Please cite the Published Version

Schoene, Berthold (2022) Arborealism, or Do Novels Do Trees? Textual Practice, 36 (9). pp. 1435-1458. ISSN 0950-236X

DOI: https://doi.org/10.1080/0950236X.2021.1900379

Publisher: Taylor & Francis (Routledge)

Version: Accepted Version

Downloaded from: https://e-space.mmu.ac.uk/627148/

Usage rights: © In Copyright

Additional Information: Copyright 2021 Informa UK Limited, trading as Taylor & Francis Group

Enquiries:

If you have questions about this document, contact openresearch@mmu.ac.uk. Please include the URL of the record in e-space. If you believe that your, or a third party's rights have been compromised through this document please see our Take Down policy (available from https://www.mmu.ac.uk/library/using-the-library/policies-and-guidelines)

Arborealism, or Do Novels Do Trees?

Berthold Schoene, Manchester Metropolitan University

Orcid: 0000-0001-6536-9093

b.schoene@mmu.ac.uk

10,285 words

ABSTRACT

What makes a realist novel an arborealist novel? What does narrative and, in particular, what does the novel need to learn or unlearn in order to 'do' trees? This article looks at two contemporary novels – Annie Proulx's *Barkskins* (2016) and Richard Powers' *The Overstory* (2018) – whose main interest has shifted from predominantly portraying human affairs to mobilising a more-than-human eco-narratological dynamic. By invoking the possibility of a plant-led creative impetus, their arborealist outlook and orientation take the traditional novel form out of its realist comfort zone and probe its deeply-ingrained anthropocentric limitations. Following a critical review that examines a wide range of ideas about vegetal agency, and the communicative and inscriptive capabilities of plants, Proulx is shown to experiment with arborealism within the paratextual framework of her novel, while Powers appears embarked upon a full-on, state-of-the-art instantiation of the arboreal sublime.

KEYWORDS

arborealism; plant writing; Annie Proulx; Richard Powers; dendrography; the ecological sublime; eco-narratology.

I am interested in novels that bring to light how narrative struggles with plants – in particular, what narrative needs to learn or unlearn not only to 'do' trees, but moreover to let trees do the novel. Put differently, I am asking what might facilitate the shift from realist novel, focused on the representation of human affairs, to arborealist novel, designed to test the limits of representational autonomy beyond the human by courting the possibility of a tree-led creative impetus. Following a critical review of the cultural standing of plants, my investigation zooms in on plant language and plant writing in particular, including recent work by Patrícia Vieira, Elizabeth Carolyn Miller, Monica Gagliano and Eduardo Kohn. I will then embark on a close reading of Annie Proulx's Barkskins (2016) and Richard Powers' The Overstory (2018) to examine how the two novels deploy and develop 'arborealism'. From the outset, the paratextual scaffolding of Barkskins presents the novel to us as framed by arboreality, the unfolding of its human drama embedded wholly within treeness. My reading of *The* Overstory goes a step further by positing that under Powers' authorship paratextual arborealism evolves into dendrographic writing not just of, but indeed by trees. Thus clearing the path for a genuine rapport between the human and the arboreal, the arborealist mode is shown to effect an interrogation of our ways of doing trees (and indeed our ways of doing the entire world) by inviting trees to have a say and 'do the human' in turn.

1. Plant-Blindness

Plants are primary anchor organisms, which by 'feeding on the sun' 1 provide food for other advanced lifeforms. Plants make the world inhabitable by protecting us from harmful radiation, harnessing cosmic energy, and excreting as their waste the very air that we breathe. Yet rather than eliciting a sense of creaturely indebtedness from us, the world-making benevolence, generosity and selflessness of plants appear to pit them quintessentially against our own deeply-ingrained 'species-narcissism'. As Erle Ellis explains, humanity has always

been 'a profoundly disruptive force like no other on Earth', yet we are only just beginning to understand that we are indeed 'capable of changing Earth permanently for the worse'³. The values of plants are no values we share, which has led to our estrangement from the natural world and resulted in a deplorable, profoundly harmful 'extinction of experience'⁴. It is not simply that we either cannot, or categorically refuse to, acknowledge our existential dependence on plants, but rather that mostly we fail to see them at all, resulting in what Randy Laist laments as 'the defoliation of the cultural imagination'⁵.

David Abram entreats us to regard the exceptionalist self-aggrandisement of the human 'less [as] a product of careful and judicious reasoning than of [...] a real inability to clearly see, or focus upon, anything outside the realm of human technology, or to hear as meaningful anything other than human speech'⁶. Abram's work seeks to rehabilitate the human and overcome 'the loss of our ancestral reciprocity with the animate earth' by reinserting humanity into 'the living dream that we share with the soaring hawk, the spider, and the stone silently sprouting lichens on its coarse surface'7. He is not arguing for a reversal of our detachment from the rest of the world. Rather, the 'eerily potent' wonder of being human depends on retaining and indeed cultivating a certain degree of separation, on experiencing other lifeforms as 'familiar, even familial' and cherishing this 'kinship or consanguinity' while appreciating humanity's pronounced distinctiveness in equal measure. Insistent upon humanity's inalienable fit, Abram writes that 'our bodies have formed themselves in delicate reciprocity with the manifold textures, sounds, and shapes of an animate earth'8, an observation that chimes with Laist's remark that 'the shape of our hands and fingers are reverse-molds of millions of years of tree branches'9. Within such a framework, even humanity's incontrovertible difference – due to our being equipped with intellect, consciousness and language – becomes an integral component and expression of nature's

design. 'We are organs of this world, flesh of its flesh', Abram declares, and 'the world is perceiving itself *through* us.'¹⁰

Abram's premise that 'we are human only in contact, and conviviality, with what is not human'¹¹, and indeed his entire project of garnering evidence for humanity's seamless insertion within the natural world, is typical of a particular strand in contemporary ecocriticism, which 'sees the widespread environmental destruction as an aberration from some more truly benign human nature, located either in the past or in some possible future culture that remains to be constructed'12. Such faith in humanity's pre-ordained place within a larger design is being contested by a more nihilistic (some will prefer the term 'realistic') way of thinking, which regards humankind as irredeemable. As Timothy Clark explains, while humanity is inarguably a product of evolution, our destiny as a species has unfolded concurrently with a techno-cultural revolution that has long outrun nature's pace and now proceeds by its own unnatural dynamic. Hence, human progress ought not to be mistaken for standard, albeit occasionally erratic, evolutionary advancement; rather, it represents an exponentially world-disrupting escalation whose 'scalar disjunctiveness' has painted us into a corner of irremediable alienation. Notably, instead of echoing Abram's insistence on 'conviviality' as a marker of humanity's relationship with the natural world, the novelist John Fowles speaks of 'our *forced* co-existence with all the other species of the planet'. Fowles perceives nature as ultra-human – 'not with us or against us, but outside and beyond us, truly alien'. Accordingly, the first step towards positioning ourselves authentically in relation to nature is to embrace its alterity: 'we shall not cease to be alienated [...] from nature until we grant it its unconscious alienation from us'. 14 What this categorical separation also signifies is of course that not only are we by no means in charge of nature, we are not a necessary, let alone indispensable requirement to its ongoing operation either.

