



Article

Ngā Pūrakau No Ngā Rākau: Stories from Trees

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Abstract: Within te ao Māori—the Māori world view—whakapapa, or genealogical connections, link together every being. Relationships with trees are traced through ancestral bonds that are recited through storytelling. Trees are tūpuna, elders, who hold knowledge, reflected in the etymology of rākāu (tree) being the pū (base) of pūrakau (stories). The Atua Tāne Mahuta, sought ngā kete o te wānanga, the three baskets of knowledge. The wānanga is a place of learning and was brought into being by the god of trees, forests, and birds. Ngāpuhi artist Nova Paul's experimental films are made with kaupapa Māori values. Her most recent films *Rākau* and *Hawaiki*, both 2022, reflect on lessons from trees, the latter premiering at the Sundance Film Festival 2023. These films are not so much *about* trees as *by* trees. Nova has made film developer from foliage of the trees that are filmed so that, for example, the riverside pōhutukawa tree is processed in a bath of pōhutukawa chlorophyll developer. For Nova, this process reveals not only an image but the mauri (life force) of the tree through the taking and then the making of her tree films. The films produced are more like an arboreal self-portrait: trees speaking directly through an embodied medium. If trees process sunlight to produce chlorophyll, here, chlorophyll produces images of light in order to communicate messages across species. The tohunga Reverend Māori Marsden wrote that photographic technologies might provide spiritual insight into perceiving life force: "Those with the powers and insight and perceptions (Matakite), perceived mauri as an aura of light and energy radiating from all animate life. It is now possible to photograph the mauri in living things." In previous films, Nova experimented with colour-separation techniques to pull apart the fabric of time and space, which Tessa wrote about for the *Third Text* online forum "Decolonising Colour?" That article was translated into Spanish for the book *Pensamientos Migrantes: Intersecciones cinematográficas* by the Colombian experimental film publishers Hambre Cine (2020). Continuing with a conversation about the ways in which experimental film practices can open up a space for decolonial thought and Indigenous epistemologies, Nova and Tessa co-write this paper in order to share the pūrakau (stories) arising from the images of these rākāu (trees), in which photosynthesis, filmmaking, and spirit, are intertwined, and where the mauri (life force) is revealed.

Keywords: trees; stories; branches of thought; decolonial representation; Indigenous film practice; plant-based film processing



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There is a story from the tribes of Ngāti Wai and Ngāti Hine that says the Kauri tree and the Whale (Tohorā) are brothers. When the Tohorā went to explore the sea, he liked it, and suggested that the Kauri tree join him, but the Kauri wanted to stay on the land. So the Tohorā removed his skin and gave it to the Kauri and returned to the sea [1]. Now, throughout Aotearoa (New Zealand), Kauri trees are dying from a pathogen that attacks their root systems. Kauri dieback, as the disease is known, has wreaked havoc on the Kauri forests, leaving skeletal stands of craggy branches. Recalling the story that the Kauri and Whale are brothers and that the Tohorā left the Kauri its skin for protection, Māori elders wondered if this ancestral connection might hold a cure for the twenty-first century disease and prepared an ointment of whale blubber to lather on the roots. The result saw the disease regress and this holds the possibility for a cure. In mātauranga Māori, or Māori

knowledge, this system of storytelling holds scientific understandings. The story of the kinship relationships between the Kauri and the Whale was kept as a repository for the knowledge that would be required in the future for the protection of the Kauri.

Making connections in the Māori world is called *whakawhanaungatanga*. The word itself is broken into *whaka* (become), *whanau* (family), and *tanga* (a suffix that expands the concept). *Whanaungatanga* is used as a way to establish relationships. Traditional stories are often recited to reveal specific relationships between ancestors, species, gods, and states of being. These connections are woven together and held in stories and retold; a web of connections is mapped out through *whakapapa* or ancestral links. The term *whakapapa* embodies “much more than genealogy; for it encapsulates not only the knowledge pertaining to various relationships within Māori cosmogony, but the process of layering knowledge and connecting those relationships” [2] (p. 4). Ngā Puhi scholar Kirsty Dunn reflects on this quote by Charles Royal, and notes that *whakapapa* can also mean “to place in layers”, as well as “to make a foundation” [2] (Ibid). Layers and foundations will be important to our *kōrero* or discourse here, where, drawing on *whakapapa*, we ask, how can these connections between the land, species, and gods be revealed in film?

In *te ao Māori* (the Māori world), trees are our *whanaunga* and *tuakana* (elder siblings) and holders of knowledge, from which wisdom and understanding are derived. *Pūrākau* is the Māori word for story and, as Jenny Lee notes, it is “not coincidental that the word *pūrākau* literally refers to the roots or the base (*pū*) of the tree (*rākau*)” [3] (p. 7) (see Figure 1). Indeed, imagery of trees and bushes reflects Māori cultural understandings of social relationships and inter-connections, both with each other and the natural environment [3]. Lee notes that the base of each tree is buried deep within *Papatūānuku*, the earth mother, and that every tree needs its roots, which she characterizes as “experiences, knowledge and teachings”, in order to survive and grow [3] (Ibid). The “base” of every story comprises a mycorrhizal web of relations—*whakapapa* that literally resides within *Papatūānuku* [3]. According to Robin Wall Kimmerer, mycorrhizae are “fungal strands that inhabit tree roots” that “weave a web of reciprocity”, redistributing wealth so that “(a)ll flourishing is mutual” [4] (p. 20). This paper will not discuss fungi as a discrete entity within *ngāhere*, the forest, but rather considers fungi, plant, soil, and animal life to be inextricably interconnected.

