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Tenderly Holding Harm Photographic- Kinship with Kauri

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Abstract

Kauri (native coniferous tree, *Agathis australis*) ngahere (forests) in Waitākere face ongoing accumulated violence through land alienation, forest clearance, kauri dieback disease (*Phytophthora agathidicida*), and atmospheric contamination. These contexts, along with Aotearoa settler colonial history, mean kauri are both denied the status of personhood and at risk of extinction. As such, this practice-led research develops a photographic-kinship methodology with kauri persons—conscious forest beings—within Te Kawerau ā Maki rohe (territory), Aotearoa New Zealand. Here, kauri ngahere, Aerochrome film, and tauiwi tangata Tiriti (non-Māori people of te Tiriti o Waitangi) learn together how harm may be held tenderly: acknowledging violence without spectacle, witnessing loss without collapse, allowing recognition of each other through shared vulnerability. Kauri, Aerochrome, and photographer engage as conscious collaborators in a framework that holds paradox without resolution, recognising unique relational capacities.

These capacities emerge through five interconnected dimensions—material-consciousness that recognises agency in all-beings, inclusive of film and forest; embodied-consent that reads permission through somatic response; spectral-kinship that holds histories alongside present care; photographic-communion that dissolves subject/object boundaries; and wounded-witnessing that sees through rather than beyond wounding. Working with Aerochrome—Kodak’s photochemical military surveillance infrared film originally developed for the American War on Vietnam (1955–75)—the research explores how this film may be reoriented from extraction towards care through sustained embodied practice. The resulting photographs suggest that

Aerochrome exercises editorial choice, selecting when to offer vivid revelation or retreat into restraint. There is a focus on how wounding may generate capacity for kinship, as contaminated collaborators recognise each other through shared chemical memory.

The research dwells within complexity rather than seeking its resolution, asking what it means to love kauri who are being lost to dieback. This dwelling requires an attention that demands neither looking away nor hardening against pain. It seeks to hold harm tenderly, which involves carrying disenfranchised grief for kauri kin, violated sovereignty, and contaminated ground, while simultaneously holding joy, hope, and wonder at their persistence. Through my photographic practice, what emerges is not a prescriptive framework but a lived negotiation where accountability operates as ongoing commitment rather than achieved transformation. Using photography to attend to loss without looking away creates forms of witnessing that are unavailable through detachment or closure, suggesting possibilities for relationships with kauri persons grounded in tenderness and reciprocal care.

Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor used artificial intelligence tools or generative artificial intelligence tools (unless it is clearly stated, and referenced, along with the purpose of use), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

26 June 2026

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Te Mokoroa, taniwha (guardian water spirit) of the waters where I share my home. I am grateful to dwell here.

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My grandmother, my Amar, chose her own path when she was barely more than a girl—leaving behind a milkmaid’s life for one she built with her own hands. From you, I learned that materials could become something new, that making is freedom. Strength and fierce maternal protection—this legacy lives on in your daughter and granddaughters. In you, survival and love were inseparable. I still feel you.

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Rhiannon: my photographic assistant, big sister, and best friend. We were given names that move—yours a song, mine a muscle car—and we have been in motion together ever since. Your loyalty, your grace, your consistency—these have anchored me. Thank you for walking alongside me

through this life and the actual trails, too. Ride or die, baby.

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For future generations, human and otherwise—may you inherit forests, not only photographs of them.

A Note to the Reader

1. Takawai Murphy, “Reflections from the Trenches: Decolonising Hearts and Minds in Aotearoa,” in *Decolonisation in Aotearoa: Education, Research and Practice*, ed. Jessica Hutchings and Jenny Lee-Morgan (New Zealand Council for Educational Research, 2016), 85.

2. Office of Treaty Settlements, *Te Kawerau ā Maki Deed of Settlement: Documents* (New Zealand Government, 2014), 15, <https://www.govt.nz/assets/Documents/OTS/Te-Kawerau-a-Maki/Te-Kawerau-a-Maki-Deed-of-Settlement-Documents-22-Feb-2014.pdf>.

3. Graeme Murdoch, “Nga Tohu o Waitakere: The Māori Place Names of the Waitakere River Valley and Its Environs; Their Background History and an Explanation of Their Meaning,” in *West Auckland Remembers*, ed. James Northcote-Bade (West Auckland Historical Society, 1990).