In Clark's diagnosis, modern humanity manifests as a volatile, deeply problematic entity whose manifold sensible and well-intentioned aspects can do nothing to mitigate the devastating impact of its collective force:

One can picture the current humanity as a super-Leviathan whose body is made up of lots of smaller Leviathans or human groups. Many would be rational, peaceful and accommodating, or people just trying to get by as best they can. But this time the giant they comprise would not be the force of restraint and order that was the Leviathan in Hobbes. Rather, if characterized in terms of the psychology of an individual, this planetary giant would not seem to have the supposedly definitive human characteristics of foresight and restraint, but it would be a self-destructive and self-deluding figure, more like a psychopath.¹⁵

Modern humanity undoes nature's creation of an intact world. The havoc we wreak is not the result of a passing malaise either, but the agency of someone whose very nature is warped and impaired. We see ourselves not as an integral part of a world, but as the world itself; everything else has no being, bearing, or visibility in its own right. It should therefore come as no surprise that in much cultural representation (as well as theory and criticism) nature appears exclusively as ambience or backdrop, which means it does not appear at all. Meanwhile, non-human animals tend to serve in the roles of mere foil, inferior sidekick, or pliable metaphor. As Timothy Baker explains, 'animals [...] are the others against which humanity measures itself¹⁶, and according to Owain Jones and Paul Cloke, 'if all this neglect is so for fauna, it is even more so in the case of flora, which remains an even more ghost-like presence in contemporary theoretical approaches' 17. These observations return us to a point I have already alluded to, namely modern humanity's 'plant-blindness', defined by James Wandersee and Elisabeth Schussler as 'the inability to see or notice plants in one's own environment, leading to the inability to recognize the importance of plants in the biosphere and in human affairs' 18. In cultural representation plants serve mostly as environmental furniture. Even in otherwise pioneering criticism such as Elizabeth Chang's Novel

Cultivations (2019), which seems keen to place plants at the centre, the focus remains on their *use* in narrative innovation, that is, on 'how fictional plant life mediates the possibilities of [human] character and selfhood' 19.

Due to its plant-blindness, narrative is pre-programmed to fail plants. According to Matthew Hall, this is true despite the fact that 'most places on Earth which contain life are visibly *plantscapes* [and] being in the natural world first and foremost involves being amongst plants' 20. Narrative continues to get and do plants wrong, much more so than is the case with non-human animals, which appeal to our imagination and conscience by virtue of their creaturely similitude. In contrast, as highlighted by Monica Gagliano, John Ryan and Patricia Vieira, plants are 'expected to exhibit animal-*like* qualities in order to be acknowledged as sensitive living organisms, rather than being appreciated in their own right and on their own terms' 21. From failing to acknowledge them altogether to expedient misappropriation, the problem with plants is that they appear to be nothing like us. This makes even pure and simple anthropomorphism a problem, especially if Jenny Diski's assumption is correct 'that an anthropocentric view is fundamental to human perception, and cannot be otherwise: there is no perspective available to humans that does not place them at the centre of the world' 22. That said, anthropomorphism is precisely the means by which at least trees have recently been given an opportunity to re-root in the popular imagination.

In Peter Wohlleben's best-selling *The Hidden Life of Trees* (2015), which conjures 'a world where trees are responsive and sociable creatures, much more like us than we ever imagined'²³, there are virtually no limits to anthropomorphic appropriation: trees appear as 'true friends' or 'street kids', and as 'mother trees'; there is even a 'tree school'²⁴, and so it continues throughout the entire book. While 'effectively challeng[ing] ideas of human exceptionalism and foster[ing] a greater appreciation of nonhuman life forms'²⁵, Wohlleben's relentless anthropomorphism erodes the ecological and representational credibility of his

account as his trees set into fairy-tale grotesques. Equally inviting accusations of tree-hugging excess, Gary Nabhan's *Mesquite* (2018) opens with an account of the author's experience of metamorphosing into the eponymous shrub. Having spent 'a minute, an hour, or an afternoon, *in arboreal rapture* [...] with all my leaflets reverberating in rhythm to the slightest stirring of a desert breeze', Nabhan asserts that nothing less than 'fledg[ing] fully into treehood' – that is, yielding to full mind-and-body dendromorphosis – will do if we want to appreciate what he terms '*arboreality*, the experience of being a tree as it truly makes sense of this world around us.'²⁶ While I agree of course that tree aficionados like him 'do not deserve to be called weirdos'²⁷, Nabhan fails to challenge his readers' taxonomic preconceptions, and as a result our disbelief remains largely unsuspended. His efforts to induce 'our own frail species [to] learn to be more resinous, resonant, or resilient'²⁸ are laudable; however, in terms of accessibility, appeal, and likely impact his prophetic manifesto falls short of the much more immediately engaging analogising we find at work in populist writings such as Wohlleben's or – to name another example – Sarah Spencer's self-help guide *Think Like a Tree* (2019)²⁹.

Anthropomorphism remains controversial as a potential deal breaker that stands in the way of 'a real celebration of "plantness"³⁰. As Jones and Cloke stress in their exploration of 'tree cultures', 'relationships between humans and trees are characterized by an essential otherness of being. Trees live and reproduce in ways different to ours: they are differently embodied, and they die differently to us', which leads them to infer that 'we cannot [...] simply transpose notions of inter-human relations, or even human-animal relations, to human-tree relations'.³¹ Yet as Val Plumwood shows, anthropomorphism is also increasingly used as a charge to disparage anyone deemed 'guilty of presenting the non-human world in more agentic and intentional terms' or, put differently, 'to bully people out of "thinking differently". According to Plumwood, anthropomorphism has come to play the role of

reactionary 'policeman for reductive materialism, enforcing polarised and segregated vocabularies for humans and non-humans'.³² How, then, are we to tell new stories about our kinship with plants when intimations of an innate family likeness are taboo? What degree or extent of anthropomorphism counts as too much? Moreover, what precisely can or do we hope to see should we eventually get to behold plants in their full undistorted plantness? How much plant difference can narrative accommodate without lapsing into injurious capture and distortion? Finally, due to its radical alterity, must authentic plantness always remain at odds with and somehow protrude from human narration?

2. What the Plant Says

One of the tenets of material ecocriticism is that non-human life, and indeed all matter, is endowed with an innate ability to express itself. 'If matter is agentic, and capable of producing its own meanings', Serenella Iovino and Serpil Oppermann argue, then 'every material configuration, from bodies to their contexts of living, is "telling"'. While principally in agreement here, I am unconvinced that the idea of matter unfolding, and in that very process writing itself, constitutes a particularly novel or radical insight. Iovino and Oppermann disclose the non-human world to us as 'a *site of narrativity*, a storied matter, embodying its own narratives in the minds of human agents and in the very structure of its own self-constructive forces', but surely, just like 'the conventional ecological vision according to which everything is connected with everything else', the notion of world-as-text is hardly new. At the same time, Iovino and Oppermann's assumption that nonhuman agents always depend for the telling of their stories on 'the material imagination of their human counterparts' strikes me as a curious resurgence of the same old anthropocentrism, departing and detracting substantially from material ecocriticism's otherwise unwavering championing of non-human agency. While eager to 'debunk our habit of worlding as if we

are the only storied beings'³⁶, material ecocriticism appears incapable to conceive of narrative autonomy without the human. Nor can it envisage an eventuality where a nonhuman agency, not only unaccomodable within narration but indeed wholly disinterested in humanity, might resist human storying, whether 'co-constitutively' or otherwise, possibly because it has a much more complex and compelling story of its own to convey.

Far more intriguing and radical in its outlook than Iovino and Oppermann's material ecocriticism, which against its own best intentions perpetuates 'one of our supreme fictions that the landscapes, the elemental forces, the creatures of the world, all align in relation to *us*³⁷, is Patrícia Vieira's concept of *phytographia*. According to Vieira, the world as we know it has always been, and continues to be, scripted by plants – quite literally. In Vieira's deconstruction of the way we assume the world works, plants 'use sunlight to create their material articulations in the world, and, in doing so, imprint themselves in the biosphere, enabling the inscription of all other living beings in the process' Raking great care to avoid anthropomorphism in her definition of 'vegetal life and inscription [as] eminently graphic' Application, Vieira dislodges the entire logocentric bedrock of world-creation. She also casts doubt on recent efforts, under cover of the Anthropocene, to promote a further 'upscaling of human life' so it 'plays in the same league as, say, heat waves, volcanoes, and Antarctic ice' Learly, as far as Vieira is concerned, it is plants that deserve to have a geological period or two named after them – not mankind.

