²⁹ Notably, the word “replenishment” is etymologically associated with “plenum”. Tim Ingold defined the plenum as absolute fullness, or that state just slightly greater than a stationary fullness, thus hinting at the perpetual motion/formation which sustains life. Then, replenishment suggests the refreshing of the plenum in the conversion of matter into a consumable. – Tim Ingold, ‘The Sustainability of Everything’.

¹³⁰ Powers, *The Overstory*, p. 510.

¹³¹ Ibid, pp. 22, 251, 510.

icy environments. Whether accidental or intended, human intervention has altered the conditions of decay in favour of preservation through the use of nonbiodegradable materials as if to ‘bubble wrap’ human artifice from ‘the weeds’.¹³²

Segregation from natural processes of decay may indicate an underlying fear of mortality. Towards the end of the novel, Patricia gives a talk at a conference entitled ‘Home Repair: Countering a Warming World’.¹³³ She suspects that a fear of decay and mortality coupled with consumption for preservation prevent humans from seeing the ‘real’ world from ‘the invented one’.¹³⁴ At the conference, she elicits two symptoms from her audience: the bystander effect from those ‘pinned in their seats’, ‘paralyzed’ in disbelief at the possibility of Patricia’s death on stage; and the fear of mortality from Neelay Mehta and Mimi Ma, who try to stop what they think she might do.¹³⁵ At the peak of this performance, at the choice between drinking the glass of *Tachigali versicolor* and flinging it at her audience, Patricia teases out the fear of death so that only the words ‘this one’ indicate that she has chosen the latter.¹³⁶ As readers, our reaction too plays a role in Patricia’s performance, rooting us deeply in the human condition of our time.

Throughout *The Overstory*, Powers draws attention to the excessive consumption of resources from forest biocoenoses to make products that help humanity progress. Whilst consumption is fundamental for sustenance and progression, ‘the sheer volume of commodities, and the hyperconsumptive necessity of junking them to make room for new ones, conceals the vitality of matter’.¹³⁷ In *Vibrant Matter*, Jane Bennett describes how hyperconsumptive behaviour (‘suicide economy’) suggests that matter is disposable, even though such products combine various natural resources, artifice, and time to manufacture and distribute.¹³⁸ As complex compounds are progressively developed without consideration for the process of decomposition, the ‘obsolete miracles’, like old technology, that humans deem “outdated” simply remain unusable.¹³⁹ Worse still, hyperconsumptive behaviour is

¹³² Powers, *The Overstory*, pp. 251, 509.

¹³³ Ibid, p. 544.

¹³⁴ Ibid, pp. 174, 582–3.

¹³⁵ Ibid, pp. 580, 582–3.

¹³⁶ *Tachigali versicolor*, commonly known as the “suicide tree”, ‘dies after fruiting and creates a hole in the forest canopy to allow light for its seedlings to grow’. – Afshin Akhtar-Khavari, ‘Suicide Tree’, in *The Mind of Plants: Narratives of Vegetal Intelligence*, ed. by John C. Ryan, Patricia Vieira and Monica Gagliano (London: Synergetic Press, 2021), pp. 363–70 (p. 363); Powers, *The Overstory*, pp. 569, 583.

¹³⁷ Bennett, *Vibrant Matter*, p. 5.

¹³⁸ Powers, *The Overstory*, p. 472.

¹³⁹ Ibid, p. 120.

perpetuated across sociocultural contexts so that it has become second nature to “gorge” on materials and dispose of them in favour of newer models.¹⁴⁰ Effectively, the rate of human consumption and the disposal of compound materials skew the replenishment rate, deplete the humus of matter and disrupt the cycle of life and death. Then, the violence enacted by humans on the entire network of entangled life is blurred beneath a furtive guise of comfort and progress.

III. A Palatable Matter

‘Within the current of materials’, life flourishes in different living bodies that ‘collide, congeal, morph, evolve, and disintegrate’, perpetually consuming and being consumed—slipping between living and waiting for regeneration.¹⁴¹ Food is the primary form in which matter moves through living bodies; it is ‘an “ontologically real and active, lively presence”’ without which the cycle of the post-humus and the presence of life would not be possible.¹⁴² As different bodies devour materials, the properties of these consumables become part of the ‘condensed story’ of the bodies that ingest or acquire them.¹⁴³ A body evolves around these palatable consumables so that living organisms carry within themselves the properties of these materials:

Eating an animal contributes directly to the growth of the person; through this act the animal’s story, indeed the very trajectory of its life, merges into and becomes one with the life of the eater. So when you eat a longnose sucker, the sucker’s story becomes your own as well.¹⁴⁴

Extending past Tim Ingold’s eating of animals to consider the act of eating more broadly, it may be suggested that the prosperity of life is perpetuated by the stories of materials and the living consumers that find new purposes and meanings for them—making more of their own tissue, storing for later use, doling out to the young and sick, and trading for more-valuable matter.¹⁴⁵ Stories are, therefore, part of the physical world in that they are exchanged between organisms through materials, traversing and transforming the bodies of different lives.¹⁴⁶

¹⁴⁰ Bennett, *Vibrant Matter*, pp. 40–3.

¹⁴¹ Ingold, *Being Alive*, p. 29; Bennett, *Vibrant Matter*, p. xi.

¹⁴² Ibid, pp. x, 39, 43; David Goodman, ‘Ontology Matters: The Relational Materiality of Nature and Agro-Food Studies’, *Sociologia Ruralis*, 41 (2001), 183; Hall, *Plants as Persons*, pp. 113–7.

¹⁴³ “Ingestion” and “acquisition/ownership” are not too dissimilar in definition here since by possessing a material within oneself or in one’s environment, new meaning is effectively added.; Ingold, *Being Alive*, p. 30.

¹⁴⁴ Ibid, p. 172.

¹⁴⁵ Bennett, *Vibrant Matter*, p. 40; Powers, *The Overstory*, p. 276.

¹⁴⁶ Ingold, *Being Alive*, p. 30.

Plants perform a ‘miraculous biochemical trick’—photosynthesis—allowing them to turn ‘light and air and water’ into nectars and fruits (palatable matter).¹⁴⁷ ‘*Saying things in words before words*’, plants whisper in chemicals above and below ground, attracting hungry organisms to eat but also to pollinate flowers and disperse seeds.¹⁴⁸ Photosynthesis becomes the original language, or mother tongue, of food and palatable matter through which all life, and subsequently all modes of communication within the biosphere, are sustained.¹⁴⁹ Reliant on this language of food, organisms forage and harvest matter, remaking and recycling it within the community. Having tasted ‘the buttery pulp’ of the pawpaw and inhaled the ‘fecund putrefaction’ of the understory, Patricia receives the chemical signals of her plant kin. Patricia carries their signal within herself like a residue, merely a memory, which she transforms into words—stories—seeds.¹⁵⁰ Much like the Navajo woman in Robin Wall Kimmerer’s *Braiding Sweetgrass*, Patricia’s words seek to share the stories held by plants, ‘their origin myths, how they got their names, and what they have to tell us’.¹⁵¹ Therefore, the challenge for Patricia is no longer to discover the patterns in shared materiality or the motivation behind the post-humus, rather it is to turn the understory into understanding: ‘what is needed is a myth’.¹⁵²

Myths are ‘basic truths twisted into mnemonics, instructions posted from the past, memories waiting to become predictions’ that find their way into human language, generating new perceptions of reality through tellers.¹⁵³ Like chemicals, words are consumable, regenerative materials subject to the limits of materiality and mortality as products of the humus through their association with various human and nonhuman tellers. Whilst the intrinsic nature of words is ephemeral, their lifespan may be extended when captured in a physical form—books. When books carry the messages of trees, they are no longer human words on paper but seeds to bring the prosperity of trees to new soil, the mind. Hence, as Patricia spins decaying matter into accessible words for human consumption in her book,

¹⁴⁷ McKenna, ‘Foreword’, pp. xi–xiv (p. xi); Powers, *The Overstory*, p. 155.

¹⁴⁸ Although non-photosynthetic organisms are effectively parasites on plants, plants benefit from such symbiotic relationships, allowing them to achieve an intended goal (‘to grow, to spread, to reproduce’) or a desirable product in exchange for food. – McKenna, ‘Foreword’, pp. xi–xiv (pp. xi–ii); Powers, *The Overstory*, p. 3.

¹⁴⁹ McKenna, ‘Foreword’, pp. xi–xiv (pp. xi–ii).

¹⁵⁰ Powers, *The Overstory*, pp. 145, 169.

¹⁵¹ Robin Wall Kimmerer, *Braiding Sweetgrass* (Minneapolis, Minnesota: Milkweed Editions, 2013), p. 44.

¹⁵² Powers, *The Overstory*, p. 315.

¹⁵³ *Ibid.*, p. 201.

