

Tūwā: Growing and Listening out of Enclosure

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Introduction

This article assesses the potential of a new materialist approach for those of colonial descent in Aotearoa New Zealand (Pākehā) to face environmental harms in a more accountable manner. Resisting a compartmentalised ethics, new materialism(s) puts forward an environmentalism that unravels nature-culture dualisms so that we can properly listen to the needs of other species. While it holds much promise, especially in the way that it shares more conceptual common ground with mātauranga Māori [*Māori worldview*], facilitating a better understanding of colonial accountability and providing richer ground for dialogue, thinking through its practice in Aotearoa New Zealand illustrates that new materialism could work as a colonising force; it all depends on how we interpret posthuman care.

There are strands in new materialism that actively resist privileging listening to and caring for certain species over others, such as indigenous over nonindigenous, claiming that these hierarchies of attachment create harmful attitudes to certain species, and stagnates seeking out new relationships needed for reviving our collapsing world. However, such universal principles of flat care will disproportionately affect the survival of indigenous species in Aotearoa New Zealand, who both evolved in less competitive landscapes and suffered settler annihilation for over 100 years.² While Māori hold diverse environmental perspectives, many who welcome introduced species, there is a long Māori tradition of understanding identity as founded in localised place.³ As mātauranga Māori emerges and is passed on in a material engagement with an environment, many parts of Māori life would be lost if specific indigenous species die.⁴ Only Māori should have the right to decide on pursuing an environmental practice that likely let indigenous species die.

This article therefore illustrates how the unprincipled, flat care of new materialism can disallow a plurality of ontological perspective and ethics to exist. More attention needs to be paid to the hierarchies embedded in landscapes, and the way the layout of the land will affect an ethical practice of listening. Rather than listening out for new relations, as is often emphasised in new materialism, in postcolonial nations a practice of listening has to be engaged in a practice of facing the past. Working through this tension in Aotearoa New Zealand illustrates how listening is an act of material regrowth, something under-explored in new materialism. Listening to those around us isn't enough if indigenous species are absent from human spaces; we must physically regenerate indigenous species outside reserves and welcome indigenous species into our cities so that we can be close to those that we need to listen to. Only then will we be able to unsettle nature-culture dualisms in a way that doesn't undermine practices of kaitiaki [*environmental guards*], allowing us to be earnest partners of democratic collaboration. As

many peoples have a world view and identity that never made a distinction between natural and cultural realms, this is relevant to other postcolonial nations.

Flat Care

Because of our ancestors' biotic genocide, Pākehā undoubtedly have a responsibility to regenerate the forests of Aotearoa New Zealand. This is pressing as we now have the highest number of at-risk endemic species in the world.⁵ Yet there is great need to re-evaluate our environmental approach. On the one hand, environmental efforts are not expansive enough to protect indigenous species. While the government expends considerable conservation resources, it at the same time supports industries that severely hurt them. We allow, for instance, under-regulated agricultural growth to poison our rivers, killing fresh-water species and making the water unusable for plants.

On the other hand, numerous indigenous scholars stress that by approaching environmentalism through reserve conservation, the government inhibits practices of kaitiaki, calling it out as an ongoing colonial practice.⁶ Many iwi [*tribe*] and hapū [*sub-tribe*] see an interdependent relationship between people and land, where iwi belong to particular lands, forests and bodies of water. It is acknowledged that the wellbeing of iwi depends on the wellbeing of the surrounding species, and vice versa, and so responsibility for people, communities and nonhuman species is approached as interwoven.⁷ Kaitiakitanga therefore is not only about sustainability of local species, but ensuring that the connection between individuals, hapu and iwi and their whenua remain strong, and that tikanga [*traditions*] are gifted to future generations, which depends on connection to a situated whakapapa [*materially entangled genealogy*].⁸ Many tikanga, become alienated when access to specific lands and species are cut off. Mahinga kai [*Food gathering practices*], for instance, cannot be continued if there are restrictions on gathering most traditional kai [*food*].⁹ So preserving indigenous species in a way that cuts kaitiaki from the land—through reserve protection—once again places Pākehā wants, laws and institutions above Māori wants, laws and institutions.

Moving forward in a way that holistically acknowledges the ongoing effects of eco-colonial wrongs first requires authentic and structural acknowledgement of Māori as equal sovereign partners. But it also involves self-reflection and taking initiative to uproot harmful assumptions and norms that clash with kaitiakitanga [*environmental guardianship*]. This article explores the potential of new materialism as a more holistic and self-reflective environmental approach for Pākehā. New materialism is a cluster of ontological theories that dispel anthropocentrism and reconceptualise existence in a way that acknowledges the central and active role that nonhuman entities play in shaping the nature of our world. New materialism traces our environmental problems to the way that we divide natural and cultural realms. The nature-culture divide first emerged in Enlightenment conceptions of humanism, which not only saw consciousness to set humans apart from nonhuman species, but attributed a lifelessness to other species that let us treat them as mere resources.¹⁰ Nature became understood and carved up into an 'out there' wilderness, while those species inside cities (like pets, garden species, rats) became subsumed into the 'culture' side of the dichotomy. New materialism breaks down the nature-culture distinction by illustrating that nonhuman others actively contribute to, and populate, what we imagine as cultural spaces, and that nature is composed by culture, both in terms of our understanding of it, and the way that humans physically affect spaces of nature (introducing exotic species, altering the atmosphere, and so on).¹¹

New materialists caution that today's 'green' environmentalism is in many ways unhelpful for tackling contemporary ecological problems because it remains rooted in the