In the same pioneering collection of essays – *The Language of Plants*, co-edited by Vieira with Gagliano and Ryan – Gagliano likewise strikes at the very foundation of human hegemony as she contests our exclusive ownership of linguistic competency by making the case for a far less speciesist understanding of language. 'What if language is a fundamentally natural and inevitable consequence of being that emerges as an organism makes meaning of its surroundings', Gagliano queries, 'and, in turn, engraves the very identity of that organism

and its physical embodiment in its world'?⁴¹ In close alignment with Eduardo Kohn's semiotic endeavour to devise 'an anthropology beyond the human' in *How Forests Think* (2013), Gagliano is dissatisfied with the learned *opinio communis* that symbolic self-expression and representation, facilitated by a uniquely human linguistic capability, is all there is. Like Gagliano, Kohn too pushes for the inclusion of 'underexplored properties that are quite distinct from those that make human language special', strongly 'encourag[ing] us to explore what signs look like beyond the human'.⁴²

At first glance, Erin James' examination of tree rings as an example of plant narrative in yet another contribution to *The Language of Plants* appears to be rising to Kohn's challenge. Unfortunately, however, James resorts far too quickly to enumerating all the ways in which arboreal narration falls short of the standards of human authorship. In the end, all tree rings serve to do in her analysis is 'suggest that the very idea of narrative is not limited to human storytellers' 43. Yet James' insistence in this context that 'trees are capable of producing their own meanings' must appear disingenuous because, as we know, story-telling requires much more than a simple recording of time passing. Determined to identify tree rings as 'examples of a material language at work', James' eco-materialist enquiry is scuppered by her own anthropocentric preconceptions, which posit that a successful plant language is one 'that can in turn inspire human language and new human imaginations', thus making human reception the measuring stick for plant accomplishment. 'What the plant says' (to cite James' title) is both primitive and essentially preliterate; plant narration only acquires meaning under and in relation to human perusal. James' investigation fails to instantiate what she so promisingly envisions in conclusion, namely the possibility of a truly plant-led creative impetus capable of, yet crucially not dependent on, transforming human narration. 'How might narratives take cues from other, newly studied vegetal modes of signification',

she asks. 'What would such narratives look like and into what new imaginative terrain might they usher readers?'⁴⁴

While according to Timothy Baker fiction 'can never be other than human', he is quick to concede that 'whether central or peripheral, the appearance of nonhuman animals in fiction challenges the stability of linguistic representation, and the implied anthropocentrism of the novel form'. 45 Such destabilisation appears all the more pronounced whenever the novel comes face to face with unruly plant life threatening to engulf and undermine its representational order. The novel, traditionally accustomed to encountering little resistance to its own omnivorous root-and-branch assimilation of the world, struggles in the face of exotic plantlife's vigour and alien alterity. A classic example is Joseph Conrad's invocation of the jungle as 'the great wall of vegetation, an exuberant and entangled mass of trunks, branches, leaves, boughs, festoons' and 'a rolling wave of plants, piled up, crested, ready to topple over the creek, to sweep every little man of us out of his little existence' 46. Another, more recent example is Hanya Yanagihara's *The People in the Trees* (2013), which highlights the protagonist's acute bewilderment at 'so many shades and tones of green – serpent, aphid, pear, emerald, sea, grass, jade, spinach, bile, pine, caterpillar, cucumber, steeped tea, raw tea', prompting him to vent his exasperation over nature's 'exhausting performance that never ended, and for what? To prove [...] its unknowability, its fundamental lack of interest in humanity'.47 Not known to turn down a challenge, the novel not only welcomes but indeed actively pursues the destabilisation of conventional strategies for meaning-making, always keen to broaden its repertory and adjust its outlook and orientation. Conrad and Yanagihara pre-empt Clark's question if 'the human imagination [is] really so depressingly enclosed, able to be captivated only by immediate images of itself'⁴⁸, as well as Abram's despair over how we could 'ever have become so *deaf* to these other voices that nonhuman nature now seems to stand mute and dumb, devoid of any meaning besides that which we choose to give it⁴⁹.

Sharing Kohn's anthropological disdain for the notion that we might be 'forever trapped inside our linguistically and culturally mediated ways of thinking' the novelists leave their readers no option but to confront that 'great wall of vegetation' and its stark exposure of man's precarity, thus instigating a long-overdue process of dismantling our speciesist delusions of superiority and grandeur. As Gillian Beer declares in her preface to *Darwin's Plots* (1983), if there are indeed any 'stories to be told from places and organisms until now unrecognised', then we can always rely on the novel – invariably alert and responsive to 'scientific work now' – to think up suitable means of delivering them. ⁵¹

The first in-depth analysis of plantness and, more specifically, arboreality (or 'treeness') in literature is Elizabeth Carolyn Miller's essay on dendrography and ecological realism in Thomas Hardy's Under the Greenwood Tree (1872) and The Woodlanders (1887). Venturing beyond a purely vehicular deployment of plants for enhancing the portrayal of human affairs, Miller presents Hardy's introduction of the arboreal dimension as a truly paradigm-shifting innovation that recasts his writing to such an extent that it deserves to be labelled 'dendrographic'. *Dendrography*, or 'tree writing', is defined by Miller as 'an attempt to imagine a fictional viewpoint beyond the human' and as 'a form of ecological realism that strives to represent the natural world more accurately by inhabiting the scale and perspective of the arboreal⁵². According to Miller, the introduction of dendrographic elements into his writing significantly intensifies the realism of Hardy's novels as it enables him to transcend the primacy of anthropocentric representation and put human life in perspective by inserting a loftier, spatially more expansive viewpoint, as well as an awareness of lifespans exceeding the duration of both individual and communal life. As Miller illustrates in more detail, 'many of Hardy's passages depicting footpaths feature an elevated narrative perspective positioned at the tree canopy, above the humans rather than in the thick of them'53. Thus unmoored from their traditional position as mere background fixtures, Hardy's trees reassemble into a

convivial environmental frame within which 'to be "under" the tree is [...] to coexist inescapably in the same medium as the tree' ⁵⁴. Accordingly, the light or shade that Hardy's trees cast on the action – quite literally, their 'adumbration' of human affairs – matters. It is the trees' narrative co-creation that installs the characters' lives within a truly multiperspectival and multi-dimensional world embedded within a variety of intersecting spatial and temporal scales. Or, at least, this would be the dendrographic ideal-case scenario. In actively courting arborealist representation, Hardy's novels do indeed do trees, yet according to Miller, his work must of necessity remain confined to writing *about* trees rather than instantiating an actual case of writing *by* trees.

Miller concludes that dendrography 'stops short of claiming actual success in achieving such a wider perspective, reminding us instead of the mediated forms of human perception on which it depends'⁵⁵. In my own readings that follow I intend to interrogate this caveat in more detail. Might the contemporary novel have begun to develop techniques to overcome its allegedly refractory anthropocentric limitations? Might it now be in a position where it can delegate at least part of its world-creative function to trees?