4 This approach directly addresses what sociolinguist Paul J. Meighan terms “Coloniallingualism”—the prioritisation of dominant languages that “covertly or overtly [uphold] colonial legacies, imperial mindsets, and inequitable practices.” Paul J. Meighan, “Coloniallingualism: Colonial Legacies, Imperial Mindsets, and Inequitable Practices in English Language Education,” *Diaspora, Indigenous and Minority Education* 17, no. 2 (2022): 146, <https://doi.org/10.1080/15595692.2022.2082406>

Te reo Māori (Māori language) place names are prioritised. English translations will be provided in parentheses on first instance for accessibility. Education scholar Takawai Murphy (Ngāti Manawa) writes, “reclaiming a Māori name became a simple but powerful gesture, a symbol of commitment to the path of healing, decolonisation and cultural reclamation.”¹ As tauiwī (persons of non-Māori descent) conducting place-based research, my use of te reo defers to mana whenua (people with territorial authority), acknowledging that language influences how places are perceived and encountered. Throughout this work, you, the reader, will encounter Te Taiapa rather than Goldie Bush, Te Henga rather than Bethells Beach, Waitākere and Te Kawerau ā Maki rohe (territory) rather than West Auckland. These are not arbitrary choices—Indigenous place names carry whakapapa (genealogy), history, and connections specific to the research sites in this project. Te Taiapa refers to the fortified pā (village) overlooking the Mokoroa Stream, distinguished by its taiapa (wooden palisades).² Te Henga describes the long foredunes resembling the henga (gunwale) of an upturned waka (canoe)—a name this place has carried for centuries.³

I write with deliberate attention to te reo conventions: no possessive apostrophes appear on Māori terms, respecting the language’s own grammatical structures. Macrons mark long vowels. When citing Indigenous scholars, iwi (tribe) affiliations are included where known, honouring their positioned knowledge and genealogical ties. A glossary offers working definitions (see Glossary), though te reo Māori meanings live in encounter and context. English translations are doorways into understanding without containing the fullness of what these words hold.

Linguistic intentionality weaves throughout my practice—from the precise terms I use for photographic encounters—working-with rather than ‘capturing’—to my refusal of possessive language regarding kauri (native coniferous tree, *Agathis australis*). Language, like photography, may perpetuate extraction or cultivate kinship. I choose kinship.⁴ Just as my photographs arise through connection with all-beings, these words develop through engagement with this rohe—asking for patience, respect, ongoing attention. This linguistic approach is akin to photographic-kinship practice—understanding how naming shapes the way things are seen, and how seeing influences the possibility of connections. I invite you to meet these names as invitations into deeper engagements with place, histories, memories, and continuance.

This research invites you, the reader, into a ngahere that is simultaneously dying and persisting, luminous and contaminated, sacred and violated. I ask of you, my reader, that we step with care as we enter. Some ground remains tender, still recovering. Some paths are sealed, teaching through what will not and cannot be accessed. But where we may walk together, where permission has been granted and relationships established, precious things emerge: photographs that breathe with their subjects, materials that exercise agency, wounds that generate witnessing. The path through this forest requires patience. Some concepts appear briefly then return later in different contexts, just as walking the same track across seasons reveals different teachings. Some tensions remain unresolved because resolution would betray the complexity this project hopes to honour. Enter this work as you would enter ngahere: with attention to what breathes beneath visibility, awareness that every step affects what it touches, recognition that the forest reads you as you read it. Like film warming slowly in my palms before loading, let these pages prepare you for encounter—never knowing whether today offers relationship, revelation, or restraint, but always learning together what may become possible through sustained attention to wounded ground.

The research that follows transcends mere information about trees—it serves as a love letter to nature, to all-beings, including to you, as prayers on a page. I invite you to approach this work with curiosity, reflecting on different ways of viewing the world—through wonder. Please take care as you proceed. This work contains images of harm—historical photographs of kauri logging from the nineteenth century and my contemporary photographs where hurt continues. Some images may be difficult to witness, as they present harm through forms that visually arrest. I invite you to approach these images with a gentleness—for yourself and for what they hold. This is the practice of tenderly holding harm—remaining soft in discomfort; witnessing without defence. The images and words invite staying present, though please do take pause when needed. Return when ready. Your own relationships with place, love, and loss are welcomed here.