Victorian assumption that natural and human spheres are intrinsically distinct, and that humans stand above nature with the right to manage ‘lesser’ nonhuman spheres. Manifesting primarily through reserve preservation, today’s green practices aim to restore small pockets of nature to their original form, removing the ongoing historical influence of humans within the reserve, such as invasive pests, and helping indigenous species recover from those harms. This practice is grounded in the impossible idea that landscapes should return to what they were before human disturbance so that the worlds diverse natural wonders can be preserved — “to ‘clean up’, purify and turn back time so that the first, native [nature] can remerge.”¹² This framework is inadequate because it permits dual moral codes: one that aims for environmental purity within reserves and one that turns a blind eye to environmentally harmful acts in ‘human’ spaces.¹³ This duality fails to recognise the entangled implication of our world and thus each act (such as agricultural pollution in New Zealand).

Significantly, traditional restorative aims also perpetuate the harmful managerial mentality that the equilibrium of ecosystems is something that humans have control over, which stops us from being properly attentive to the needs of the other species. We fall into the habit of seeing ecologies through an outdated, pre-established bias of how we perceive the ecology should be, meaning that when we listen, species merely fulfil preconceived roles. Most commonly nature is seen as a cluster of indigenous ecology pockets with a balance to return to, where only species that were originally part of that ecology are seen natural.¹⁴ Alien species that upset the balance are pre-emptively deemed unnatural, unwelcome, and unworthy of conservation. This justifies further annihilation of species in an era where we are already on the cusp of multi-species extinction. These pre-established conceptions of nature also make us lazy, failing to listen out for new relations, looking instead to a mystified, abstracted past, convinced that those without language are unable to communicate.

Thinking ecologically for new materialists resists the urge to restore isolated ecosystems to their pre-human-disturbance state. New materialists recognise that traits of other species hold potential to nurse our hurt world and trust that if humans reel back their managerial dominance, new opportunities for environmental rebuilding could arise. Accordingly, they see ecological care to begin with listening. All entities tell a story through the way they assemble other entities around them. For instance, the longevity of the giant podocarps, such as kauri or tōtara (averaging between 800 and 2000 years), creates rich, stable microhabitats that support large multi-species communities on their branches, particularly ferns, moss, lichens and epiphytes, who in turn create milder climatic conditions that enable smoother growth of species below (such as sheltering them from hard rainfall). The berries of podocarps draw birds to them which spreads their seed, as well as possums who strip them to death.¹⁵ Listening involves paying close attention to the polymorphic patterns of landscapes; noticing how different livings overlap and pull one another in ever-changing ways. For example, the dire implications of the introduced fungal disease *Phytophthora agathidicida* (kauri dieback) from Australia will completely shift the way species relate in the example just described.

This listening can only begin when we deflate the imaginary distinction between human and nonhuman realms and put aside our assumptions that entities should relate in particular ways. But listening is also expected to further disintegrate our anthropocentric assumptions, as we come to realise the extent that all beings actively shape the world, often in ways we didn’t expect.¹⁶ In doing this, we can be more open to what Eileen Joy describes as ‘tender’ attention to nonhuman responses to ecological devastation: “it is precisely about amplifying the ability of our brains to pick up more communication signals from more “persons” (who might be a human or a cloud or a cave)

whose movements, affects, and thoughts are trying to tell us something about our interconnectedness and co-implicated interdependence with absolutely everything.”¹⁷

When we see that assemblages continuously shift, without an equilibrium to return to, we realise that new kinds of relationships and communities are possible that could help us to collectively survive and grow. Listening throws us into a “passionate immersion”¹⁸ in others’ lives, human and nonhuman. We don’t just notice changing relations but are pressed to seek new ones, to continuously, experimentally and lovingly reshape human–nonhuman interactions, forming unexpected groupings that might bring about better ways of being.¹⁹ Karen Barad emphasises that because of our entangled state of being, obligations of care are nonoptional, in that each time we intra-act we shape who and what other entities are. We are ethically implicated simply through the nature of reality.²⁰ As Deborah Bird Rose writes, “with [listening] comes a burden: the commitment to bear witness to the shimmering, lively, powerful, interactive worlds that ride the waves of ancestral power.”²¹

Some new materialists maintain that through listening and in striving for a posthuman care, we reach “the possibility of a communism of human and nonhuman beings.”²² New materialists endorse a flat care that isn’t guided by distinctions of what seems natural, beautiful, important or alive to humans, but aims to be mindful of all entities. This flat care acknowledges the complex interconnectedness of everything on earth, both expanding the network of direct responsibility and of care. In practice this means that each entity has their needs for a flourishing existence met to the best of our collective, posthuman ability.²³ While it is impossible to meet all needs of all entities (because needs often clash), this communitarianism asks that we at least try: in a messy push and pull, each entity’s existential needs are continuously negotiated. For instance, if bees need poison-free flowers to exist/flourish, humans would be obliged to stop putting pesticides on flowers, unless this was detrimental to our own existence. If we imagine all entities’ existential needs, we can see how muddled this communistic negotiation could be!