3. Paratextual Arborealism in Barkskins

Inspired by Miller's introduction of the concept of dendrography into literary studies, I shall now embark on a closer analysis of two contemporary novels – Annie Proulx's *Barkskins* (2016) and Richard Powers' *The Overstory* (2018) – in order to examine how they deploy and develop the arborealist mode. To what extent do these novels successfully install a viewpoint beyond the human, putting human life in perspective by framing our existence – and co-existence with trees and other lifeforms – within a grander scheme of spatial and temporal scales? In this context, I would like to define 'arborealism' as going beyond dendrography in that it challenges the apparent truism that tree-writing must always depend

on human mediation. I am looking for signs of an inherent arboreality in these novels, that is, signs of an arboreal narrative agency or arboreal language that influence both the way these texts are written and the way they are received.

Barkskins is an historical novel about deforestation in Canada and the northeastern United States from the late seventeenth century onwards. It charts the entwined histories of two families and their divergent roles in the timber industry: the fiercely entrepreneurial, upwardly-mobile Dukes and their employees, the frontier-dwelling, increasingly Mi'kmawidentified Sels. Commending its circumvention of pure cli-fi post-apocalyptic horror, Byron Williston has called *Barkskins* 'the first great novel of the Anthropocene' due to its painstaking depiction of 'our ecologically parlous present and the dark future that likely awaits us as the twin historical upshots of a history of environmental degradation'. ⁵⁶ One recurrent theme in the novel is the fallers' unshakable faith in the 'everlasting', 'eternal', 'infinite and permanent' inexhaustibility of the forest, which persists even as the bleak repercussions of deforestation become increasingly plain to see.⁵⁷ Modern humanity's propensity for this kind of cognitive failure appears hereditary as even maverick Duke scion Charley, banished to the Amazonian jungle for his progressive ideas about forest ecology, succumbs to the same, seemingly inveterate error of judgment. 'I take comfort in the thought that none of them can really harm that massive heart of the world', Charley declares as the novel draws to its close. 'The rain forest is so large and rich it defeats all who try to conquer it'. 58 Another central theme is Proulx's gradual elision of the distinction between western and indigenous perceptions of the natural world. Whereas originally the Mi'kmaw 'were so tightly knitted into the natural world that their language could not reflect the union and that neither could be separated from the other', later in the novel Jinot Sel's response to the forest appears virtually indistinguishable from Marlow's in *Heart of Darkness*: '[The wild New

Zealand forest] repulsed him with its violent tangle of vegetable exuberance, its unfamiliarity and ancient aloofness'.⁵⁹

Much more intriguing, however, than Proulx' thematic preoccupations are the arborealist techniques and devices she deploys in the composition of her novel. With reference to Gilles Deleuze and Félix Guattari's explication of 'arborescent' and 'rhizomic' modes of thought and representation in A Thousand Plateaus (1980)⁶⁰, for example, one might want to start by examining the degree to which Barkskins aligns itself with either one or the other, or indeed comprises a conflation of the two. According to Jeffrey Nealon in Plant Theory (2016), 'we already know full well what the rhizome is: multiple, intense, subterranean, resistant, connective, smooth, molecular, a block of becoming. (And thereby we also know what it's not: totalized, extensive, arborescent, compliant, closed, striated, molar, a block of being)'. 61 Whereas 'arborescent' makes use of the actual appearance of a tree, its trunk and branches, 'rhizomic' refers to all the parts of the tree that remain unseen, yet which are equally vital for its survival. Unlike arborescent structures, rhizomes operate mainly horizontally and often in a wildly sprawling fashion; their activity remains largely underground where anything might link up with anything else. Actual trees of course effortlessly incorporate both modes – the arborescent and the rhizomic, making a nonsense of their human conceptualisation as strictly compartmentalised spheres of perception and experience. In Karen Houle's terms, like all plants, trees are at once 'air-breathers' and 'earth-touchers' and, as a result, they are likely to 'enjoy qualities and freedoms of movements – passions – not available' to us. 62 The Deleuzian definitions have never been more than very roughshod extrapolations, and they have never really been about doing representational justice to trees. Nonetheless, their failure to encapsulate nature's holistic complexity is spectacular. Furthermore, according to Nealon, 'rhizomatics has become a template for discussing virtually everything, except plant life'63.

The challenge for my own enquiry, then, is to devise what Gagliano, Ryan and Vieira envision as 'a phytocentric [...] form of literary criticism [that] would seriously regard the lives of plants in relation to humankind in terms that would look beyond the purely symbolic or "correlative" dimensions of the vegetal '64. With regard to *Barkskins* I shall argue that the paratextual scaffolding of the novel – its title, table of contents and chapter headings, as well as its supplementary provision of two family trees – presents the novel to us from the moment we pick it up as informed and framed by arboreality, the unfolding of its human drama from start to finish embedded wholly in treeness. This all-encompassing textual dendromorphosis starts with the title and the dedication page, designed to engage and involve absolutely everybody, including the reader – 'barkskins of all kinds', from arboreal specialists to 'the rest of us' 65 – with the pioneering transformative power of this novel about trees.

Proulx's selection of banal words and phrases like 'hair', 'clouds', 'in the bush' or 'moonlight' for her seventy chapter headings makes the outermost layer of her novel appear brittle and rough, quite as if it had been glued together from swept-up leaves or 'heaps of bark and mountains of chips'66. Hers is a table of contents that quite expressly does not impose any fixed meaning-bearing structure on what follows; neither does it set a specific tone, or present itself as the result of meticulous historical research. Proulx's fictional historiography comes in no fixed shape or order; the passing of time has left no unmistakable records in its wake. From the outset *Barkskins* unfolds as a frail and transient calendar, its markers resembling notches haphazardly carved into a weather-beaten post. Its focus on humanity appears torn, fragmented, distracted, incidental, unable to identify or concentrate on the main events due to the gravitational pull of a larger, indifferent, decidedly non-anthropocentric order. Subverting the characters' frenzied preoccupation with the conquest and cultivation of new land, the table of contents makes each chapter look exactly the opposite of a successful clearance: rather than making progress by adding new territory to its

ever-expanding realm, humanity is forever attempting to assert itself and struggling to find an enduring foothold in its new environment.

The provided timeline is not properly linear either, but operates in fits and starts, occasionally turning back on itself and omitting several years altogether. Sections 1 and 2 both commence in 1693, but while one stretches to 1716, the other extends into 1727. Section 3 then covers 1724 to 1767, whereas section 4 completes in 1766. The years 1805 to 1807 receive no coverage at all, and the final section comes in one hurried, incongruously compressed coda subsuming 127 years (1886-2013). Read with reference to the beginnings of the science of dendrochronology, these incongruities reveal themselves as yet another potentially arborealist feature. As Valerie Trouet recounts in *Tree Story* (2020), after the first dendrochronologists had successfully deciphered and periodised a number of discrete treering samples gleaned from a variety of different tree sources, the challenge that remained was to track down hitherto hidden linkages and overlaps between them, and to 'cross-date treering data from multiple trees or sites' with the aim of fitting together one coherent tree-ring chronology for the entirety of human history.⁶⁷ A similar effort informs Proulx's novel, which struggles to match up the lives of 'barkskins of all kinds', whose one shared common denominator is their deeply-troubled relationship with trees.