Preface

Through my spiritual and photographic practice, I sense a breathing kinship—the sacred reciprocity where each exhale becomes another being’s inhale, where we are breathing each other into being, as kin. This breathing-with, this vulnerable intimacy, becomes even more tender when atmospheric space is wounded—as if harm itself crawls inside our kinship and makes a home there, heavy in our hearts and lungs. I am letting my encounters teach me about these respiratory entanglements that may form and dissolve with each breath.

The helicopter appeared without warning. I was taking my morning walk up Mokoroa Valley Road with Louis, my miniature poodle, and the herbicide spray settled on our skin, hair and fur like a question we were not prepared to answer, immediately creating breathing difficulties, skin inflammation, and vision problems. In the hours that followed, as the physical impacts persisted, I began to understand how violence operates not just via land occupation but within the air itself. Through this encounter with illegal chemical exposure in March 2022, I was introduced to atmospheric wounding—the ongoing violation of sovereign airspace that damages territorial sovereignty and the breathing kinship between all beings.

In the days that followed, as inflammation persisted in my tissues, I began recognising my body as one node in a larger network of atmospheric woundings. All who breathed that morning’s air became involuntary archives of the same violation. While my body’s encounter with this violence was singular and shocking, I recognise that Indigenous communities across Aotearoa have endured such atmospheric violations for generations, as documented in te

Tiriti o Waitangi settlements, Waitangi Tribunal reports, and environmental justice scholarship.⁵

My exposure that morning irrevocably altered my research—there was the work I imagined before breathing poison, and the work that revealed itself after.

The aerial spraying had been conducted without the required notification, despite community dependence on tank water and the animals grazing through the hills.⁶ Community testimonies echoed patterns: breathing difficulties mirroring my own, farm animals exposed before anyone could bring them in, concerns for tuna (eel; *Anguilla dieffenbachii*) and kōura (freshwater crayfish; *Paranephrops planifrons*) in the Wairere and Mokoroa Streams. We learned the spraying had continued for many hours across multiple days. Previous aerial campaigns had already left their signatures—vegetation death, landslips, the slow unravelling of hillside integrity. Through collective witnessing, we understood atmospheric space as a vector for violence. Herbicide drift was carried hundreds of metres on the wind, and chemical warfare operated across multiple scales simultaneously—infiltrating bodies, contaminating water, and disrupting entire watershed ecologies. These circumstances suggested deliberate circumvention more than regulatory failure and raised questions about how environmental protection statutes can be anything other than fiction when rural communities and their forest kin are seemingly regarded as acceptable casualties. We who breathed that morning’s air together—human neighbours, grazing animals, stream beings, ngahere (forest)—became vulnerable to the same wounding, our porous boundaries unable to refuse what the

5. Waitangi Tribunal, *Report of the Waitangi Tribunal on the Motunui-Waitara Claim (Wai 6)*, 1983 (Waitangi Tribunal, 1983); Darren King, Apanui Skipper, and Wiremu Tawhai, “Māori Environmental Knowledge of Local Weather and Climate Change in Aotearoa-New Zealand,” *Climatic Change* 90, no. 4 (2008): 385–409, <https://doi.org/10.1007/s10584-007-9372-y>.

6. Community observations documented aerial spraying in rural Waitākere at the intersection of Gregory Road, Caton Road, and Mokoroa Valley Road, March 15–22, 2022.

wind carried, our contaminated bodies becoming involuntary archives of what regulatory complexity obscures.⁷

What happened in Waitākere reflects global patterns of atmospheric violence, similarly embodied by nuclear testing in the Pacific and chemical warfare across Indigenous territories. Indigenous scholars and communities have long documented how atmospheric violence never affects only human bodies—it penetrates entire webs of whakapapa (genealogy) relationships, contaminating the ngahere, poisoning streams, disrupting the mauri (life force, vital essence) of soils, silencing bird song, breaking the delicate respiratory exchanges between trees and atmosphere.⁸ My understanding emerges from one morning’s direct exposure; Indigenous peoples have resisted this comprehensive ecological violence for centuries.

this violence, I feel called to share this knowing. My cells remember what regulatory systems fail to acknowledge, creating an obligation to document what my body knows, joining kauri and atmosphere as collaborative witnesses to ongoing environmental harm. This is where the work lives now: in this opened place that refuses closure, in the wound that insists on remaining tender to what needs witnessing. From this wounded ground, a different kind of strength emerges—not healing, not transcendence, but a quiet insistence on staying present to what is.