Lee advocates for a “*pūrākau* approach” or methodology which “guides us to speak in a language that is not exclusive, but draws on our own ways of seeing, speaking and expressing ourselves” [3] (p. 10). Nova has used a *pūrākau* method to make her most recent films *Rākau* (2022) (see Figure 1) and *Hawaiki* (2022), which were created from the premise that “every tree has a story”. Moreover, within this essay, we utilize Lee’s “*pūrākau* approach” by talking with, about, and around *rākau* and *pūrākau*, stories and trees, with each other, and a host of others, in order that new branches of thought will emerge from ancient roots, for “the researcher adds another branch to the *rākau*, a ‘branch’ that has space to be unique” [3] (p. 11). Lee considers the *pūrākau* approach as a research method which has the potential to hold many layers of meaning, and this is achieved through the activation of voice and literary techniques within the text. Our voice is multiple, like the layering in Nova’s experimental colour-separation films (see below), including images of multiple trees forming one tree, or one tree made of many trees.

Let us begin with making a foundation and placing layers upon it. Nova is *tangata whenua Māori*, her mountain is *Whatitiri* and her river is *Waipao*. She has an experimental film practice that spans two decades, and much of this is guided by her tribe, the *hapū Te Uru Roroi*, *Te Parawhau me Māhurehure ki Whatitiri*, and the *iwi Ngāpuhi*. Tessa was born and raised in *Tāmaki Makaurau* (Auckland), under the watchful eye of *Rangitoto* from across the sparkling waters of the *Waitemata*. Tessa now lives in Australia, working in *Naarm/Melbourne*, on the lands of the *Wurundjeri Woiwurrung* peoples of the Eastern Kulin Nations.



Figure 1. Nova Paul, *Rākau*, 2022, 16mm film print.

We have been friends and colleagues for over twenty years, with Tessa writing about Nova's use of colour-separation in her experimental film works *Pink and White Terraces*, (2006), and *This is Not Dying*, (2010), for the *Third Text* online platform "Decolonising Colour?" [5] Nova's process, in this instance, involved filming the same sequence three times, processing each take in a separate colour (red, green, or blue) and reassembling the sequences so that static objects maintained "true to life" colour, while moving objects unleashed coloured after-images within the filmic frame (see Figure 2). In pulling apart and reassembling colour, Nova created *shades*, in both senses of that word, allowing the wairua, or spirit, of matter, to be visualized. This stretching, disassembling, and layering of time follows First Peoples' ontologies in which time is not linear, but a meshwork of past, present, and future.

Nova filmed the daily life around her marae (ancestral land) for *This is Not Dying*. A humble kitchen scene features a fridge covered in magnets, one of which depicts the demigod Māui snaring the sun in a net, a synecdoche of the film as a whole. The pūrākau of Māui catching the sun is a familiar childhood story in Aotearoa New Zealand; a story about the days moving too quickly for Māui to get things done. To slow down the endless march of time, Māui's heroic intervention was to catch the sun and beat Rā, the solar deity, so that rā, the daylight hours, could be longer. Just as Māui slows time, makes it linger longer, so too Nova's film layers and congeals time. The story of how Māui slowed the sun reminds us that time is malleable, material; it can be stretched and thickened.



Figure 2. Nova Paul, *This is Not Dying*, 2010, 16mm film, 30 min (still).

When considering the concept of time for Māori, Nova once asked her Aunty for a Tangata Whenua perspective. Her Aunty's reply was that she might like to direct her question to Tāne Mahuta, God of the Forest, embodied in the form of a giant Kauri tree in the Waipoua Forest of Northland, who was a seedling 2000 years ago, the span and scale of a lifetime elongated into millennia. Since then, Nova has put her questions directly to the trees, particularly during the lockdowns of COVID-19, when rākau provided much-needed grounding. As daily life ground to a halt, an ordered sense of time also became untethered, which Paul Preciado, among others, saw as a “micro-political opening” for decolonial and ecological thought; a shamanic caesura for “modifying subjectivity”, an opportunity to declare “stop the world: I want to get off” [6]. Is it implausible to connect such a tectonic temporal shift and its concomitant effects on thought, to shifts within cinema, which Deleuze assesses as points when new cerebral circuits are created? Creating new sequences in art means creating them in the brain, too [7].