Possibly Proulx's most conspicuous arborealist framing device is her appendage of elaborate family trees for both the Dukes and Sels. Naturally, one would expect a family tree to be overtly arborescent in design. However, the sheer number of individuals and generations included in Proulx's narration, which stretches across three centuries, lends both trees a markedly rhizomic appearance. This is accentuated further by the convention to present family trees upside down, with the original root ancestor positioned at the top and their descendants scattering sucker-like beneath them. Compared to the Dukes', the Sels' tree gains increasingly in complexity as the family go native and produce an abundance of

supernumerary 'others', many of whom remain 'unnamed'. Their tree includes sets of twins as if to further demonstrate the family's wild, unruly fecundity. A second supplementary family tree appears gratuitously inserted in an additional box referring to 'other Miuses (not said to be related to Joe [Mius])'68. In contrast, the Duke tree looks more pruned and trim. Yet a closer look quickly reveals it to be equally disrupted – or indeed sustained, depending on one's perspective – by a variety of un/natural irregularities, including the Americanisation of the original family name (Duquet), infertility and adoption, illegitimacy and sexual transgression (Bernard Duke's Scandinavian wife Birgit is discovered to be male on her deathbed), and at least one instance of miscegenation with the native population. The latter is destined to become the novel's linchpin and final twist as mixed-heritage Beatrice Duquet becomes Beatrix Sel, making her hybrid progeny of native-identified Canadians, almost driven to extinction by the course of events the novel describes, the last remaining 'blood' heirs to the Dukes' corporate fortune. Proulx's family trees diverge from 'the conventional [arborescent] family tree structure' which, as Mica Hilson points out, makes 'a poor substitute for real trees [being] more like a wooden coat rack: treated, sterile, and inert'69. They are primarily rhizomic, disrupting anthropogenic order with a predilection for the feral and unforeseeable. In the same way as her table of contents is suggestive of an arborealisation of history, her family trees disperse into a rhizosphere of freely intersecting familial clumps – a representational move that effectively deconstructs our preconception of how reproduction is supposed to work in a family saga depicting the incipient rise of a new nation.

Making use of a diverse range of paratextual devices, Proulx's aborealist outlook challenges the novel form's customary idealisation of the human, portraying mankind instead as 'a short-lived species with a notoriously bad grasp of timescales longer than a few of our own generations'⁷⁰. As Clark explains, to conceive of ourselves as a species turns us into creatures of 'a largely but not fully determining biology that plays itself out in individual

lives over and above the way specific selves may perceive themselves and their goals'⁷¹. In this light, then, the exuberance of Proulx's family trees mirrors her plot, which mobilises such a vast cast that individuality becomes inconsequential and instead the focus shifts onto the Dukes and Sels as different phenotypes of humanity. According to Ben De Bruyn, *Barkskins*' 'three-hundred-year sweep [...] brushes aside individual characters [who] struggle to be remembered by the reader in the novel's speeded-up succession of births and deaths'.⁷² Only Lavinia Duke, who exudes 'a powerful sense of ownership'⁷³, momentarily (for just over twenty pages) fully commands a centre-stage position.

While the Dukes' acutely anthropocentric understanding of the world determines the trajectory of the novel, we find a very different kind of knowledge inscribed in Proulx's paratextual frame, namely that the barkskins' 'countless ax blows were nothing against the endless extent of the earth's spiky forest crown'⁷⁴. Both the novel and the anthropogenic world it projects are shown to remain susceptible to 'the vigor of multiple sprouts from stumps and still-living roots'⁷⁵, which continue to stir in its frame. It looks like – albeit against most considerable odds – the trees are ultimately destined to prevail.

4. The Arboreal Sublime in The Overstory

Richard Powers' *The Overstory* picks up where *Barkskins* 'slid[es] into darkness'⁷⁶, that is, in our own contemporary present where the despoliation of the natural world continues. As it harks back to bygone days when 'there were four great forests on this continent. Each was supposed to last forever. Each went down in decades. We barely had time to romanticize!'⁷⁷, it is tempting to read Powers' novel as Proulx's post-apocalyptic sequel. Predictably, Powers' main thematic concern is with humanity's plant-blindness. The novel deplores 'how the world is inhabited by magnificent creatures no one knows'⁷⁸. By the time Powers' generation of characters reach adolescence, this cognitive impairment has already grown into the

impending environmental menace it is today, cynically shrugged off by one parent as: 'Plant-blind. Adam's curse. We only see things that look like us. Sad story, ain't it, kiddo?'⁷⁹ But *The Overstory* also shares with *Barkskins* a set of arborealist features that frame and embed its human narrative, presenting it to the reader as a long-winded digression of no enduring consequence, its travails, upheavals and ostensible threats always already contained within a larger more-than-human order.

Powers' cast comprises a multicultural constellation of nine U. S. American environmental activists from diverse socio-economic backgrounds, each of whom has their own chapter dedicated to them in the ROOTS section of the novel, with the exception of a couple who are introduced together. The first relevant paratextual clue in this introduction are the emblematic vignettes we find affixed to the opening sentence of each individual portrait, displaying neat botanical sketches designed to identify specific trees by their leaves, fruits and flowers. These vignettes, in combination with the stories about the characters' first formative arboreal encounters, pair each human individual with their distinctive totem tree, reminiscent of Philip Pullman's use of animal dæmons in His Dark Materials (1995-2000). With their inner selves thus arboreally ingrained, the characters' subsequent lives unfold along a sequence of arboreal signposts, invoking the course of a natural cycle by transporting them from ROOTS to TRUNK to CROWN to SEEDS. (Counterintuitively, this trajectory could of course signify that something or someone is deteriorating and at serious risk of 'going to seed'.) The TRUNK section employs its own arborealist feature by inserting drawings of sawn-off tree rounds in lieu of asterisks as section-break markers. These 'cookies', as professional fallers call them⁸⁰, have the appearance of fingerprints or indeed thumb-mark smudges left behind by the reader, thus flagging our own messy participation in the novel's arboreality.

The arborealism of *The Overstory* is supported moreover by its distinctly rhizomic interplay of characters. 'Their lives have long been connected, deep underground', we are told, and 'their kinship will work like an unfolding book' 81 – this book, one assumes. Overall, Powers' novel looks like it is undergoing a process of dendromorphosis much more radical than that at work in *Barkskins*. As its shape, tone and orientation become increasingly dendrocentric, The Overstory is shown to outgrow the traditional anthropocentrism of the novel form. Not only are humans pictured as taking after trees, they are also found severely lacking as they fail to live up to arboreal standards. According to Marco Caracciolo, 'the narrativized form of the characters' social network mirrors not only the structure of a single tree but also the mycorrhizal organization that brings plants together in "smart communities", adding that 'human collectives fail to replicate the cohesiveness and efficacy of plant assemblages'. 82 As 'currents rise from the soil-gripping roots, relayed over great distances through fungal synapses linked up in a network the size of the planet'83, The Overstory envisions tree life as the embodiment of some kind of cosmo-arborealism, and humans absent themselves from this more-than-human order at their own peril. It is absurd to suggest that trees could ever depend on humans for campaigning and standing up for them. Trees pre-date and will outlast humanity, and they will continue to stand by and for themselves.

Unlike in *Barkskins*, where arborealism remains largely confined to the paratextual frame, Powers' novel opens up into arborealist narration. His prominent use of the term 'overstory' draws attention to the forest canopy and hints at the capacity of trees to produce narrative of their own natural accord, and by their own natural means, as 'the evergreen tips sketch and scribble on the morning sky [...] in smallest cursive increments, each hour of every day. Forever in motion, these stationary things '84. Reminiscent of Miller's concept of dendrography, the title also signals Powers' aspiration to access a higher plane of relating (to)

the world by introducing trees as 'a form of nonhuman life that inhabits a longer time scale than humans and achieves a greater height than humans, and thus, in some sense, assumes a wider and longer point of view'⁸⁵. Each section of Powers' novel opens with a preamble written in 'this alien script' of tree language, tapping into the overstory to record a disembodied, yet distinctly arboreal voice, which speaks 'endlessly' and multitudinously in terms of 'nothing' and 'everything': 'The tree is saying things, in words before words'. ⁸⁶ This no longer constitutes mere paratext in terms of simply introducing yet another additional framing device for arborealist meaning-making; rather, Powers' cursive preambles alert us to the existence of a different, deeper core of signification that transcends and effectively renders irrelevant the novel's focus on human emplotment.