As we can see, a new materialist environmentalism holds promise in Aotearoa New Zealand because it both helps non-indigenous people understand and face the materially entangled nature of colonial injustice, and provides a more inventive, holistic view of environmental rebuilding. Listening to the land would upturn stale practices and be more open to relationships that flourish, such as finding agricultural methods that don’t harm our rivers. It gives nonindigenous people a framework to engage with the ways that our world is constituted by nonhuman others, and to have pressing grounds to develop posthuman kinship. Crucially new materialism is an onto-epistemic frame that shares more common ground with mātauranga Māori, expanding the potential for constructive collaboration on environmental issues. While there are fundamental differences between the two onto-epistemic perspectives, as one is based on a spiritual cosmology and one on an Anglo-dominated scholarship, there are some key overlaps, a shared understanding that human and nonhuman spheres are deeply connected. Mātauranga Māori is not unanimous across peoples, because it is a knowledge form that is materially responsive to the local environment of iwi environment. However, many see everything—humans, the environment and the spiritual realm—as interrelated, linked through genealogy.²⁴ This shared understanding gives non-indigenous people a better frame to acknowledge the expansive reach of ongoing colonial injustices, and understanding core concepts to kaitiakitanga, like mauri.

However, I’m concerned that because concrete indigenous solidarity isn’t guaranteed in new materialist ecological practices, the potential that new materialism holds for eco-colonial reconciliation in Aotearoa is pre-emptively deflated. While Barad’s

new materialists theory of entanglement, which obliges us to be aware of the historical complexity of any issue, invites humans to take responsibility for ongoing past wrongs, some attitudes in new materialism resist the outright privileging of indigenous species.²⁵ A tone runs through new materialism that is deeply against the idea of ecological conservation because of the way it perpetuates the urge to return landscapes to imagined pre-disturbance times, with its damaging environmental management, as well as simple stories that associate indigenous species with 'natural' and 'good' and outsiders as "'monstrous' by violating the order of nature."²⁶ Indeed, because hybrid ecologies (indigenous and nonindigenous mix) are inevitable in our age, these new materialists maintain that we must seek better ways of living together in a hybrid reality, and extend care beyond simple visions of what is 'natural' and 'good.' Bryant "rejects any ontology of transcendence or presence that privileges one sort of entity," arguing instead for finding what traditionally unusual alliances can bring. He "welcom[es] unheard of strange strangers, building what are as of yet unheard of collectives."²⁷ Once we recognise environments as ever-changing rather than static and eternal, we see species relations can be "creative, constructive, and inventive."²⁸

Similarly, Anna Tsing asks us to make peace with the landscapes that humans and momentous other entities have drastically altered, and to welcome "transformative encounters" from those who exist there: "disturbance-based ecologies in which many species sometimes live together without either harmony or conquest."²⁹ Tsing stresses that "assemblages coalesce, change, and dissolve" and should not be seen to take place only between "human relations with their favored allies."³⁰ Confusing and challenging the indigenous–foreign distinction, Tsing stands by multi-species attempts to bring life to desolate spaces, even in areas they are not 'supposed' to be, like exotic species in traditionally indigenous spaces: pine growing in oak trees' deforested ruins; bamboo taking over previously indigenous pine forests. These theorists recognise that we must work to undo wrongs introduced by colonial rule, but consider reality to be more complicated than simple indigenous–nonindigenous divides, ultimately resisting totalising commitments and overriding principles that ask us to care more for the existential needs of indigenous species.

From here on, this article illustrates that in postcolonial countries like Aotearoa New Zealand, a posthuman politics only makes sense if it starts from a commitment to indigenous species, and that it is possible to commit unwaveringly to indigenous needs without perpetuating anthropocentric management and stable narratives of 'nature'. While basing eco-political practices in new materialism could lend to an onto-epistemic frame more collaboratively compatible with mātauranga Māori, without commitment to the needs and survival of indigenous species, it is too easy for Pākehā to unsettle anthropocentrism while perpetuating colonialism, leading to a disingenuous struggle for a posthuman communism. While not all Māori hold the view that indigenous species should be saved above all else—many welcome foreign species to Aotearoa—this is not something for non-indigenous people to decide, as many parts of Māori life are inextricably bound to place and indigenous species. As Dick et al. write, the "cultural consequences [of indigenous extinction] include severance of links between people and the food species, reduced connection between people in their community, erosion of ways that kinship is maintained, severed transmission of cultural knowledge, and impaired health and tribal development."³¹ This tension unearths a broader risk that must be considered in thinking through the practice of new materialisms in postcolonial nations, a tension that must be at the forefront of new materialist debates.

Inviting the Underworld

Some local environmentalists have already raised the new materialist spirit in Aotearoa, calling us to discard our anthropocentric drive to ‘save’ habitats and to pursue instead a more inclusive care that isn’t based on a preconception of what we consider ‘natural’. Jamie Steer argues that we should be caring for all species in the face of increasing ecological desolation, rather than contribution to extinction: “both native and introduced – have fascinating ecological and social histories that deserve to be celebrated.”³² The appeals of these local environmentalists unsettle the self-rewarding saviour narratives that run through Pākehā conservation, but at the same time illustrate how loosening an unwavering commitment to indigenous species threatens to deepen colonial inequities, emphasising why Pākehā should be cautious about how new materialism is interpreted and pursued here in Aotearoa.³³

These local environmentalists call for equitable care across indigenous and introduced species because they think that labelling foreign species as ‘unnatural’ drives detrimental environmental harm, especially for ‘pests’—possums, rats, stoats— and ‘weeds’, which are given a demon-like aura.³⁴ They claim it drives inhumane killing methods, from mass-poisonings to drowning possum joeys at school fairs, and has led to unhealthy managerial interference. For one among many examples, the New Zealand government is currently supporting technological advances to rid Aotearoa of ‘pests’ by 2050, which include “genetic tweaks that interfere with animal fertility” in animals like possums—an interference that could have grave, unforeseeable effects if, for example, infertile possums reached Australia.³⁵