Both *Rākau* and *Hawaiki* are conversations with trees. *Rākau* (2022) preceded *Hawaiki* and was commissioned for the Māori Moving Image exhibition at Christchurch Art Gallery in 2022. In this film, Nova carried out her first experimentations, filming trees and hand processing them in the leaves of the trees. Carefully exposing the film footage to ensure all film process elements could be worked through, with notations on the filming, this film is a study of the textures of the trees from an etheric circle of ancient pūruri. The Bolex camera moves along the trunk and into the branches, filming in 20 second rushes of hand-wound film to create in-camera edits. The footage sways along with the wind in the trees. In the B&W experimentations in *Hawaiki* (which screened at the Sundance Film Festival 2023), Nova has approached filming the trees with a more formal, portraiture approach: sometimes the camera is locked off and other times it pans around smoothly, or carefully tracks the limbs of the tree.

Here, Nova is extending her experimental film practice of exploring the materiality of film and early cinematic practices through a Māori lens. She has researched and developed a methodology to process 16mm film in a plant-based film developer, replacing environmentally damaging Kodak D-76 chemicals. Using foliage from the very same rākau that are her filmic subjects, she creates a chlorophyll bath made from leaves and bark, in which she develops the celluloid. For example, a riverside Pōhutukawa tree is filmed on 16mm film and is processed in a bath of Pōhutukawa-based chlorophyll developer, or, as Nova calls it, “tree juice”. This is in addition to the plant-derived materials which traditionally make up the celluloid medium, including cotton by-products and camphor [8]. This technical methodology reflects the epistemological frameworks of te ao Māori. Plant-based

film chemical processing reveals not only an image of the rākau but also the mauri (life force) of the tree. Rather than continuing the extractive nature of western photographic histories—*taking* an image—this co-creation between tree, human, and celluloid is a collaborative *making* of an image. You could even say that the images are given by the trees themselves, as Nova considers that the whole project “came from the trees”. Just as Lee speaks of a pūrākau method which “creates the opportunity to write about culture as well as write culture into the text” [3] (p. 12), so too Nova is making images *of* trees as well as *by* trees, in a branching methodology that allows for both—and.

The branching methodology of both—and troubles the categories inherent to pākehā (non-Māori, generally European) epistemologies, including the triadic semiotic theory of Charles Sanders Peirce. In this theory, the word “tree” is a symbol, the photograph or film of a tree is an icon, and residue of the tree’s bark, an index. But photographs already problematize this division by sharing characteristics of indexicality (physically affecting the form of the sign) and symbol (requiring a certain degree of cultural literacy to be interpreted) [9]. The Māori photographer Natalie Robertson argues for the indexical nature of photography when she writes about the experience of coming into contact with negatives of her ancestors in a museum archive. “Silver halide crystals held traces of light, and energy reflected off my ancestral Waiapu River and off people from my tribe” [10] (p. 64). Nova’s films, however, exceed the indexical; the fact that the images are made with “tree juice” and therefore carry DNA material, imbues them with whakapapa. They are not remnant traces, but living relations.

These films are akin to an arboreal self-portrait, trees speaking directly through an embodied medium; (the use of this word “akin” rather than “like” deliberately leaves behind the language of Facebook, and instead uses language that emphasizes kinship or whakapapa cosmologies). An analogy can be drawn with Stan Brakhage’s 1963 film *Mothlight*, where the filmmaker sandwiched moth wings, flowers, grasses, seeds, and leaves between two strips of clear film. As J. Hoberman writes in *Artforum*, this ceases to be representation and is instead “the thing itself . . . profoundly indexical” [11]. In Nova’s films, we might equate this with Mana Motuhake in action: self-determination for the trees, as their own representatives. If trees process sunlight to produce chlorophyll, here, chlorophyll produces images of light in order to communicate messages across species. In the case of Brakhage’s *Mothlight*, Hoberman declares the filmmaker was “practicing a particular sort of magic” [11]. In the case of *Rākau* and *Hawaiki*, photosynthesis, filmmaking, and spirit, are intertwined and mauri is revealed.

Nova’s filmmaking practice has been driven by implementing Mana Motuhake and Tino Rangatiratanga (self-determinacy) in order to decolonize representation and privilege Indigenous processes. Centring a Māori world view in both the *what* and the *how* of her film practice creates relationships with subjects that echo Māori values and ways of being. In making her recent films, Nova wondered, can plants teach us how to take an image? And how might the wisdom that comes from Indigenous harvesting be practiced when filming? In approaching her filmmaking, she asked the trees for their image and their leaves to make into a developer and offered a karakia (prayer or acknowledgement) to the ngāhere (forest). Indigenous practices around collecting food and medicine, and utilizing materials from the natural world have an intentionality, as described in Potawatomi botanist Robin Wall Kimmerer’s *Honorable Harvest*: care for the things that care for you, acknowledge the provider, ask for permission and uphold the integrity of the process. Only take what is offered and only what you need, leaving more than half for others and for regeneration. Follow traditions of harvesting and utilize everything. “Sustain the ones who sustain you and the earth will last forever” [4] (p. 183).