I agree with Birgit Spengler who refers to these iterations of arboreal speech as an "active" voice [that] communicates what might best be described as a "tree ontology" – insights that prod the reader to imagine how the world may "look" or "feel" from the perspective of trees'. Unlike Spengler, however, who fears that 'this rendering of nature in a – literally – active voice may [...] seem overly anthropomorphizing'⁸⁷, I believe Powers defuses the charge of anthropomorphism by implementing the conditional tense, making it clear that arboreal communication is more-than-human and as such remains incompatible with human sense perception. As a species, we are not equipped to receive, let alone grasp, whatever messages trees may be sending our way. 'If your mind were only a slightly greener thing, we'd drown you in meaning', the voice explains. 'If he could read, if he could translate ... If he were only a slightly different creature.' As things are, however, we do not and are unlikely ever to get trees at all: 'All the ways you imagine us [...] are always amputations. Your kind never sees us whole. You miss the half of it, and more. There's always as much belowground as above.' ⁸⁸

While I do share Caracciolo's sentiment that 'we need innovative forms of storytelling that disrupt the linearity of the narrative of the Anthropos in charge of the world', I am perplexed to find that despite Powers' ingenious innovations within the novel genre itself, Caracciolo feels compelled to refer us to 'experimentation with digital media and the hybridization of novelistic concerns with interactive storytelling in video games'.⁸⁹ Even on confrontation with the particular challenges of the Anthropocene and the unprecedented complexity of threats that together constitute global climate change, the novel genre – left to its own devices – appears perfectly able to cope. In Powers' novel, the preamble sections reveal a distinctly new significatory sphere located in between the novel's paratextual frame and the fiction enclosed. Neither mere scaffolding nor fully integrated within the narrative, situated properly neither in speech nor in print, this in-between sphere enables the novel to emit an utterance that heralds – but not quite yet incorporates – a voice suitable for interspecies communication. Powers' use of cursive style befits his endeavour to articulate what in her essay on the ineffability of climate change, Maggie Kainulainen refers to as 'the Saying'. As Kainulainen explains, whereas 'the Said of language is what is imposed in order to create meaning', the Saying denotes what 'remains unsayable in language [that is, in other words] the ungraspable Real that exceeds the horizons of the discursive field'. 90 Correspondingly, one might want to speculate that *The Overstory* can indeed conceive of what 'the tree is saying '91; it can even begin to speak in the voice of the arboreal. Yet it must stop short of committing itself to that utterance, of emplotting it within its realist arc of narration, lest the novel come to ventriloquise the arboreal in an act of crassly anthropomorphic appropriation.

What is ultimately at issue here is the arboreal as a manifestation of the sublime, described by Kainulainen as 'something so vast that it escapes all attempts to apprehend it fully'92. Albeit always by definition 'ego-shaking'93, it is imperative that an encounter with the sublime – and in particular 'the ecological sublime'94 – never be experienced as wholly

incapacitating. This is the main reason why arboreality (as I am keen to present it here) does, and does not, make a very good match for Timothy Morton's influential concept of the 'hyperobject'. Hyperobjects are entities of enduring temporal and spatial ubiquity that remain elusive to human understanding, and rebut any rational or strategic response. They manifest diffusely and sporadically, thus resisting definitive crystallisation into one manageable or computable thing. Indeed, what makes these objects hyper- is precisely that they do not qualify as traditional 'things' in the first place. Climate change is such an hyperobject, and Morton also lists 'the Lago Agrio oil field in Ecuador, or the Florida Everglades. [...] the biosphere, or the Solar System [...] the sum total of all the nuclear materials on Earth; or just the plutonium, or the uranium [...] Styrofoam or plastic bags, or the sum of all the whirring machinery of capitalism'95. In contradistinction to the majority of Morton's examples, which tend towards the all-powerful, unpropitious and downright disastrous, the arboreal deserves to be envisioned as a hyperobject of a more benevolent and life-affirming kind, as exuding – as one of Powers' characters puts it – 'the inscrutable generosity of green things' ⁹⁶. Whereas it still ought always to be a genuinely humbling experience, we would expect our encounter with the arboreal sublime to result in an edifying, even epiphanic outcome for us, for example by prompting 'the realization that we are mortal creatures, "beings of nature" whose lives are entirely dependent on forces greater than we are'97.

At both the beginning and the end of *The Overstory* we find Mimi Ma, one of Powers' characters, seated in Buddha-like meditation under a tree. Thus immersed in and adumbrated by the arboreal, her mind momentarily 'becomes a greener thing'98. Powers dispenses with the conditional tense that he has utilised in all his other allusions to interspecies plant-human communication, signalling that this is no longer a mere promise but *really happening now*. The transformative dynamic at work in Mimi's dendromorphosis follows that of the ecological sublime, which differs from its Romantic counterpart in that awe and humility in

confrontation with the more-than-human do not subsequently translate into what Hitt terms 'self-apotheosis', The Romantic sublime invariably concludes by celebrating human superiority over inanimate nature, which is deemed incapable to perceive or express its own power, beauty and wonder without human mediation. In contrast, Powers' rendition of the ecological sublime sees Mimi re-emerge from her experience as 'the altered woman', yet without appearing exceptionally enlightened. She is as incontrovertibly human as she was before; if anything, she is more fallible and mixed up. The only difference seems to be that now she readily concedes her inconsistencies: 'Guilty, her eyes say. Innocent. Wrong. Right. Alive.' Possibly the most appropriate term to capture her post-meditative state is 'bewilderment', resonantly invoked by Matthew Battles as 'mingl[ing] wildness with precarity, mystery, exile beyond the edges of norms and qualities' 102.

I anticipate resistance to my reading of *The Overstory*, especially the notion that under Powers' authorship paratextual arborealism evolves into dendrographic narration not just *of*, but indeed *by* trees. However, as Hitt explains, the entire point of the ecological sublime is 'to jolt us momentarily out of a perspective constructed by reason and language, a perspective that, in modern Western culture, has rendered nature mute' 103. This is exactly the kind of impact Powers is after by articulating the inaudible, as-yet-unheard-of eloquence of trees. Powers also extricates himself from the much-vaunted proposition that art (and literature) in the Anthropocene must of necessity emphasise 'disjunctiveness, a being-overwhelmed by contexts in which the human perceiver is deeply implicated but cannot hope to command or sometimes even to comprehend' 104. As with Morton's concept of the hyperobject, the matter is presented in far too absolutist and self-defeating terms. Indeed, learning to yield to powerlessness, to embrace our cognitive limitations and to accept our existential irrelevance promises yet to be the best manoeuvre towards reconnecting with the world that we can possibly hope to accomplish in the Anthropocene.

5. Trees Doing the Human

According to Matthew Battles in *Tree* (2017), his contribution to Bloomsbury's series of *Object Lessons*, doing trees refers to all 'the ways we have of knowing, manipulating, and addressing' the arboreal; for example, 'there is the tree as it has been done by biology, ecology, botany'. ¹⁰⁵ Doing trees refers to our implementation of trees for building and propping up the world as we already know it. Against this background, there can be no doubt that in its capacity as a world-creating device the novel, too, does of course do trees. Matters become far less straightforward as we touch on 'the ways in which it's *not* practical and normative to relate to trees – the interpersonal; the oneiric and mystical; the divine and animistic; the magical, and many ways and wisdoms simply as yet unrevealed' ¹⁰⁶. In other words, whenever trees elude our plant-blindness and their treeness gets a chance to manifest unconcealed by the blur of human perception and understanding, thus effectively enabling realism to morph into arborealism.