Moreover, these environmentalists point out that enriched species diversity has many ecological benefits for Aotearoa—something usually overlooked due to New Zealanders’ distain for invasive species. For instance, Jamie Steer points to arguments that deer fulfil the role that moa once did, underlining that “forests with deer would be more like pre-human forests than those without them.” Steer summarises, “deer are *functionally equivalent* to moa, as large forest-dwelling herbivores. This means that they perform *similar* overarching roles [and] occupy similar niches within the forest,” like trimming branches at particular heights.³⁶ These exotic nonhuman species not only play important roles in our ecology, but have adapted from their foreign ancestors in intra-action with the indigenous species of Aotearoa, forming their own kind of indigeneity. “[T]reat[ing] exotic species as notoriously bad... [forgets that] community membership criterion are far from clear cut and that it can in many cases be difficult to determine where species belong.”³⁷

These local environmentalists ask us to reel back the harm caused by human endeavours, such as agricultural growth, yet at the same time to open our care to all. This would involve, for instance, conserving animals no matter what their origin and dismantling the sacredness of reserves. They admit that loosening control over the nonhuman world will inevitably come at the expense of some indigenous species, but nonetheless consider it vital, reminding us that introduced species, having been moved to a new habitat, were just as much victims of colonisation. As Steer writes, “Tree species that are more palatable to possums and other herbivores will become less numerous in the canopy over time and those that are less palatable will become more numerous... while ‘extinction’ is a really dirty word in conservation, it’s also an important part of evolution.”³⁸ Too often the blame for biotic colonial harm is shifted to nonhuman species, followed by the simpleminded attitude that destroying invasive species will amend colonial harms.³⁹

But these are murky waters. Even in the name of unsettling the rigid boundaries we place on troubling species companionship, endorsing ecological policies that let

indigenous species die out forgets and disregards the way mana [*spiritual power*] and well-being is tied to specific species. Ngāti Huia, for instance, saw the loss of huia as more than the loss of the bird; it was a loss of a tapu [*sacred*] entity, and part of their identity.⁴⁰ Pursuing a care-for-all will deepen the gap between species that thrive in a hybrid ecology and those that don't and, according to patterns of the past, this will disproportionately harm indigenous species. Although many introduced species developed a nurturing intra-action with indigenous plants, helping them regenerate in deforested ruins (for example, gorse, fulfilling a similar role to mānuka and kānuka, protects saplings from humans and hungry predators, dying once the plant outgrows it), and many indigenous species thrive in this hybrid ecology (for example, tuī, pūkeko and weka), countless indigenous species undeniably suffer in intra-action with introduced species.⁴¹ For instance, many indigenous species don't have the appropriate defence system to fight off introduced diseases or fungi (like *myrtle rust*), and so disproportionately suffer from this feature of hybridity.⁴² And possum browsing is undeniably unforgiving to indigenous plants in Aotearoa. Possums return to the same tree until it is fully stripped, and most indigenous trees can't recover quickly enough because of long regrowth rates, leading to fast-paced die-back. As environmental group *Project Crimson* pointed out, "in one part of the Ruahine forest, possums took less than 10 years to reduce the proportion of rātā and kamahi in the forest canopy from 74% to 8%."⁴³

Moreover, because indigenous species evolved in less competitive landscapes, it is difficult for them to thrive in landscapes where they have to compete with introduced species without rigorous conservation efforts. The plant life span of canopy dominants (rātā, rimu, kauri, and so on) evolved to be very long (trees can take 1000-2000 years to grow), while species that evolved in more competitive landscapes tend to have traits that make it easier to generate faster, like "high rates of long-distance dispersal, short regeneration times, [and] copious seed production," and aggressive traits that secures the soil for their species (such as pine scattering needles on the forest floor).⁴⁴ Pākehā deepened this imbalance through wiping out indigenous seedbanks, leaving indigenous species reliant on human help to regenerate deforested regions—after years of burning indigenous bush, remaining seedlings were grazed by sheep and cattle in agricultural areas. Evidence for this can be seen in off-shore island ecologies, where indigenous plants thrive in the absence of exotic competition.⁴⁵ On top of that, because the country was carved up during European settlement between human and wilderness spaces, and species in cities tend to be dominated by introduced species, we may be more inclined to listen to those around us, and develop a skewed practice of listening.⁴⁶

Therefore, an interpretation of new materialism that treats indigenous–nonindigenous difference as no difference is unthinkable. Extending Ocean Ripeka Mercier's critique of Steer's environmental perspective to notions of flat care, this unprincipled new materialist spirit "smacks of the melting pot debates that argue that we need to get over the notion of a bicultural nation, with all the attendant dismissal of Te Tiriti that that entails, and give way to a multicultural one."⁴⁷ Striving for a posthuman communitarianism only holds potential in Aotearoa if it sustains a level of common ground with mātauranga Māori needed for constructive collaboration/cohabitation. This entails not only understanding that human and nonhuman realms as deeply entwined, but doesn't undermine mauri or efforts of kaitiaki, which at its most basic level involves a commitment to the survival of indigenous species. This obviously isn't to say that Pākehā should attempt to incorporate parts of mātauranga Māori into their world-view—as its epistemic building blocks are founded in a historically situated, "cosmological whakapapa" that Pākehā will never be part of, this is an impossibility—or that we should aim to diminish cultural difference, given the constructive potential that clashing world-

views hold.⁴⁸ But a balance should be maintained. A posthuman equity requires not only adjusting the relationship between humans and nonhumans, but addressing the complex ways in which Pākehā have created hierarchies among nonhuman species, and as Pākehā holding ourselves accountable for the fact that many indigenous species now cannot survive without help. Indigenous conservation efforts needn't be tied to simplistic dualisms and impossible fantasies of reversing human disturbance—we can work to conserve indigenous species, while at the same time removing the barriers that separate human and nonhuman spaces and listening out for new relations.