Considering filmmaking as a “harvest” both by filming the tree and collecting leaves to make the film developer, Nova’s practice included karakia, acknowledging the gods or Atua of the ngāhere and of creativity. How often do we ask permission before we “take” a photo? And how often do we treat images of ancestral beings we have “taken” with the ongoing respect they deserve? Speaking of images of her departed ancestors, Māori

filmmaker Merata Mita said “at home I greet the images of my ancestors . . . and speak to them as they come forth on the screen. They have much to relate to me and I and my children have much to learn still from them . . . Foremost, and through all pervasiveness throughout this connection, is the acknowledgment of our creator and our implacable link to the earth, its creatures, its elements and seasons, the stars, the planets, the entire universe . . . ” [12] (pp. 103–104).

So, if rākāu (trees) are the pū (base) of pūrākau (stories), then let us dig deep into their whakapapa—grounded, ancestral, and material relations. We will pair three of the rākāu that make up Nova’s new film series with a pūrākau which *develops* (in the double meaning of botanical growth *and* the emergence of imagery on film) the knowledge and wisdom of the trees: ngā tohu, the signs they reveal through their kōrero, messages.

“If your films don’t heal, there’s no point in making them” [13]. As with other Indigenous practices that centre the natural world, such as those outlined in Kimmerer’s *Honorable Harvest*, for Māori, karakia (acknowledgements) are offered to Tāne Mahuta for all plants harvested, giving thanks for life and the fruits of the forest that give us health. Each karakia finishes with *Tihei mauri ora*, calling the breath of life and asserting wellbeing. By entering into this relational practice, it is also possible to consider taking filmic images in the same way.

Undergrowth, bushes, scrub, and ferns, provide the birthing and nursery conditions for trees. Fern fronds unfurl like koru, the intricate spirals that can be seen throughout Māori whakairo, carving, and kowhaiwhai, painting. Ferns are fractal plants, whose leaves mirror and echo their own structure on a micro and macro level. Perhaps it is no coincidence that one of the first photographs on record is William Fox Talbot’s *Buckler Fern* (1839), a “calotype” from the Greek meaning “beautiful impression” [14]. Another key species of the undergrowth is Kawakawa, a medicinal plant known for its many healing properties. Such is the significance of this sacred plant that it is used in ceremonial contexts; for example, Kawakawa is held by women when they karanga (call) people on to the sacred grounds of the marae.

Kawakawa leaves are held and shaken to create energies which open a doorway for ancestors to come through. This trembling can also be heard in the vibrato voices of the women calling the ancestors, known as ihirangaranga, which shares vibrational resonances with rākāu, and it can be seen in quivering, iridescent leaves in a scene in Nova’s *Pink and White Terraces* (see Figure 3). Such trembling indicates a threshold space, and can be productively linked to what Édouard Glissant referred to as the “trembling thinking” required to imagine the world anew: “utopia needs trembling thinking: we cannot discuss utopia with fixed ideas” [15] (p. 139). For Glissant, a Caribbean writer who thought with the mangrove, tremblement “is thinking in which we can lose time, lose time searching, in which we can wander and in which we can counter all the systems of terror, domination, and imperialism with the poetics of trembling” [15] (p. 140). If only he could have seen kuia performing the wiri, or quivering of hands, with and without Kawakawa leaves, as they enter the sacred space of the marae. It is said that this movement represents, among other things, shimmering waters, heatwaves, and, importantly to the kaupapa of this kōrero, wind rustling through leaves [16].

Trees have been imbricated with film since the Lumières produced *Repas de bébé* (*The Baby’s Meal*, 1895), where it was noted that audiences were even more enthralled by the rustling of leaves in the background than the prosaic action of feeding a baby in the foreground [17] (p. 50). In her essay “Vegan Cinema”, Anat Pick contrasts two approaches to life and looking exemplified by this film: the devouring baby, and “its non-voracious alternative that attends to objects at a distance, and lets them be” [18] (p. 131). Pick’s concept of “vegan cinema” is not necessarily a didactic exploration of animal rights, but a cinema which allows the more-than-human to permeate the medium, rather than the relentlessly anthropocentric narratives of mainstream film. In *The Baby’s Meal*, what is most profound is that the “beauty of the fluttering leaves made visible the operation of natural

forces, undirected by human hands, to which the cinema is witness” [18] (pp. 131–132). It is these natural forces that Nova connects to and makes-with in the films *Rākau* and *Hawaiki*.