‘*The Secret Forest*’, she effectively weaves together a post-humus textual material, or seed, to dialogue and intermingle with new bodies and memories.¹⁵⁴

Patricia discovers that ‘people see better what looks like them’, and so she appeals to her readers’ anthropomorphic tendencies by introducing them to aspects common to both human and nonhuman organisms. While anthropomorphism can be viewed as the height of an anthropocentric tendency to view the world through human eyes, it may also be used to encourage human care by drawing attention to a common ground and shared reality with nonhuman organisms. Therefore, rather than completely avoiding anthropomorphism, it should be used in appropriate amounts to promote conservation and educate the public on natural ecosystems.¹⁵⁵ In this sense, anthropomorphism may act as a gateway or first step towards a rerouted understanding of life in its complex entanglement. The bodily cognition of hunger and the value of food are shared across bodies even if ‘the distinction between plant and animal [...] depends on the way an organism feeds itself’.¹⁵⁶ Thus, Patricia turns to Douglas-firs to anthropomorphically represent the generosity of plants:

Before it dies, a Douglas-fir, half a millennium old, will send its storehouse of chemicals back down into its roots and out through its fungal partners, donating its riches to the community pool in a last will and testament. We might well call these ancient benefactors *giving trees*.¹⁵⁷

In this way, she entreats her readers to see how even ‘after an immense journey in separate directions’, humans and plants share a quarter of their genes.¹⁵⁸ Still, while similarities appear between plants and animals, ‘they are two very unique evolutionary adaptations for multicellular life’ so that while both develop organs and tissues to ‘fill similar functions’, ‘each is biologically unique’.¹⁵⁹ These differences, however, are valuable to understand once the shared experience of life and the intricacies of interdependence are positioned at the forefront of our understanding. By focusing on these similarities, Patricia guides her audience to view themselves as part of an entanglement of stories, inseparable from nature through food, communication and decay—materiality.

¹⁵⁴ Powers, *The Overstory*, p. 335.

¹⁵⁵ Chan, ‘Anthropomorphism as a Conservation Tool’, 1889–92 (pp. 1891–2).

¹⁵⁶ Wohlleben, *The Hidden Life of Trees*, p. 83.

¹⁵⁷ Powers, *The Overstory*, p. 276.

¹⁵⁸ Powers, *The Overstory*, p. 166.

¹⁵⁹ Chamovitz, *What a Plant Knows*, pp. 169–70.

Much like Patricia draws her reader's attention to Douglas-firs, Powers introduces his reader to chestnuts.¹⁶⁰ The nutty providence of these American natives lures the reader to consider the most familiar aspect of our relationship with plant life—food—the symbol of new beginnings. In this way, the human-plant relationship is introduced in terms of 'giving trees' and receiving humans.¹⁶¹ Yet, once a fourth of 'America's perfect tree' population succumbs to an imported blight, the influence of human economy begins to leave an impression on the characters' and reader's understanding of what underlies our current relationship with plants.¹⁶² When the echoes of hyperconsumption shake the characters' lives, they are called to act on behalf of their vegetal kin almost before fully grasping the problem. Collectively, the decisions of these individuals 'run counter to their tribe's beliefs' so that each of them creates new meaning through actions that promote the balance of consumption and the post-humus.¹⁶³

A variety of solutions then emanates through the characters as they transform their plant kins' 'radical' signals into scientific papers (Patricia Westerford's work), activism, living art, and repurposed mechane.¹⁶⁴ One such response to the messages of plants is that of Ray Brinkman and Dorothy Cazaly, who, after a tumultuous companionship questioning ownership and freedom, turn their attention to their garden where, as a young couple, they planted a chestnut tree. In later life, what was once a forgotten garden turned into 'the Brinkman Woodlands Restoration Project', purposefully left untouched; and, what was 'planted in years gone by' turned into their 'daughter'.¹⁶⁵ By allowing part of their territory to morph into a space for wild things to grow, the couple share ownership of the land with their vegetal kin in the hopes of returning to their daughter some of that which sustained so many of their kind.

The 'bulbous and elephantine' aliens (foreign trees) that colonise 'Stanford's inner quad' migrate into Neelay Mehta's mind, setting him to work on a virtual world.¹⁶⁶ The ever-expanding bodies of these 'creatures' inspire him to develop an endless game whose players must 'figure out what the new desperate world wants' of them.¹⁶⁷ His game, 'Mastery',

¹⁶⁰ Powers, *The Overstory*, pp. 5, 178.