Accepting this conclusion invites a different kind of listening. Because new materialists actively resist privileging listening to particular kinds of species over others, the ecological regeneration characteristic of listening isn't emphasised. Listening, as a caring practice, demands proximity—noticing those around us. However, given that the colonial history of Aotearoa New Zealand carved up landscapes and caged many indigenous species inside reserves, there is a physical distance from many indigenous species. This means that listening entails a material practice of regrowth: to unsettle traditional inter-species colonial relationships, and to listen, Pākehā must partake in indigenous reforestation in the spaces we have tried—impossibly—to segregate from 'nature'. Because it trusts plants to nurse our world, indigenous reforestation works to return part of what people took without perpetuating human-centric narratives, and enable a closer listening. Forests are, after all, a backbone that supports multiple ecosystems.

One way indigenous reforestation can be done is through education. Every week, students could nurture indigenous seeds and plant them around their school—not in designated areas, but in any soil they can see: in their school's sports field, in neighbours' gardens/farms, in parks, in pavement cracks, in their bedrooms.⁴⁹ As the years span, the biodynamic area around each school will grow. Slowly, over the course of a generation's school life, forest ghosts will re-emerge. All the while, children, who tend to be more open to the aliveness of nonhuman species, can listen to trees' allusions and open themselves to the changes trees invite.⁵⁰ This educational reforestation should be accompanied by an inquiry into our entangled colonial history, making future generations face and challenge the ways that they continue to benefit or lose from ongoing colonial inequity. This experiment doesn't aim to place all responsibility for meeting entangled injustices on future generations, or suggest that reforestation will bring about a posthuman communitarianism; it should be seen as one step among many that need to be taken.

Importantly, this project doesn't try to return us to a pre-human Eden. It openly invites nonhuman species into spaces we have tried to keep out, anticipating a nature-culture hybrid (not that there was ever a separation to begin with). Trees will reach over trimmed lawns and into pristine kitchens. Moss will slowly peel paint off buildings and turn hard corners soft, forming fleshy, animated wall-coats. Children will nest kānuka inside our orderly vegetable patches. And slowly the colour of our world will shift (will city-greens turn deeper?). Over time, we will end up with a Lovecraftian landscape, with biotic lifeforms taking over not only our cityscapes and farmscapes but also the mind-bodies of our citizens.

The ongoing presence of indigenous forests in our day-to-day lives would rouse a conceptual underworld that flips what rationality, and its anthropocentric counterpart, label precious: the clean, the shiny, the abstract and the cultural. This is because forests incessantly bring attention to our bodily realm, and make the boundary between the body-human and other material matter less clear: "stress is laid on those parts of the body that are open to the outside world, that is, the parts through which the world enters the body or emerges from it... the open mouth, the genital organs... the potbelly, the nose."⁵¹ Forests are known to rescript human minds and bodies, modifying ideologies without

words: they shift the colours we see, the way we smell, our attentiveness to shadows and movement.⁵² They want us to bury ourselves in dirt, to feel and understand its coarseness in our fingernails, where we will one day—in death—fully open our material portals to the outside. A forests' influence could have profound implications for the kind of humans we raise, and the way they care—a care mindful of, and responsible for, the complexity of our past-present, especially given the unusually altruistic nature of the forests of Aotearoa New Zealand.⁵³ I hope that through planting and caring for indigenous plants, and incessantly facing the destruction caused by our ancestors without fear, Pākehā will come to unsettle and strip their generational skins of dominance. This will shrink the tendrils of Pākehā prevalence, reducing the tiresome barriers that expressions of tino rangatiratanga [*Māori sovereignty*] continuously come up against.

Reforestation averts simple stories of salvation—it is a slow, drastic and unforeseeable revival. It refuses a set outcome, but crafts an environment where all entities' intra-actions must shift meaningfully. It is not equity that we find in the forest... but hierarchy is long abandoned. Indigenous plants will be given a path to creep over the mundane, confusing our drive for capitalist productivity and sustained colonialism; sending our intimacy deeper into the nonhuman realm until we become attentive to everything that moves and breathes. Inside the grown underworld humans will turn over, becoming more of what we have always been.

Conclusion

This essay has been about what it takes for Pākehā to be better positioned for an equal, pluralist ontological interaction with Māori and the species of Aotearoa New Zealand.⁵⁴ Over the past decade, several scholars that have similarly voiced concern that new materialism is Euro-centric in the way that it doesn't meaningfully acknowledge the importance of other ontologies and indigenous knowledges that have long recognised the active nature of nonhuman others, drawing principally from "the rock-star arenas of Euro-Western thought."⁵⁵ Because of this, new materialism is branded as misunderstanding some key ideas about navigating a plurality of perspectives and instead treats its relational ethics with universal relevance.⁵⁶ It is crucial to acknowledge the locality of new materialism. But its apparent in Aotearoa New Zealand that it there is more to it than acknowledging the hidden assumptions of an ontology. Resisting coloniality in new materialism involves recognising the ongoing material historicity of each place, like how landscapes and the positioning of human and nonhuman others preferences certain kinds of listening.