The installation of an arboreal gaze brings about an unprecedented shift in the novel's outlook and perspective, which in turn has the potential to instigate a radical reconfiguration of human affairs by intervening in our representational conventions for world-creation.

Naturally humanity is quick to learn and adapt, devising ever-new ways of doing trees. Thus, the relatively recent discovery of plantlife's important role not only in regulating the climate, but also in imparting vital information about previous climatic vacillations and irregularities, has led to a significant revaluation of the arboreal. However, the standard response to such evidence of tree agency and sagacity is never to review our history of ongoing cognitive failure, but rather to simply 'add [it] to the ways we've learned to do and think the tree' 107.

By contrast, Battles is keen to signpost ways of rethinking and recalibrating our relationship with trees. It is in this regard that Battles' essay resembles *The Overstory* which, as we have

seen, finds fertile ground for arborealist experimentation in the interstices between what is and can be said, on one hand, and what must remain suspended in the process of articulation, on the other. Battles shows a particular interest in experiences of spiritual and intellectual disorientation, or 'bewilderment', which result from allowing our 'ways of doing trees' (and indeed our ways of doing the entire world) to be interrogated and refracted by 'trees doing the human' Like Powers, Battles appears to be searching for some common ground from which interspecies plant-human communication can grow and elicit a sense of existential rapport between the human and the arboreal.

Trees doing the human is not to be understood in terms of anthropomorphic mimicry or emulation, but rather in a dendrographic sense as exerting a direct representational influence on the adumbration of human affairs. As such, the arboreal once again displays an affinity with Morton's hyperobjects, which likewise 'seem to force something on us, something that affects some core ideas of what it means to exist, what Earth is, what society is' 109. Due to its ultra-human alterity, plantlife works on us like something akin to the sublime. Even if we choose to disavow Vieira's phytographic notion that all life, including our own, is quintessentially scripted by plants, we cannot go on to ignore forever that plants are constitutive of us, that our entire existence and life as we know it depends upon solar energy, which it is in the power of plants to harness and purvey to us. Keen to expose the enduring hegemony of animality over plantlife, Karen Houle takes humanity to task for our categorical plant-blind 'backgrounding of herbality', our preposterous protestations that we are nothing to do with plants, and our compulsion to dispel any intimation of even the slightest trace of a natural affinity:

Notice that we are able to see, and are willing to be shown, that we humans start as alligator-like creatures crawling up out of the Devonian mud [...], our musculatures and genes evolving, yet still trailing out behind us, connecting us to the fanshaped Kingdom Animalia [...]. That is what we are willing to see as our actuality. And

though we know, intellectually, that we always have and always will live by grace of the oxygen produced by said plants, and are built from the very carbons of them, and run our entire global economy of the backs of that carbon, we are unable to think let alone live the novel and profound truths of *these* vegetal relations.¹¹⁰

Compared with the rest of humanity, writers are possibly more attuned to the reliance of their craft and identity on plants and trees in particular; after all, it has traditionally been trees that have provided the paper for the books without which there would be no literacy, let alone a literary culture. It might then perhaps not be quite so surprising that arborealism should emerge, spread, and assert itself from the interstitial materiality of the paratext, the experimental liminality and significatory limits of literary creation, or – as Philippe Lejeune puts it – 'the fringe of the printed text which, in reality, controls the whole reading' 111.

Arborealism takes the novel form out of its realist comfort zone, and in that process shows it to be little more than a precariously staked-out speciesist refuge amidst a more-than-human vastness, which continues to elude human narration. As Patty, one of Powers' characters, declares, 'this is not our world with trees in it. It's a world of trees, where humans have just arrived' Barkskins and The Overstory are epic experiments in arborealism where the novel's ceaseless doing of trees winds up outdone by the trees themselves.

Notes

¹ Erle Ellis, Anthropocene: A Very Short Introduction (Oxford UP, 2018), p. 21.

² Timothy Clark, *Ecocriticism on the Edge: The Anthropocene as a Threshold Concept* (Bloomsbury, 2015), p. 152.

³ Ellis, *Anthropocene*, p. 12.

⁴ According to Masashi Soga and Kevin Gaston, 'fewer and fewer people, and especially children, have daily contact with nature' causing 'an ongoing alienation', which they designate in suitably anthropocenic as the 'extinction of experience ('Extinction of

Experience: The Loss of Human-Nature Interactions', *Frontiers in Ecology and the Environment*, 14: 2, 2016, 94-101, p. 91).

⁵ Randy Laist, *Plants and Literature: Essays in Critical Plant Studies* (Rodopi, 2013), p. 10.

⁶ David Abram, *The Spell of the Sensuous: Perception and Language in a More-Than-Human World* (Vintage, 2017 [1997]), p. 27.

⁷ Ibid., p. 10.

⁸ Ibid., pp. 16 and 20.

⁹ Laist, *Plants and Literature*, p. 9.

¹⁰ Abram, Spell of the Sensuous, p. 68.

¹¹ Ibid., p. 22.

¹² Clark, *Ecocriticism on the Edge*, p. 151.

¹³ Ibid.

¹⁴ John Fowles, *The Tree* (Vintage, 2000 [1979]), p. 44, my emphasis.

¹⁵ Clark, p. 15.

¹⁶ Timothy Baker, Writing Animals: Language, Suffering, and Animality in Twenty-First-Century Fiction (Palgrave, 2019), p. 1.

¹⁷ Owain Jones and Paul Cloke, *Tree Cultures: The Place of Trees and Trees in Their Place* (Berg, 2002), p. 4.

¹⁸ James Wandersee and Elisabeth Schussler, 'Preventing Plant Blindness', *American Biology Teacher*, 61: 2, 1999, 82-6, quoted in Monica Gagliano, John Ryan and Patrícia Vieira (eds), *The Language of Plants: Science, Philosophy, Literature* (University of Minnesota Press, 2017), p. xxix, note 6.

¹⁹ Elizabeth Chang, *Novel Cultivations: Plants in British Literature of the Global Nineteenth Century* (University of Virginia Press, 2019), p. 2.

²⁰ Matthew Hall, *Plants as Persons: A Philosophical Botany* (SUNY Press, 2011), p. 3.

²¹ Gagliano et al, *The Language of Plants*, p. xii.

²² Paraphrased in Baker, Writing Animals, p. 14.

²³ Isabella Tree, Wilding: The Return of Nature to a British Farm (Picador, 2018), p. 21.

²⁴ Peter Wohlleben, *The Hidden Life of Trees: What They Feel, How They Communicate* – *Discoveries from a Secret World*, translated by Jane Billinghurst (Collins, 2016 [2015]), pp. 5, 33 and 43.

²⁵ Birgit Spengler, 'Arboreal Encounters in Richard Powers's *The Overstory*', in Birgit Spengler and Babette Tischleder (eds), *An Eclectic Bestiary: Encounters in a More-Than-Human World* (Transcript, 2020), 65-89, p. 69₃₀

https://www.researchgate.net/publication/291329096 Material Ecocriticism Materiality Agency and Models of Narrativity, accessed 1 April, 2020.

²⁶ Gary Paul Nabhan, *Mesquite: An Arboreal Love Affair* (Chelsea Green, 2018), pp. 4, 14 and 2.

²⁷ Ibid., p. 14.

²⁸ Ibid.

²⁹ Sarah Spencer, *Think Like a Tree: The Natural Principles Guide to Life* (Swarkestone Press, 2019).