¹⁶¹ Ibid, p. 276.

¹⁶² Ibid, pp. 13–4.

¹⁶³ Ibid, p. 295.

¹⁶⁴ Ibid, pp. 325, 410.

¹⁶⁵ Ibid, pp. 209, 554, 574–5, 584, 587.

¹⁶⁶ Ibid, pp. 137, 139.

¹⁶⁷ Ibid, pp. 138–9.

becomes an instant success with players, and it evolves into a series of games in which the aim is to research ‘an enormous technology tree’, build empires, and conquer lands.¹⁶⁸ However, Neelay soon realises that the game’s mechanics, or mechane, which once hoisted players into positions of power, face ‘a Midas problem’—pointless prosperity.¹⁶⁹ The endless spreading, unlimited opportunities, and infinitely replenishing resources position players in a world without story or purpose, where playing ‘turns tedious’.¹⁷⁰ His game lacks direction and a point to its expansion, but more than this, it simply propagates the lie that matter is endless. In response, Neelay proposes ‘a game with the goal of growing *the world*, instead of yourself’, and thus unravels the Deus ex machina complex of ‘*Mastery*’ by redirecting the mechane back to the humus, to building communities over selves.¹⁷¹

Another transformation of matter culminates in the activism of Nicholas Hoel, Mimi Ma, Adam Appich, Douglas Pavlicek, and Olivia Vandergriff, whose lives come together to protest against the logging of the great American forests. These ‘defenders of the forest’ take on ‘new names’ to represent the work they intend to do alongside plants so that Nick becomes Watchman, Olivia is named Maidenhair, Mimi takes the name of Mulberry, Douglas comes to be known as Douglas-fir, and Adam turns into Maple.¹⁷² Although the group initially engages in peaceful protests, tension and violence with the loggers drive them towards more drastic measures to counter hyperconsumptive companies. In ‘a single act of desperation’ for justice and attention, the group decides to burn down a ‘future resort’s half-framed main lodge’, and an accident takes Maidenhair with it.¹⁷³ At this late stage in the novel, her death shocks the characters and the reader into considering whether the decision to burn a piece of land and all the life and material on it was ever worthwhile or ‘sustainable’ to begin with.¹⁷⁴ Human death serves as a reminder of how easy it is to slip into anthropocentric thinking but also how valuable all life is: ‘when you cut down a tree, what you make from it should be at least as miraculous as what you cut down’.

Powers weaves a tale of ‘*words before words*’ in an alliance with trees that sacrifice their conscious materiality for their stories, their seeds, to grow.¹⁷⁵ The influence of plants is

¹⁶⁸ Powers, *The Overstory*, p. 247.

¹⁶⁹ Ibid, p. 470.

¹⁷⁰ Ibid, p. 515.

¹⁷¹ Powers, *The Overstory*, pp. 247, 516–7.

¹⁷² Ibid, pp. 264, 270.

¹⁷³ Ibid, pp. 429, 433.

¹⁷⁴ Ibid, pp. 432, 538.

¹⁷⁵ Ibid, pp. 3, 530.

noted throughout the novel, directing the vibrant imagery, the dialogue, thoughts, and actions of human characters, and essentially the story itself through a performance of metamorphosis from chemical signals inspiring Powers to woven words on paper. However, what is particularly striking about *The Overstory* is the tree structure adopted for the different phases of the story moving from ‘Roots’ to ‘Seeds’. The intertwining branches of its structure enable the different stories and characters to come together and work towards a shared goal. Upon consuming the text, the reader metaphorically and literally journeys page by page through the understory and up the bole of the tree, where transformation brings about new perceptions of the natural world and the value of entanglement through the act of reading. In short, as *The Overstory* draws attention to its own materiality, it becomes a testament to the vibrancy of matter which when consumed becomes part of the reader’s story. Then, the last breaths of the novel—‘This *will never end*’—implant the palatable message of vegetal organisms within the reader’s mind (humus), where it takes root within their body, waiting to be turned into new material.¹⁷⁶

¹⁷⁶ Powers, *The Overstory*, p. 625.