One reason for this oversight may be that the gaze of some new materialisms is eager to look out for *new* relations: "to survive, we need to relearn multiple forms of curiosity."⁵⁷ It seeks to move the world forward to more tender, robust ecologies, which could stand in tension with reconciling the past. Past material and structural inequities still shape our landscapes and lives today, affecting our relations in those landscapes, and who we are able to listen to.⁵⁸ Each place is shaped by different inequities. We need to consider who would be able to survive in a context where we try to enable all species to flourish, and what other ontological and ethical narratives get closed by that material configuration. An unprincipled care-for-all can work as an act of silencing.

Dethroning human exceptionalism doesn't mean denying the significant impact humans have on the nature of multi-species relations and survivability. We, especially those who benefit from ongoing power inequities, have to take responsibility for our impact on the world. We need to ask how species matter and for who. In working to unsettle nature-culture dualisms and listening to nonhuman others in a way that

addresses the intricate colonial inequities of landscapes, like through indigenous reforestation, Pākehā will be better positioned to face the ecological injustices of our ancestors without undermining tino rangatiratanga, better opening possibilities to collaborate constructively with kaitiaki and cultivate accountable ethical relations.

Glossary

Hapū — kinship group, or subtribe

Iwi — tribe

Kai — food

Kaitiaki(tanga) — guardian(ship)

Mahinga kai — the practice of gathering food

Mana — spiritual power, influence, status

Mātauranga Māori — Māori wisdom, onto-epistemic worldview, the body of knowledge originating

Mauri — spiritual energy and life force from Māori ancestors

Moa — giant bird endemic to Aotearoa

Pākehā — of European descent

Tapu — sacred

Tāwhirimātea — god of storms

Te Tiriti — The Treaty of Waitangi, signed in 1840 between the British Crown and Māori chiefs from the North Island

Tikanga — tradition, custom

Tino rangatiratanga — Māori self-determination, autonomy, self-government

Tūwā — growing out of place, self-sown, wild

Whakapapa — genealogy/lineage

Whenua — land

References

- Bakhtin, Mikhail. 1965. *Rabelais and His World*. Indiana: Indiana University Press.
- Barad, Karen. 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. London; Durham: Duke University Press.
- Beattie, James. 2011. 'Biological Invasion and Narratives of Environmental History in New Zealand, 1800-2000.' In *Invasive and Introduced Plants and Animals*, edited by Ian Rotherham and Robert Lambert, 343-352. London: Routledge.
- Bekoff, Mark. 2017. 'Scapegoating Possums: Science, Psychology, and Words of War.' *Psychology Today*, June 11. <https://www.psychologytoday.com/us/blog/animal-emotions/201707/scapegoating-possums-science-psychology-and-words-war>.
- Brooking, Thomas and Vaughan Wood. 2002. 'The Grasslands Revolution Reconsidered.' In *Environmental Histories of New Zealand*, edited by Eric Pawson and Thomas Brooking. Oxford: Oxford University Press.
- Brooking, Thomas and Eric Pawson (eds.). 2011. *Seeds of Empire: The Environmental Transformation of New Zealand*. London: I. B. Tauris.
- Bryant, Levi. 2010. 'Inhuman Ethics.' *Larval Subjects*, January 20. <https://larvalsubjects.wordpress.com/?s=Inhuman+Ethics>.
- Bryant, Levi. 2011. *The Democracy of Objects*. Michigan: Open Humanities Press.
- Bryant, Levi. 2012. 'Flat Ontology/Flat Ethics.' *Larval Subjects*, June 1. <https://larvalsubjects.wordpress.com/2012/06/01/flat-ontologyflat-ethics/>.