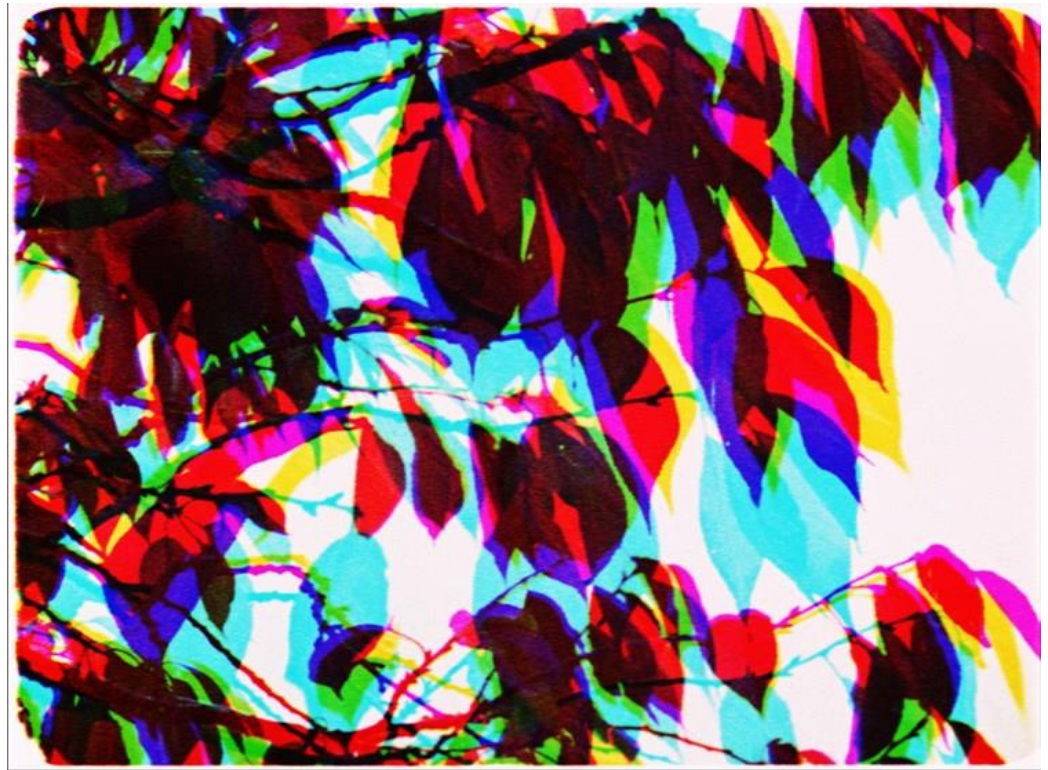


Figure 3. Nova Paul, *Pink and White Terraces*, 2006, 16mm film, 10 min (still).

Perhaps the most famous, and foundational, of pūrākau, is that of the separation of Ranginui, the sky father, and Papatūānuku, the earth mother. Before their son Tāne, God of the Forest, pushed them apart, there was no light, and no differentiation in the universe; the two parental gods and their children lived together in featureless darkness. Tāne and his siblings were tired of living this way, and instigated a rebellion. Tāne lay on his back and pushed with his long straight legs (interestingly, in terms of the copious contemporary literature on the “intelligence” of trees, which resides in the mycorrhizal or fungal networks found in trees’ entangled roots, Māori always knew the “head” of the tree is its root system, not the leafy canopy). Eventually, Tāne’s parents were pushed apart, allowing for illumination and creating Te Ao Mārama, the world of light. Aptly, Tāne Mahuta is personified as the largest Kauri tree in Aotearoa, lording it over the ngāhere, forest, in Northland, where he is a major tourist attraction, and home to countless forms of wildlife.

Film is a medium of light, and our whole cosmos can be visioned, as Henri Bergson imagined it, as a “metacinema”, with its plays of light, shadow, and movement [19] (p. 61). Similarly, photosynthesis brings the world into being: plants are our oldest ancestors, without whom we could not breathe, and to whom we owe the gift of life. Tūhoe kaumātua Hēmi Waiwai further elaborated the etymology of rākau, trees, as follows: rā is the source of divine energy (the sun); kā is the igniting of divine energy (a spark); ū is to instil, and therefore rākau can be understood as the process western science more recently came to call photosynthesis. This could also be related back to the pūrākau of Māui snaring the sun, since photosynthesis is a kind of binding of the sun’s energy, transmuting it into another form. We can understand photosynthesis as a mode of “non-human looking” [20] (p. 153). The sun must be *perceived* by plants to create the basic building blocks of life. Even the birth of human vision is linked to photosynthesis, as our microscopic ancestors had no

eyes, but photoreceptors, which sensed sunlight, and the cellular structure that enabled them to photosynthesize is the same one that eventually developed into eyes [20] (Ibid).

Film can also be called a kind of photosynthesis; just think of the first photograms which were literally developed in the sun. If the Reverend Māori Marsden speaks of a “woven universe”, perhaps we could imagine both film and photosynthesis, and especially film developed in chlorophyll, as weaving with light? Patricia Grace explains: “Writing can be likened to both carving and weaving. A writer, like a carver, seeks to reveal what is within. A writer, like a weaver, selects the strands and works them together” [2] (p. 16). Certainly, Nova’s films have always been woven, meshing together layers of colour, time, place, and perspective. But in attending to light, we cannot ignore the foundational role of darkness, either in cinema, or in the growth of plants and people. Dunn quotes Tina Makereti, who refers to Te Kore (the void or chaos) as a “place of pure potentiality”, and Dunn interprets this as meaning the place where creativity springs from [2] (p. 17). Indeed, Ranginui Walker refers to Te Kore as “the primaevial matter that comprised the seeds of the universe” which coalesced to form Papatūānuku and Ranginui; and it is from this union that “all things in the world descend, including atua, stars, mountains, lakes, and rivers, flora and fauna, humans and other animals” [3] (pp. 25–26). This is why Māori whakapapa to, or make relations with, not just the originary parents, but the environment and everything in it, including animals; they are whanaunga, relations.