7. The complexity of tracking compliance across dispersed requirements—operator certifications, council rules, national standards—means formal documentation of this incident remains elusive. Individual contributors remain unnamed to honour privacy; their embodied testimonies of breathing difficulties, contaminated water tanks, and exposed livestock constitute our primary archive. Where regulatory complexity creates gaps in accountability, our bodies hold witness.

8. Garth Harmsworth and Shaun Awatere, “Indigenous Māori Knowledge and Perspectives of Ecosystems,” in *Ecosystem Services in New Zealand: Conditions and Trends*, ed. John Dymond (Manaaki Whenua Press, 2013), 274–86; Helen Moewaka Barnes and Tim McCreanor, “Colonisation, Hauora and Whenua in Aotearoa,” *Journal of the Royal Society of New Zealand* 49, sup. 1 (2019): 19–33; Te Kipa Kepa Brian Morgan, “Waioira and Cultural Identity: Water Quality Assessment Using the Mauri Model,” *AlterNative: An International Journal of Indigenous Peoples* 3, no. 1 (2006): 42–67.

The spray’s chemical signature created, for me, unexpected resonance with my photographic materials. Just as herbicide had breached my skin’s protective barriers, making me hypersensitive to atmospheric-wounding, I learned that some film carries its own wounded sensitivity. That singular morning’s violence opened my body to understanding what I would later recognise in the Aerochrome itself—that expired film and exposed skin share their own strange kinship. I became the recording device for understanding how atmospheric space itself can become weaponised, my body’s inflammatory response a form of involuntary reciprocity with chemical violence—knowledge I never sought but now cannot unknow. This violation transformed me into a reluctant chronicle—my contaminated body now holds knowledge that seeks expression. Having breathed

The soil remembers everything. I recall my mother’s hands, dark with earth, teaching me, when I was little, how to feel for the invisible threads connecting plant to plant beneath the surface of Waitākere. “Nothing grows alone,” she would say, pressing my small palms against the warming compost, letting me feel the heat of decomposition transforming death into life. Although these early lessons in reciprocity have taken decades to fully germinate, their roots were already reaching deep.

Kauri (native coniferous tree, *Agathis australis*) are dying. Not metaphorically, not eventually, but now, today, as I write these words. *Phytophthora agathidicida*, the water mould causing kauri dieback disease, spreads through soil with every footstep that moves between infected and healthy areas. The pathogen causes root rot, canopy thinning, and eventually the death of trees that have stood for millennia.¹⁰ Each infected kauri takes years to die—roots rotting invisibly while crowns remain green, looking healthy until suddenly they do not. The disease does not announce itself through dramatic collapse but through patient, relentless starvation occurring beyond human visibility. There is currently no known cure. Between 2008 and 2017 I walked through Waitākere ngahere (forest) regularly, diligently using the small manual cleaning stations at track entrances without comprehending the danger. No one discussed dieback with me. I never saw dead kauri. There were no public education campaigns making the crisis visible to casual walkers. The pathogen, capable of spreading through just a pinhead of contaminated soil, was already affecting one in five kauri in the Waitākere Ranges, moving invisibly through root systems while I—and many

others—moved through trails not knowing what our footsteps might carry.¹¹

This experience of learning about kauri dieback formed the initial catalyst for my project. From this wounded ground, my research question emerged: How may kinship emerge between kauri, Aerochrome film, and tauiwi tangata Tiriti (non-Māori people of te Tiriti o Waitangi) through photographic practice that tenderly holds harm? This question seeks to productively engage with irresolvable tensions. It acknowledges that my camera cannot be fully decolonised while working within systems of representation that emerged from territorial control. Yet it also recognises that transformation remains a potential possibility, perhaps through patient, sustained practice that prioritises Indigenous environmental authority over individual artistic vision.