- Bryant, Levi. 2013. 'Black Ecology.' In *Prismatic Ecology: Ecotheory beyond Green*, edited by Jeffrey Jerome Cohen, 290-309. Minnesota; London: University of Minnesota Press.
- Davis, Mark et al. 2011. 'Don't Judge a Species on Their Origins.' *Nature* 474: 153-154.
- Dick, Jonathan, Janet Stephenson, Rauru Kirikiri, Menrik Moller and Rachel Turner. 2012. 'Listening to the Kaitiaki: Consequences of the Loss of Abundance and Biodiversity of Coastal Ecosystems in Aotearoa New Zealand.' *MAI Journal* 1(2): 117-130.
- DOC. 2004. 'A Pest of Plague Proportions.' <https://www.doc.govt.nz/documents/science-and-technical/everybodyspossum.pdf>.
- DOC. 2009. 'Native bush on your farm,' *Waikato Conservancy*.
- Fisher, Karen. 2018. 'Indigenous Ontologies and Nonhuman Agency: Co-governance of the Waipā River.' Lecture presented at GED Seminar Series, *Victoria University of Wellington*, April 19.
- Gan, Elaine, Anna Tsing, Heather Swanson and Nils Bubandt. 2017. *Arts of Living on a Damaged Planet: Ghosts of the Anthropocene*. Minnesota; London: The University of Minnesota Press.
- Haraway, Donna. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. London; Durham: Duke University Press.
- Harmsworth, Garth and Shaun Awatere. 2013. 'Indigenous Māori Knowledge and Perspectives of Ecosystems.' In *Ecosystem Services in New Zealand – Conditions and Trends*, edited by John Dymond. Lincoln: Manaaki Whenua Press.
- Harris, Max. 2017. *The New Zealand Project*. Wellington: BWB.
- Hettinger, Ned. 2001. 'Exotic Species, Naturalisation, and Biological Nativism.' *Environmental Values* 10(2): 193-224.
- Hølleland, Herdis. 2017. 'Caged for Protection: Exploring the Paradoxes of Protecting New Zealand's *Dactylanthus taylorii*.' *Environment and History* 23 (4):545-567.
- Isern, Thomas. 2002. 'Companions, Stowaways, Imperialists, Invaders; Pests and Weeds in New Zealand' in *Environmental Histories of New Zealand*, edited by Eric Pawson and Thomas Brooking. Oxford: Oxford University Press.
- Joy, Mike. 2015. *Polluted Inheritance*. Wellington: BWB.
- Linklater, Wayne. 2017. 'Native's Not Always Good and Exotic's Not All Bad.' *School of Biological Science News*, 9 March.
- Longhurst, Robyn. 2006. 'Plots, Plants and Paradoxes: Contemporary Domestic Gardens in Aotearoa/New Zealand.' *Social and Cultural Geography* 7: 581-93.
- Mercier, Ocean Ripeka. 2007. 'Indigenous Knowledge and Science: A New Representation of the Interface Between Indigenous and Eurocentric ways of Knowing.' *He Pukenga Kōrero* 8(2): 24- 22.
- Mercier, Ocean Ripeka. 2017. 'Bringing the 'Trickster Wasp' into Discourse on Biotechnological Controls of 'Pest Wasps'.' *MAI Journal* 6(1): 74-81.
- Mouffe, Chantal. 2013. *Agonistics: Thinking The World Politically*. London: Verso.
- Murris, Karin. 2016. *The Posthuman Child*. London: Routledge.
- Owens, Brian. 2017. 'Behind New Zealand's Wild Plan to Purge all Pests. *Nature*, January 11. <https://www.nature.com/news/behind-new-zealand-s-wild-plan-to-purge-all-pests-1.21272>.
- Panelli, Ruth. 2010. 'More-than-Human Social Geographies: Posthuman and Other Possibilities.' *Progress in Human Geography* 34(3): 79-87.
- Parsons, Meg, Johanna Nalau and Karen Fisher. 2017. 'Alternative Perspectives on Sustainability: Indigenous Knowledge and Methodologies.' *Challenges in Sustainability* 5(1): 7-14

- Peretti, Jonah. 1998. 'Nativism and Nature: Rethinking Biological Invasion.' *Environmental Values* 7(2): 183-192.
- Perry, George, Matt Mcglone and Janet Wilmshurst. 2014. 'Ecology and Long-term History of Fire in NZ.' *New Zealand Journal of Ecology* 38(2): 157-176.
- Phillips, Chanel, Anne-Marie Jackson and Hauiti Hakopa. 2016. 'Creation Narratives of Mahinga Kai: Māori Customary Food-gathering Sites and Practices.' *MAI Journal* 5(1): 63-75.
- Project Crimson. 2014. 'Fighting the Threat of Possums to Native Trees.' <http://projectcrimson.org.nz/wp-content/uploads/2016/05/Possum-Brochure-Jan-2014-web.pdf>.
- Roberts, Mere, Waerete Norman, Nganeko Minhinnick, Del Wihongi and Carmen Kirkwood. 1995. 'Kaitiakitanga: Māori Perspectives on Conservation.' *Pacific Conservation Biology* 2: 7-20.
- Richardson, David and Marcel Rejmánek. 2004. 'Conifers as Invasive Aliens.' *Diversity and Distributions* 10(5-6): 321-331.
- Rose, Deborah Bird. 2017. 'Shimmer: When All You Love Is Being Trashed.' In *Arts of Living on a Damaged Planet: Ghosts of the Anthropocene*, edited by Elaine Gan, Anna Tsing, Heather Swanson and Nils Bubandt, 51-65. Minnesota; London: The University of Minnesota Press.
- Sagoff, Mark. 2013. "What Does Environmental Protection Protect?." *Ethics, Policy & Environment* 16(3): 239-257.
- Simpson, Philip. 2017. *Tōtara*. Auckland: Auckland University Press.
- Steer, Jamie. 2016. A War on Pests and Weeds is 'Malicious' and 'Incompetent' and Will Ultimately Fail," *Stuff*, August 8, <https://www.stuff.co.nz/science/82113675/A-war-on-pests-and-weeds-is-malicious-and-incompetent-and-will-ultimately-fail>.
- Steer, Jamie. 2017. 'Are Deer Sort of like Moa?.' *Sciblogs*, April 13. <https://sciblogs.co.nz/so-shoot-me/2017/04/12/deer-sort-like-moa/>.
- Steer, Jamie. 2018. 'From Restoration to Reconciliation, no. 8, 9 & 10.' *Sciblogs*, December 21. <https://sciblogs.co.nz/so-shoot-me/2018/12/21/from-restoration-to-reconciliation-belief-8-our-ecosystems-are-going-to-collapse/>.
- Sundberg, Juanita. 2014. 'Decolonizing Posthumanist Geographies.' *Cultural Geographies* 21(1): 33-47.
- Teulon, David et al. 2015. 'The Threat of Myrtle Rust to Māori Taonga Plant Species.' *Science Solutions for B3* 68: 66-75.
- Todd, Zoe. 2016. 'An Indigenous Feminist's Take On The Ontological Turn: 'Ontology' Is Just Another Word For Colonialism' *Journal of Historical Sociology* 29 (1): 4-21.
- Tsing, Anna Lowenhaupt. 2015. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruin*. Princeton; Oxford: Princeton University Press.
- Tulloch, Lynley. 2016. 'Habitat crowding lame excuse for duck hunting.' *NZ Herald*, May 3. https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11632372.
- Williams, Peter. 2011. 'Secondary Succession through Non-native Dicotyledonous Woody Plants in New Zealand.' *New Zealand Natural Sciences* 36: 73-91.
- Youatt, Rafi. 2014. 'Interspecies Relations, International Relations: Rethinking Anthropocentric Politics.' *Millennium: Journal of International Studies* 43(1): 207-223.