If Gilles Deleuze compares filmmakers to philosophers, saying that the former think with images rather than concepts [19], could we compare trees to filmmakers? Both do their developing in the dark in order to be projected into, or via, Te Ao Mārama, the world of light. “Film itself thinks” [21] (p. xix) and so too do trees. There has been so much recent scholarship on “plant intelligence” [22,23], but much of this tends to imagine trees as independent scholars, although Michael Marder is quick to point out that rhizomatic thinking, which is “plant-thinking *proper*”, takes us beyond “the fictitious enclosure of a reified and self-sufficient identity” [24] (p. 169). Likewise, we want to acknowledge the whole entangled forest, starting, of course, with the undergrowth, and what is under the undergrowth, Papatūānuku, our mother, to whom we all whakapapa, make relations, with (see Figure 4). In fact, the word ngāhere (forest or bush, as it is referred to in Aotearoa) literally means the (nga) ties (here), representing interrelations and interdependence [3] (p. 7).

If plants were the first filmmakers, it is not surprising that light in the trees recurs as a filmic trope well beyond its debut with the Lumières. This is how the Dream Machines of Brion Gysin and William Burroughs came into being—they were contraptions built to echo the play of light and shadow on eyelids, as seen with the sun setting through trees while travelling on a bus or train [25]. The pulsing flickering could induce hallucinatory patterns behind the eyes, psychedelics without drugs, a state Nova’s films frequently produce.

Important to this discussion is the concept of mauri that permeates all Māori thinking, including arts and sciences. Scholars from the latter field, Daniel Hikuroa, Angela Slade and Darren Gravley, have provided an excellent summary of mauri via numerous thinkers and definitions, including that it operates as a “physical life principle; the spark of life, the active component that indicates a person is alive, the binding force between the physical and the spiritual; the capacity for air, water or soil to support life.” Importantly, for our purposes here, mauri can be found “in water, land, forests as well as mist, wind, soil and rocks, and is the force that interpenetrates all things to bind and knit them together” [26] (p. 2). Tohunga Reverend Māori Marsden notes that photographic technologies can reveal the mauri in life: “Those with the powers and insight and perceptions (Matakite), perceived mauri as an aura of light and energy radiating from all animate life. It is now possible to photograph the mauri in living things” [27] (p. 50). Marsden recognizes that photographic practices enable mauri to be visualized and that the filmic apparatus has the potential for revealing otherwise imperceptible life forces, thus enabling spiritual insights. Reflecting on the aura of light radiating from life has been an ongoing preoccupation in Nova’s film practice. Her technicolour films experimented with colour-separation techniques, intent on

opening spaces for tracing wairua, spirit, layering whakapapa, and creating a decolonial *thought-image* [28] (p. 105), by pulling apart the fabric of time, just as Tāne once pulled apart his parents in order to create a new reality.