This research traces how kinship can emerge between kauri persons, photographic materials, and tauiwi (persons of non-Māori descent) through a photographic practice that keeps tenderness and terror in unresolved relation. For my project, kauri are understood to be conscious beings with agency. I position the photographic film used throughout my research as a type of wounded material. Specifically, I work with expired Kodak Aerochrome infrared film—originally designed for U.S. military operations in Vietnam (1955–75) to detect camouflaged enemies and Agent Orange defoliation.¹² The false-colour film renders invisible infrared light as vivid magentas and reds. Decades of chemical degradation have transformed the rolls of film into unstable collaborators whose wounds parallel the contaminated forests they witness.

10. R. E. Bradshaw et al., “Phytophthora agathidicida: Research Progress, Cultural Perspectives and Knowledge Gaps in the Control and Management of Kauri Dieback in New Zealand,” *Plant Pathology* 69, no. 1 (2020): 3–16, <https://doi.org/10.1111/ppa.13104>

11. Melanie Mark-Shadbolt, Waitangi Wood, and James Ataria, “Why Aren’t People Listening? Māori Scientists on Why Rāhui Are Important,” *The Spinoff*, February 2, 2018, <https://thespinoff.co.nz/atea/02-02-2018/why-arent-people-listening-maori-scientists-on-why-rahui-are-important>.

12. I use ‘Vietnam (1955–75)’ as a temporal and geographic marker from my tauiwi positioning. In Vietnam this conflict is known as *Kháng chiến chống Mỹ* (Resistance against America), the American War, or the War Against America to Save the Nation. These Vietnamese names centre resistance and sovereignty rather than military intervention, revealing how naming practices embed political perspectives.

The primary methodology—photographic-kinship—positions the camera not as a tool for extraction but as a potential facilitator of sacred encounter. Photographic-kinship is a relational methodology in which kauri, materials, and photographer exercise agency in co-creating images through reciprocal encounter. Expired military surveillance film, contaminated forests, and a photographer carrying her own wounds may recognise each other across species and space. Yet as the whakataukī teaches, every tree can be traced back to its soil—and so, too, this practice-led project traces back to the specific ground from which it emerged. My photographic-kinship grows from thirty years of relationship with Waitākere ngahere, an experience of exposure to chemical spraying, and responsibilities carried as tauiwi working within Te Kawerau ā Maki rohe (territory). These relationships, violations, and encounters—both mine and the land’s—have shaped my ways of seeing and photographic witnessing that inform this doctoral inquiry.

This project takes place within the rohe of Te Wao Nui o Tiriwa (the Great Forest of Tiriwa), known as the Waitākere Ranges, under the territorial sovereignty and environmental authority of tangata whenua (people of the land) iwi (tribe) Te Kawerau ā Maki. As descendants of the tūrehu (fairy folk) chieftain Tiriwa, this iwi understands kauri trees as ancestors, their whakapapa (genealogy) connections to these ancient beings holding sacred significance across generations. Working within territories where these relationships shape environmental understanding, my research acknowledges kauri as ngā rākau rangatira—chiefly beings deserving respect, equivalent to honoured ancestors in te ao Māori (Māori worldview) frameworks.

This recognition of kauri personhood and mana whenua (people with territorial authority) governance grounds every aspect of my photographic practice, establishing foundational responsibilities that shape my work.

When I was eight, I discovered what it meant to be held by the universe. Visiting a whānau (family) friend’s whare (house) in rural Kaukapakapa, northwest Tāmaki Makaurau (Auckland), my cousin and I ventured into the dense bush beyond her backyard, searching for a kauri marked with red ribbon. We lost the trail. Then we lost each other. When I stumbled into a clearing filled with giant cows and spotted a distant house, I faced a choice: walk across the farm and knock on a stranger’s door or return to the ngahere. The initial spike of fear gave way to an embodied decision; I chose the trees. I returned to the bush, found a fallen log, and let my tears come. Once they slowed, something else arrived—a calmness enveloping me, the embrace of te taiao (the natural world) that would become central to my understanding of sanctuary. I grounded myself with my new tree-friends and prayed, experiencing the gentle but persistent recognition that I belonged with rather than separate from the natural world. My mother found me before nightfall. The ngahere had kept me safe, teaching me in those suspended hours that being lost could be another form of being found. The forest was my āhuru mōwai—my sheltered haven, my calm place. It still is.