Works Cited

‘About Suzanne Simard’, *Suzanne Simard* <<https://suzannesimard.com/about/>> [accessed 1 December 2021]

Afshin Akhtar-Khavari, ‘Suicide Tree’, in *The Mind of Plants: Narratives of Vegetal Intelligence*, ed. by John C. Ryan, Patrícia Vieira and Monica Gagliano (London: Synergetic Press, 2021), pp. 363–70

Aquinas, Thomas, ‘The Life of Christ: Question 44 Article 4 Objection 1’, in *The Summa Theologica of St. Thomas Aquinas: Part III*, trans. by Fathers of the English Dominican Province, *New Advent* <<https://www.newadvent.org/summa/4044.htm>> [accessed 27 December 2021]

Balas, Benjamin and Jennifer L. Momsen, ‘Attention “Blinks” Differently for Plants and Animals’, *CBE—Life Sciences Education*, 13 (2014), 437–43

Balding, Mung and Kathryn J. H. Williams, ‘Plant Blindness and the Implications for Plant Conservation’, *Conservation Biology*, 30 (2016), 1192–9

Bennett, Jane, *Vibrant Matter: A Political Ecology of Things* (Durham: Duke University Press, 2010)

Chamovitz, Daniel, *What a Plant Knows: A Field Guide to the Senses of Your Garden – And Beyond* (London: Oneworld Publications, 2013)

Chan, Alvin A. Y.-H., ‘Anthropomorphism as a Conservation Tool’, *Biodiversity and Conservation*, 21 (2012), 1889–92

Clark, Timothy, ‘Phenomenology’, in *The Oxford Handbook of Ecocriticism*, ed. by Greg Garrard (Oxford: Oxford University Press, 2014), pp. 276–90

‘Decomposition and Decay’, *Trees for Life* <<https://treesforlife.org.uk/into-the-forest/habitats-and-ecology/ecology/decomposition-and-decay/>> [accessed 18 December 2021]

Deleuze, Gilles and Félix Guattari, *A Thousand Plateaus: Capitalism And Schizophrenia*, trans. by Brian Massumi (Minneapolis: University of Minnesota Press, 1987)

Deleuze, Gilles, *Expressionism in Philosophy: Spinoza*, trans. by Martin Joughin (New York: Zone Books, 1992)

Eddy, Timothy J., Gordon G. Gallup Jr and Daniel J. Povinelli, ‘Attribution of Cognitive States to Animals: Anthropomorphism in Comparative Perspective’, *Journal of Social Issues*, 49 (1993), 87–101

‘Forest Biocoenosis’, *Encyclopedic Dictionary of Landscape and Urban Planning*, ed. by Klaus-Jürgen Evert, Edward B. Ballard, David J. Elsworth, Icíar Oquiñena, Jean-Marie Schmerber, and Robert E. Stipe (Berlin: Springer, 2010), p. 250
<https://doi.org/10.1007/978-3-540-76435-9_4992>

Foucault, Michel, *The Order of Things: An Archaeology of the Human Sciences*, trans. by Alan Sheridan (New York: Pantheon, 1970)

Frank, Albert B., ‘On the nutritional dependence of certain trees on root symbiosis with belowground fungi (an English translation of A.B. Frank’s classic paper of 1885)’, trans. by James M. Trappe, *Mycorrhiza*, 15 (2005), 267–75

Gagliano, Monica, Stefano Mancuso, and Daniel Robert, ‘Towards Understanding Plant Bioacoustics’, *Trends in Plant Science*, 17 (2012), 323–25

Gee, Henry, *A (Very) Short History of Life on Earth: 4.6 Billion Years in 12*

Chapters (London: Picador, 2021)

Good News Translation (Today's English Version), 2nd edn (Philadelphia, PA: American Bible Society, 1992)

Goodman, David, 'Ontology Matters: The Relational Materiality of Nature and Agro-Food Studies', *Sociologia Ruralis*, 41 (2001), 182–200

Hall, Matthew, *Plants as Persons: A Philosophical Botany* (Albany: State University of New York Press, 2011)

Hall, Matthew, *The Imagination of Plants: A Book of Botanical Mythology* (Albany: State University of New York Press, 2019)

Ingold, Tim, 'The Sustainability of Everything', as part of *Pluralizing The Anthropocene – Virtual Colloquium* (Sci-Tech Asia: University of Coimbra, 15 February 2021)

<<https://www.youtube.com/watch?v=yav1hb2RQwc>>

Ingold, Tim, *Being Alive: Essays on Movement, Knowledge and Description* (London: Routledge, 2011)

Kimmerer, Robin Wall, *Braiding Sweetgrass* (Minneapolis, Minnesota: Milkweed Editions, 2013)