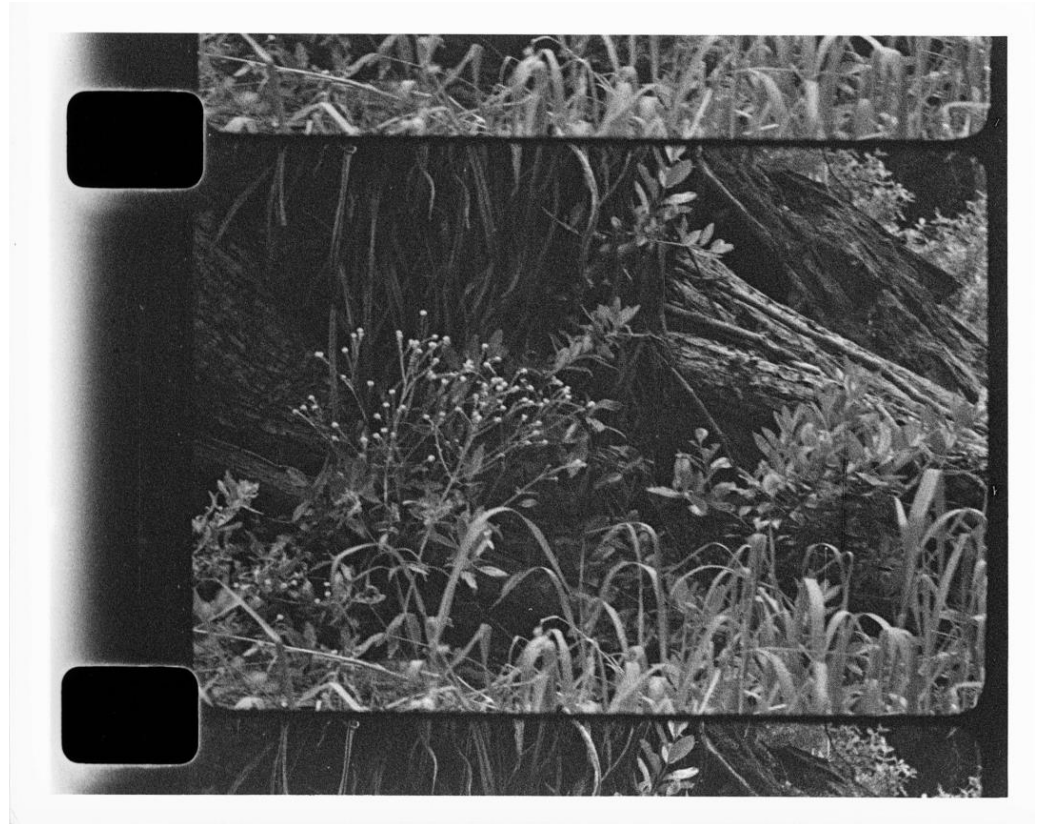


Figure 4. Nova Paul, *Rākau*, 2022, 16mm film print.

This same Atua, Tāne Mahuta, God of the Forest, also sought and retrieved *ngā kete o te wānanga*, the three baskets of knowledge, from the heavens. These included *te kete-tuatea* (the basket of light), *te kete-tuauri* (the basket of darkness) and *te kete-arōnui* (the basket of pursuit) [29]. That the *wānanga*, which is a place of learning, was brought into being by the god of trees, forests, and birds, does not seem coincidental. The forest is a library, a repository of knowledge, it is “thick with information” (Michael Pollan uses this term in relation to his garden) [30] (p. 73). In having this cross-cultural, and cross-Tasman hui, we too, Nova and Tessa, are creating a *wānanga*. This text is not the product of a singular vision—we are not a singular voice, but a braided one, like the afterimages in Nova’s colour-separation films. Kimmerer also discusses coloured afterimages when she notes the abundance of her ancestral lands on Turtle Island, including the psychedelic inflorescence of yellow goldenrods and purple asters. These complementary colours appear in late summer, making pupils (in both senses of the word) vibrate and dilate. Kimmerer uses this afterimage effect as a metaphor for the two worlds she inhabits; her “science eyes” and the world of Potawatomi traditional knowledge. Her methodology, like our Trans-Tasman, Māori-Pākehā *wānanga*, is one of complementarity. She hopes that science and traditional knowledge can be “purple and yellow to one another”, enacting the beautiful overlay of goldenrod and asters in their complementary colours. “We see the world more fully when we use both” [4] (p. 46).

Vision, however, not to mention scopic apparatuses such as cameras, microscopes and telescopes, have all been tied to western systems of domination. Behind Nova’s film practice is an ethos that echoes Māori filmmaker Barry Barclay’s notes around hui, meetings, *kōrero*, discourse, and the desire to make the camera a listener, rather than a scopophilic voyeur [31] (pp. 14–18). Listening is a humble activity, undertaken by students in the

wānanga of life. A film can also be a wānanga; a place of learning, a place of time in space, a starting point for filmic production and engagement, the site of making and then viewing. This wānanga framework radiates out, like the concentric circles within a tree trunk, marking growth, knowledge, and measuring time. In this wānanga, Mita has a kōrero with Deleuze about the thought-image, suggesting that the medium of celluloid film creates memory pictures, pictures of the imagination, in a continuation of the oral tradition [13] (p. 3).

The Pūriri tree is very special to Nova's hapū, because her mountain, Whatitiri, was covered in Pūriri that were felled by colonial settlers. It is said that the name Whatitiri (Goddess of Thunder) was given to the mountain because of the flapping of the kūkupa (kererū/wood pigeon) wings; their abundance, due to gorging on Pūriri berries, made a thunderous noise. Nova's hapū use Pūriri leaves in their tangihanga (funerary rites) making pare rau, (head wreaths), and surrounding the tūpāpaku (deceased body). The rau/rākau is a portal between this world and the underworld. Before colonization, tūpāpaku were placed in trees and a year later our bones were interred in caves. Today, stands of Pūriri are often wāhi tapu, sacred sites.

Within the film *Hawaiki*, the Pūriri tree is a focal point, a portal created by the children of Okiwi school on Aotea, Great Barrier Island, in the Hauraki Gulf (see Figure 5). At the edge of the playground, close to the forest, the children have made a refuge they call Hawaiki. Woven through ancestral stories and in genealogy, Hawaiki is a place with spiritual and metaphysical connections for Māori. With deep cultural links across the Pacific or Te Moana-nui-a-Kiwa, Hawaiki is an island, a homeland, a portal where Māori come from and will return to. In the world of the children, we see that their ancestors also intended that Hawaiki was for them to make their own, to play with, and have agency within. Hawaiki is a place where spiritual connections to ancient wisdom exist, a sanctuary for reflection and place to be yourself. Under the shelter of the trees and grounded on the land, the children create a space for their self-determination, reminding us that Hawaiki enables us to build the world we want.



Figure 5. Nova Paul, *Hawaiki*, 2022, 16mm film print.