At nine years old I briefly moved from the rainforest of Waitākere to rural west-central Sri Lanka, where my family lived on a coconut plantation. I did not yet know that both landscapes had been fundamentally reshaped by

extraction—that Waitākere kauri had been 99.9 percent clear-felled for timber; that Sri Lankan highlands had been forcibly converted from Indigenous forests into coffee plantations; and that coffee rust (*Hemileia vastatrix*) had devastated those monocultures so completely by the 1880s that colonial administrators abandoned coffee entirely, transitioning to tea and coconut. I knew only that both places held me in simultaneous awe and ache—that forests could be simultaneously sacred and wounded, that land carried histories my child’s body felt but could not yet name.

Through my body’s memory of spending time at Te Henga (Bethells) waters, I understand how childhood joy may unfold within unrecognised grief. The black sand between my toes still radiates iron-grain warmth—each magnetic particle a tiny compass, naturally drawn to alignment by ancient volcanic inheritance. As children in the 1990s and 2000s, we called it ‘the watering hole’, this brackish threshold where the Waiti Stream braids with the pull of the moana (ocean). My skin learned this place through temperature and current—how freshwater coolness climbs legs, how salt density changes the body’s buoyancy. These embodied learnings happened before I could recognise that I swam through sites of dispossession. When I nearly drowned here—my friend’s panic tangling our limbs, my mother diving fully clothed in to rescue us—the water held that terror and relief in its suspension. What I did not know then was how these same waters once sustained Waiti kāinga (freshwater village), a thriving Te Kawerau ā Maki settlement. The Waitākere Dam, constructed in 1910 under the Public Works Act (1864), altered the stream’s hydrology so severely that the village became uninhabitable.¹³ The Act enabled compulsory

acquisition of Māori land for ‘public benefit’, creating legal frameworks for dispossession. By 1953, Te Kawerau ā Maki were effectively landless, their last holdings seized under public works legislation. Yet this specific violence—the dam’s role in cultural destruction—remains unnamed in the 2014–15 Te Tiriti o Waitangi Settlement.¹⁴ As children, we renamed this wounded place ‘the watering hole’, our innocent pleasure inadvertently erasing its proper name from our mouths. This belated recognition shapes how I approach consent and territorial respect within my photographic practice.

I swam in what I term a ‘liquid-archive’—each stroke disturbing sediments where joy and violation settle together, distinct yet inseparable. The children who originally played in Waiti village, and we settler children who claimed their stream, exist in spectral relationship—not replacing or erasing, but occupying the same place—Waiti Stream—across time. This embodied knowledge of swimming through wounded waters directly informs the photographic-kinship developed as part of this study. Just as my childhood body moved unknowing through spaces of others’ loss, the camera risks similar forms of breaching when it documents without recognising existing relationships and responsibilities. The estuary taught my body about thresholds before I had language for them—where river meets sea, where joy meets grief, where my freedom of movement occurred within others’ displacement. Equally, photographic witnessing requires acknowledging complicity beyond innocence.

My photographic practice is grounded in Mokoroa, a coastal valley west of Tāmaki Makaurau where I have made my home within Te Wao Nui o Tiriwa. Wairere Stream flows

13. Ministry for Culture and Heritage, “The Treaty in Practice: Obtaining Land,” NZ History, updated January 13, 2016, <https://nzhistory.govt.nz/politics/treaty/the-treaty-in-practice/obtaining-land>.

14. Te Kawerau ā Maki Claims Settlement Act 2015, No. 75, s. 8(13), (15); Auckland Council, *Te Henga/Bethells Beach Local Area Plan: Human Heritage* (Auckland Council, 2009), 37.

into Mokoroa Stream; together they feed Te Awa Waitākere (Waitākere River), which flows through Te Henga wetlands to the moana—the same coastal waters where I played as a child. Waitī Stream joins the Waitākere River near the coast, at the very place of ‘the watering hole’. This dwelling—thirty years of relationship with Waitākere kauri ngahere from childhood wanderings through Te Henga taiao to adult life in Mokoroa—shapes my research as sustained presence within this interconnected watershed. The valley sits where farmland meets kauri ngahere—Mokoroa Stream flowing through regenerating rainforest where kauri climb the ridgelines.