³⁰ Gagliano et al, p. xiii.

³¹ Jones and Cloke, *Tree Cultures*, pp. 111-12.

³² Val Plumwood, 'Nature in the Active Voice', *Australian Humanities Review*, 46, May 2009, http://australianhumanitiesreview.org/2009/05/01/nature-in-the-active-voice/, accessed 30 March, 2020.

³³ Serenella Iovino and Serpil Oppermann, 'Material Ecocriticism: Materiality, Agency, and Models of Narrativity', *Ecozon@*, 3: 1, 2012,

³⁴ Ibid., pp. 83 and 85.

³⁵ Ibid., p. 82.

³⁶ Serpil Oppermann, 'Nature's Narrative Agencies as Compound Individuals', *Neohelicon*, 44, 2017, 283-95, p. 285.

³⁷ Matthew Battles, *Tree* (Bloomsbury, 2017), p. 29.

³⁸ Patrícia Vieira, 'Phytographia: Literature as Plant Writing', in Gagliano et al, 215-33, p. 225.

³⁹ Ibid., p. 224.

⁴⁰ Pieter Vermeulen, "The Sea, Not the Ocean": Anthropocene Fiction and the Memory of (Non)human Life', *Genre*, 50: 2, 2017, 181-200, p. 185.

⁴¹ Monica Gagliano, 'Breaking the Silence: Green Mudras and the faculty of Language in Plants', in Gagliano et al, 84-100, p. 94.

⁴² Eduardo Kohn, *How Forests Think: Toward and Anthropology Beyond the Human* (University of California Press, 2013), pp. 8 and 41.

⁴³ Erin James, 'What the Plant Says: Plant Narrators and the Ecosocial Imaginary', in Gagliano et al, 253-72, p. 267.

⁴⁴ Ibid., p. 269.

⁴⁵ Baker, pp. 14 and 7-8.

Symposium, 19: 2, 2015, 37-56, pp. 53-4.

⁴⁶ Joseph Conrad, *Heart of Darkness*, edited by Ross Murfin (Bedford Books, 1996 [1902]), p. 45.

⁴⁷ Hanya Yanagihara, *The People in the Trees* (Picador, 2018 [2013]), p. 99.

⁴⁸ Clark, p. 178.

⁴⁹ Abram, p. 91.

⁵⁰ Kohn, *How Forests Think*, p. 41.

⁵¹ Gillian Beer, *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction*, 2nd edition (Cambridge UP, 2000 [1983]), p. xxviii.

⁵² Elizabeth Carolyn Miller, 'Dendrography and Ecological Realism', *Victorian Studies*, 58:

^{4, 2016, 696-718,} p. 711.

⁵³ Ibid., p. 710.

⁵⁴ Ibid., p. 698.

⁵⁵ Ibid., p. 711.

⁵⁶ Byron Williston, 'A Tapestry of Concealments: *Barkskins* as Anthropocene Fiction', *Environmental Philosophy*, 15:2, 2018, 237-54, p. 241.

⁵⁷ Annie Proulx, *Barkskins* (Fourth Estate, 2016), pp. 69, 118 and 364.

⁵⁸ Ibid., p. 646.

⁵⁹ Ibid., pp. 149 and 430.

⁶⁰ Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, translated by Brian Massumi (Continuum, 2004 [1980]), pp. 3-28.

⁶¹ Jeffrey Nealon, *Plant Theory: Biopower and Vegetable Life* (Stanford UP, 2016), p. 83.

⁶² Karen Houle, 'Animal, Vegetable, Mineral: Ethics as Extension or Becoming?',

⁶³ Nealon, Plant Theory, p. 85.

⁶⁴ Gagliano et al, p. xi.

⁶⁵ Proulx, *Barkskins*, p. v.

⁶⁶ Ibid., p. 315.

⁶⁷ Valerie Trouet, *Tree Story: The History of the World Written in Rings* (Johns Hopkins UP, 2020), p. 13.

⁶⁸ Proulx, p. 719.

⁶⁹ Mica Hilson 'Reimagining the Family Tree: Property, Biopolitics, and Queer Kinship in David Malouf's *Remembering Babylon* and Patrick White's *Riders in the Chariot'*, *Pacific Coast Philology*, 53: 2, 2018, 198-216, p. 200.

⁷⁰ Emma Marris, *Rambunctious Garden: Saving Nature in a Post-Wild World* (Bloomsbury, 2011), p. 4.

⁷¹ Clark, p. 175.

⁷² Ben De Bruyn, 'Learning to Be a Species in the Anthropocene: On Annie Proulx's *Barkskins*', *Frame*, 29: 2, 2016, 71-90, pp. 87-8.

⁷³ Proulx, p. 502.

⁷⁴ Ibid., p. 57.

⁷⁵ Ibid.

⁷⁶ Ibid., p. 627.

⁷⁷ Richard Powers, *The Overstory* (Heinemann, 2018), p. 284.

⁷⁸ Ibid., p. 219.

⁷⁹ Ibid., p. 114.

⁸⁰ Robert Michael Pyle, 'The Long Haul', in Nathaniel Brodie, Charles Goodrich and Frederick Swanson (eds), *Forest under Story: Creative Inquiry in an Old-Growth Forest*, (University of Washington Press, 2016), 17-20, p. 17.

⁸¹ Powers, *The Overstory*, p. 132.

⁸² Marco Caracciolo, 'Deus Ex Algorithmo: Narrative Form, Computation, and the Fate of the World in David Mitchell's *Ghostwritten* and Richard Powers's *The Overstory*, *Contemporary Literature*, 60: 1, 2019, 47-71, pp. 61-2.

⁸³ Powers, p. 499.

⁸⁴ Ibid., p. 355.

 $^{^{85}}$ Miller, 'Dendrography and Ecological Realism', p. 710.

⁸⁶ Powers, pp. 156 and 3.

⁸⁷ Spengler, 'Arboreal Encounters', p. 71.

⁸⁸ Powers, pp. 4, 155 and 3.

⁸⁹ Caracciolo, 'Deus Ex Algorithmo', p. 67.

⁹⁰ Maggie Kainulainen, 'Saying Climate Change: Ethics of the Sublime and the Problem of Representation', *Symplokē*, 21: 1-2, 2013, 109-23, p. 118.

⁹¹ Powers, p. 3.

⁹² Kainulainen, 'Saying Climate Change', p. 111.

⁹³ Marris, Rambunctious Garden, p. 19.

⁹⁴ Christopher Hitt, 'Toward an Ecological Sublime', *New Literary History*, 30:3, 1999, 603-23.

⁹⁵ Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (University of Minnesota Press, 2013), p. 1.

⁹⁶ Powers, p. 124.

⁹⁷ Hitt, 'Toward an Ecological Sublime', p. 607.

⁹⁸ Powers, p. 499.

⁹⁹ Hitt, p. 609.

¹⁰⁰ Powers, p. 500.

¹⁰¹ Ibid., p. 501.

¹⁰² Battles, *Tree*, p. 32.

¹⁰³ Hitt, p. 617.

¹⁰⁴ Clark, p. 184.

¹⁰⁵ Battles, pp. 61 and 46.

¹⁰⁶ Ibid., p. 26.

¹⁰⁷ Ibid., p. 125.

¹⁰⁸ Ibid., p. 67.

¹⁰⁹ Morton, *Hyperobjects*, p. 15.

¹¹⁰ Houle, 'Animal, Vegetable, Mineral', pp. 39-40.

¹¹¹ Quoted in Gérard Genette and Marie Maclean, 'Introduction to the Paratext', *New Literary History*, 22: 2, 1991, 261-72, p. 261.

¹¹² Powers, p. 424.