This is a fractal, or nested wānanga, place of learning, within, or in addition, to the school on whose grounds it has emerged. We might relate this relational wānanga to Moten and Harney's concept of Study, that exists both inside, outside, and in spite of, the institution. Study is always relational—Study is “what you do with other people”,

it is “talking and walking around with other people, working, dancing, suffering, some irreducible convergence of all three, held under the name of speculative practice” [32] (p. 110). In *Hawaiki*, Nova is both filming a wānanga, and creating one. The film itself is a place of learning, a conrescence of time into place, with its mauri, life force, coming from the Pūriri tree itself. The Pūriri juice that develops the film is vivid green, bursting with chlorophyll, with life, giving a rich tone to its celluloid self-portrait. Tihei mauri ora!

By contrast, Pōhutukawa gives an orangey, sepia tone. This makes sense both in terms of its reddish wood, bright red flowers, and the fact that, in film media, sepia is associated with memory and passing, and Pōhutukawa are connected to death. They tumble and prostrate themselves, humbly reaching and searching sea and sky, as well as holding out a helping hand to guide those on rocky paths, including the spirits of the departed on their journey to Hawaiki (see Figure 6). Pōhutukawa is the name of one of the stars of the Matariki cluster (Pleiades), and she is the star associated with collecting the souls of the departed [33].



Figure 6. Nova Paul, *Hawaiki*, 2022, 16mm film print.

In *Hawaiki*, Pōhutukawa’s self-portrait is flecked by flashes of light, scars and scratching, like the salt and sea-spray that some say is the source of the name Pōhutu (a geyser), appropriate to a sea-side tree [34]. So close are they to the sea that some iwi have the Pōhutukawa whakapapa (relate) to Tangaroa, God of the Sea, rather than Tāne, God of the Forest [34]. The ocean breeze gusts through limbs, which wave to, and with, the waves of the ocean. They have strong hearts, as the name “iron heartwood” attests to; their timber is staunch and red, like a beating heart. Ngāti Rārua Ātiawa Iwi Trust writes that Pōhutukawa are “filled with aroha” or love [35].

The Pōhutukawa and Rātā are related by their red blooms, and Rātā is a key character in an important pūrākau or story. Rātā was on a mission to avenge his father, and so he

needed to make a canoe. But even though he cut down a straight tree and began carving it, when he returned the next day to complete his task, the canoe was nowhere to be seen, and instead, the tree he had felled was standing tall again in the very spot he had cut it down. Rātā felled the tree again, and carved it again, but the next day the exact same thing happened. This time, after cutting and carving, Rātā hid behind a bush and saw the hakuturi (spirits of the forest in the form of birds, insects and pekapeka, or bats), were replacing all the fragments of the tree. When he confronted them, they told him he had failed to follow kawa or protocol. When he did so by reciting a karakia before taking a life from the forest (as in Kimmerer's *Honourable Harvest*), the hakuturi released the tree and Rātā was able to continue on his mission [36].

That the tree cannot be felled is interesting in relation to Deleuze and Guattari's systematic attempt to destroy the image of arborescence and lineal descent in favour of the distributed rhizome. Of course, we now know that trees are not in fact individual, upright citizens of the plant "kingdom", but nodes in underground networks. Marder argues for the use of rhizomatic thought and other Deleuzian concepts without uprooting or felling the tree, because *no* plant is the product of hierarchical organization. According to Marder, even in its spatial verticality, the tree "maintains conceptual horizontality . . . its body is a non-totalizing assemblage of multiplicities" [24] (p. 85). It goes without saying that Māori have always known this, and that in trying to fell Tāne Mahuta without acknowledging mycorrhizal whakapapa Deleuze was barking up the wrong tree, a pun all the more layered when we consider both the *bark* that develops Nova's films, and that Deleuze himself called the barking of dogs "the stupidest cry . . . the shame of the animal kingdom" [37]. The fact that Rātā's tree reassembles again and again is thanks to the networked nature of the forest: birds and insects put the tree back together again, piece by piece, because the tree is already made up of countless actors, countless forces; it is "an inherently political space of conviviality" [24] (p. 85). Pōhutukawa remind us of this, with their fibrous, matted aerial roots, fringing their gnarled trunks. Pōhutukawa are elders; they demonstrate the beauty of the bent frame, wrinkled skin and bleached, blemished limbs, a reminder of death in life, and life in death.

The films *Rākau* and *Hawaiki* enact a cinematic thinking-with arboreal whanaunga, family, including the undergrowth and medicine, here represented by Kawakawa; abundance including food (berries and fat pigeons) but also knowledge (wānanga) and life force, as with the Pūriri; and death, rebirth, and the entanglement of those states with Pōhutukawa. All of these rākau/pūrākau exist within a Māori kaupapa or framework of relations that holds a space for us all. The films call for a collective restoration of the ngāhere, chip by chip, to slow the capitalist march of time, as Māui did, so that the trees have time to grow. Indigenous epistemologies, science and knowledge, enable us to consider how we might think-with the trees and acknowledge how trees have in fact provided the template for thinking and being since the emergence of Te Ao Mārama, our shared world of light. Indigenous ways of being, passed down, *tuku iho*, generation after generation, understand that all creatures depend upon the trees and their wisdom.

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