The spiritual presence of Te Mokoroa, taniwha (guardian water spirit) of these waterways and the surrounding area, embodies the enduring whakapapa connections between Te Kawerau ā Maki and their ancestral taonga (treasure) (Figure 1).¹⁵ Te Kawerau ā Maki Deed of Settlement (2014) explains that “the Mokoroa Stream which flows from the falls is named after the taniwha Te Mokoroa who was the guardian of the surrounding area in ancient times.”¹⁶ Te Mokoroa maintains two documented lairs: Te Rua ō Te Mokoroa—the lair of Te Mokoroa—at the pool beneath Wairere (the Mokoroa Falls), and a second lair at Te Roto, the large lagoon where Wairere Stream meets the Waitākere River.¹⁷ Te Mokoroa protects the mauri (life force, vital essence) and wairua (spirit, soul) of waters that arise from the grief and yearning between Ranginui (sky father) and Papatūānuku (Earth Mother)—presenting as teardrops of rain and sighs of mist flowing through these valleys.¹⁸ This spiritual geography provides foundational understanding: the valley carries protective presence

15. Office of Treaty Settlements, *Te Kawerau ā Maki Deed of Settlement: Documents*, 15.

16. Office of Treaty Settlements, *Te Kawerau ā Maki Deed of Settlement: Documents*, 15.

17. Office of Treaty Settlements, *Te Kawerau ā Maki Deed of Settlement: Documents*, 20.

18. Anne Salmond, Gary Brierley, and Dan Hikuroa, “Let the Rivers Speak: Thinking About Waterways in Aotearoa New Zealand,” *Policy Quarterly* 15, no. 3 (2019): 45; Tina Ngata, “Wai Māori: A Māori Perspective on the Freshwater Debate,” in *Mountains to Sea: Solving New Zealand’s Freshwater Crisis*, ed. Mike Joy (Bridget Williams Books, 2018), 18-29.