Notes

- ¹ Amalia Louisson is a Melbourne-based ceramicist and Rosean scholar. She descends from two colonial lineages—matrilineally Israeli and patrilineally Pākehā—and is only at the start of a long journey to decolonise herself and her society (with much to learn). Her research specialises in utopian imagining and the intersection between philosophy and ecological practice.
- ² Brooking and Pawson 2011
- ³ Harmsworth and Awatere 2013
- ⁴ Harmsworth and Awatere 2013; Phillips et al. 2016
- ⁵ Joy 2015: 46; Harris 2017: ch. 9
- ⁶ Dick et al. 2012; Harmsworth and Awatere 2013; Roberts 1995; Phillips et al. 2016
- ⁷ Roberts 1995
- ⁸ Ibid.
- ⁹ Dick et al. 2012
- ¹⁰ Youatt 2014
- ¹¹ Haraway 2016
- ¹² Hølleland 2017
- ¹³ Bryant 2013
- ¹⁴ Ibid.
- ¹⁵ Simpson 2017
- ¹⁶ Tsing 2015
- ¹⁷ Bryant 2012
- ¹⁸ Rose 2017: 52
- ¹⁹ Haraway 2016
- ²⁰ Barad 2007
- ²¹ Rose 2017: 52
- ²² Bryant 2010
- ²³ Bryant wonders if “we could go one step further” to include non-animate entities in “this communism of actants,” which involves expanding “dignity and [a] set of ethical relations” to all entities (including stones, water, planets and so on). Ibid.
- ²⁴ Harmsworth and Awatere 2013
- ²⁵ Barad 2007. For discussions on why we should stop distinguishing between indigenous and foreign species, see Peretti 1998; Hettinger 2001; Beattie 2011
- ²⁶ Bryant 2013: 297
- ²⁷ Bryant 2011: 245; 279
- ²⁸ Bryant 2013: 297
- ²⁹ Tsing 2015: 157; 160.
- ³⁰ Ibid., 5, 158. Haraway admits that “[p]erhaps the fact that all of us inherit the trouble of colonialism and imperialism in densely related, mostly white, Anglophone webs makes us need each other even more as we learn to rethink and refeel with situated earth critters and their people” (2016: xiii). I am acutely aware of new materialists’ rounded understanding of the complexity of colonial issues. I am more concerned with tones that could influence simplistic applications of their unfenced advice.
- ³¹ Dick et al. 2012: 128
- ³² Steer 2018: no. 10
- ³³ Linklater 2017; Tulloch 2016; Bekoff 2017; Steer 2016; Davis 2011; Sagoff 2013. Keep in mind that these environmentalists don’t base their justification on new materialism, rather their arguments illustrate the dangers of following an unprincipled new materialism.
- ³⁴ Isern 2002: 244. I found this telling notice at a hut in Fiordland National Park, 20 April (2018):
- THE BAD GUYS**

The wooden boxes you see on the side of the track are Traps for introduced pests like Rats, Mice & Stoats. You can sponsor a trap & help us fight the **ENEMY!**

Contact Joyce B. Johnson at Wairarapa Jot for more information and join the fight!
0800 376 174
- ³⁵ Owens 2017
- ³⁶ Steer 2017
- ³⁷ Hølleland 2017
- ³⁸ Steer 2018: no. 8 & 9
- ³⁹ Hølleland 2017: 554. Also see Isern 2002

- ⁴⁰ Parsons, Nalau and Fisher 2017: 11
- ⁴¹ Williams 2011. "Recent studies, however, suggest that there are important differences in succession through mānuka as opposed to gorse, with species richness lower under gorse" (Perry et al. 2014: 166).
- ⁴² Teulon et al. 2015. Also see Lee et al. 2017
- ⁴³ Project Crimson 2014; DOC 2004.
- ⁴⁴ This was explained to me by botanist Julie Deslippe. As Tsing puts it, "[p]ines are among the most active trees on earth. If you bulldoze a road through a forest, pine seedlings will likely spring up on its raw shoulders... Pines grow in extreme environments: cold high places; almost-deserts; sand and rock. Pines also grow with fire" (2015: 169). Also see Richardson and Rejmánek 2004
- ⁴⁵ There are over 100 of these islands, including Kapiti, Te Hauturu-o-Toi, Mana Island and Rakiura.
- ⁴⁶ Longhurst 2006
- ⁴⁷ Mercier 2017
- ⁴⁸ Mercier 2007: 107
- ⁴⁹ Brooking and Wood 2002. However, this may not be plausible in actuality. For example, "conditions on an open grassland site, like a farm paddock, are not the most favourable for many native trees." Due to soil conditions, "rich organic matter is not available on farm pasture" (DOC 2009).
- ⁵⁰ Murriss 2016
- ⁵¹ Bakhtin 1965: 26.
- ⁵² Tsing 2015.
- ⁵³ Tsing reminds us that "[a]s long as trees make history, they threaten industrial governance" (2015: 168).
- ⁵⁴ Sundberg 2014; Panelli 2010
- ⁵⁵ Todd 2016: 8
- ⁵⁶ Sundberg 2014: 35
- ⁵⁷ Gan et al. 2017: 11
- ⁵⁸ Mercier 2007