Kinchin, Ian M., 'Investigating secondary-school girls' preferences for animals or plants: a simple "head-to-head" comparison using two unfamiliar organisms', *Journal of Biological Education*, 33 (1999), 95–9

Knapp, Sandra, 'Are Humans Really Blind to Plants?', *Plants, People, Planet*, 1 (2019), 164–8

Lusher, Tim, 'The man who thinks trees talk to each other', *The Guardian*, 2016
<<https://www.theguardian.com/environment/2016/sep/12/peter-wohlleben-man-who-believes-trees-talk-to-each-other>> [accessed 1 December 2021]

Macfarlane, Robert, *Underland* (London: Penguin, 2020)

Marder, Michael, *The Philosopher's Plant: An Intellectual Herbarium* (New York: Columbia University Press, 2014)

McKenna, Dennis, 'Foreword', in *The Mind of Plants: Narratives of Vegetal Intelligence*, ed. by John C. Ryan, Patrícia Vieira and Monica Gagliano (London: Synergetic Press, 2021), pp. xi–xiv

Merleau-Ponty, Maurice, *The Phenomenology of Perception*, trans. by Colin Smith (New York: Routledge and Kegan Paul, 1981)

'Mycorrhizal Fungi', *The Royal Horticultural Society* <<https://www.rhs.org.uk/biodiversity/mycorrhizal-fungi>> [accessed 8 December 2021]

Nealon, Jeffrey T., *Plant Theory: Biopower and Vegetable Life* (Stanford: Stanford University Press, 2016)

Nørretranders, Tor, *The User Illusion: Cutting Consciousness Down to Size*, trans. by Jonathan Sydenham (New York: Viking, 1998)

Powers, Richard, *The Overstory* (London: Vintage, 2019)

Ro, Christine, 'Why "plant blindness" matters — and what you can do about it', *BBC*, 2019
<<https://www.bbc.com/future/article/20190425-plant-blindness-what-we-lose-with-nature-deficit-disorder>> [accessed 19 November 2021]

Robbins, Jim, 'Why Trees Matter', *New York Times*, 2012
<<https://www.nytimes.com/2012/04/12/opinion/why-trees-matter.html>> [accessed 5 December 2021]

Schussler, Elisabeth E. and Lynn A. Olzak, 'It's Not Easy Being Green: Student Recall of Plant and Animal Images', *Journal of Biological Education*, 42 (2008), 112–9

Sheldrake, Merlin, *Entangled Life: How Fungi Make Our Worlds, Change Our Minds and Shape Our Futures* (London: The Bodley Head, 2020)

Simard, Suzanne W., David A. Perry, Melanie D. Jones, David D. Myrold, Daniel M. Durall, and Randy Molina, 'Net Transfer of Carbon between Ectomycorrhizal Tree Species in the Field', *Nature*, 388 (1997), 579–82

Simard, Suzanne W., *Finding the Mother Tree: Uncovering the Wisdom and Intelligence of the Forest* (London: Allen Lane, 2021)

Simard, Suzanne, 'How trees talk to each other', *TED*, 2016
<https://www.ted.com/talks/suzanne_simard_how_trees_talk_to_each_other?language=en#t-15612> [accessed 6 December 2021]

Sloss, Craig R., Kira E. Westaway, Quan Hua, and Colin V. Murray-Wallace, 'An Introduction to Dating Techniques: A Guide for Geomorphologists', *Treatise on Geomorphology*, 14 (2013), 346–69

Wandersee, James H. and Elisabeth E. Schussler, 'A Model of Plant Blindness' [Poster-paper] 3rd Annual Associates Meeting of the 15^o Laboratory, (Baton Rouge, LA: Louisiana State University, 13 April 1998a)

Wandersee, James H. and Elisabeth E. Schussler, 'Plants or Animals: Which Do Elementary and Middle Students Prefer To Study?' [Unpublished manuscript] 15^o Laboratory, (Baton Rouge, LA: Louisiana State University, 1998b)

Wandersee, James H. and Elisabeth E. Schussler, 'Preventing Plant Blindness', *The American Biology Teacher*, 61 (1999), 82–6

Wohlleben, Peter, *The Hidden Life of Trees: What They Feel, How They Communicate*, trans. by Jane Billinghurst (Vancouver: Greystone Books, 2016)

Wulf, Andrea, 'Humboldt's Cosmos', in *The Invention of Nature: The Adventures of Alexander von Humboldt, The Lost Hero of Science* (New York: Alfred A. Knopf, 2015)