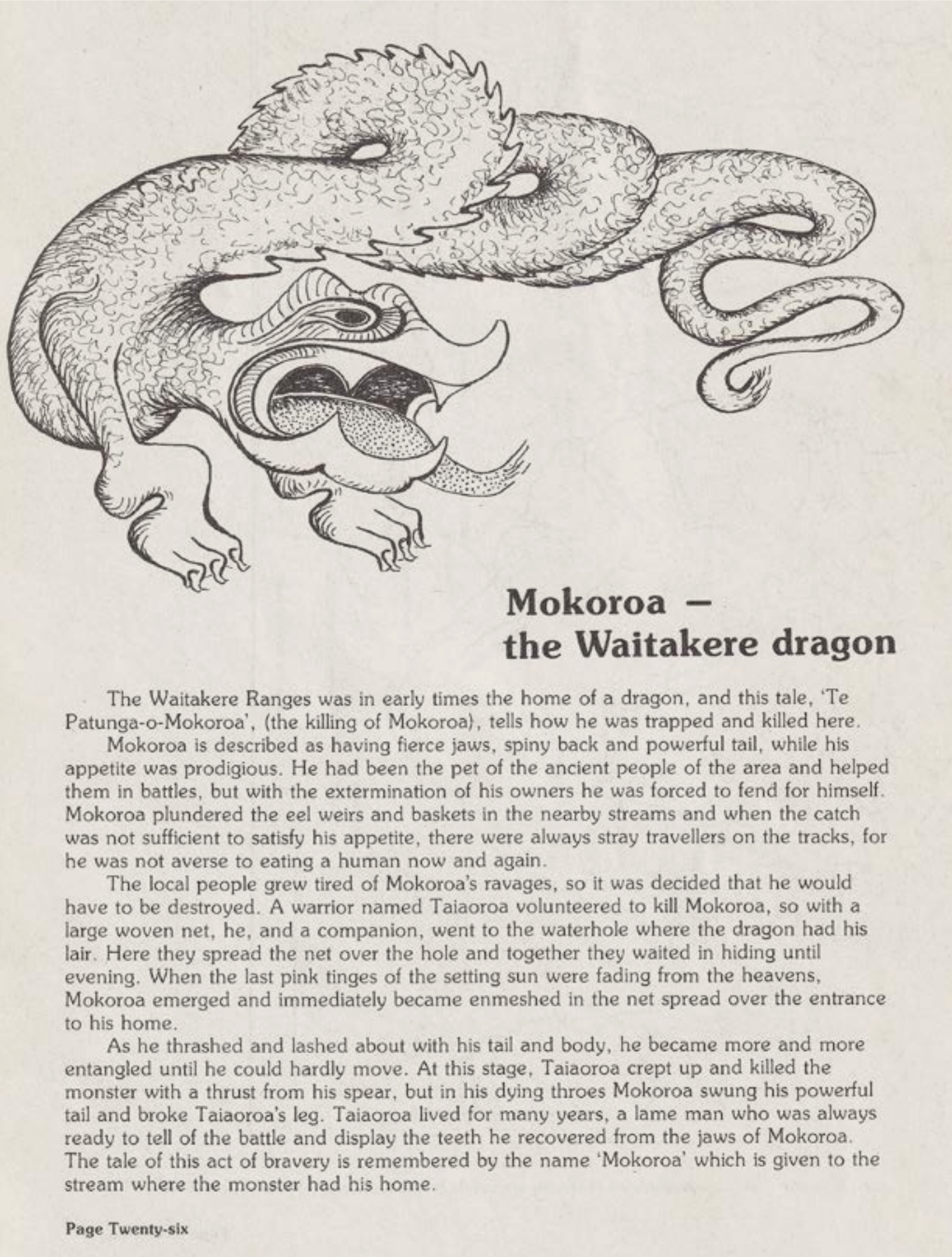


Figure 1. John Diamond and Bruce Hayward, *The Māori History and Legends of the Waitākere Ranges* (Lodestar Press, 1979), 26.

that predates and supersedes colonial infrastructure, that continues regardless of governance failures, that shapes how those who coexist here with attention may understand appropriate relationships. Recognising Te Mana o te Wai—the framework water law scholar Linda Te Aho articulates as waterways being living ancestors with their own mana (authority) and mauri—I approach Mokoroa understanding that these waters hold authority, require respect, and sustain relationships across time.¹⁹

Te Kawerau ā Maki understand the Waitākere River and its catchment—including the Mokoroa sub catchment—“in a holistic manner as a living entity, with its physical form, biodiversity, and historical and cultural values seen as inextricably linked.”²⁰ The settlement documents further clarify that “the waterways, wetlands and lakes within the catchment are seen as having their own mauri, or spiritual essence and qualities.”²¹ The Mokoroa sub catchment sustained kāinga (settlements) and māra (cultivations) including Motu and Ōkaihau, part of the broader network of settlements along the Waitākere River that Te Kawerau ā Maki maintained for generations.²² These place names remind that this sub catchment is not wilderness but inhabited territory, where generations of Te Kawerau ā Maki have practised forms of reciprocal relationship with the ngahere and waterways intertwined within this research.

For kauri, violence continues. For example, research between Te Kawerau ā Maki and biosecurity scientists revealed that kauri dieback rates climbed from 8 to 19 percent between 2011 and 2016 across the Waitākere Ranges.²³ Disease spreads along corridors of human movement—the very paths settler

colonial infrastructure carved through ngahere. When I walk Mokoroa Valley Road each morning, I wonder if my shoes carry spores, or if my photographic practice contributes to the violence I document. If walking risks spreading disease, what harm may photography perpetuate through documentation without consent? The violence photography risks perpetuating has deep roots in this place.

Among the archival holdings at Waitākere Central Library, two photographs from 1922 took my attention with their documentation of destruction. Both images—taken by *Auckland Weekly News* photographers and published as “Tripping a Kauri Dam”—show Mokoroa Stream at Te Taiapa (Figures 2 and 3).²⁴ The photographer’s careful composition captures water through broken timbers, transforming ecological violence into public spectacle and framing ancient forest destruction as newsworthy achievement for settler consumption. Now preserved within historian John T. Diamond’s West Auckland collection, these photographs serve as evidence of the violence they documented while retaining their original celebratory intent. I share them here as testimony to the documentary violence I critique—how photography has celebrated industrial ‘progress’ and normalised kauri destruction as achievement. Using colonial archives to critique colonial photography requires holding this tension: feeling how these images pulse with celebration even as they bear witness to harm.

These photographs document the final years of timber merchant and former Auckland mayor David Goldie’s logging operations, which, between 1900 and 1926, systematically

19. Linda Te Aho, “Te Mana o te Wai: An Indigenous Perspective on Rivers and River Management,” *River Research and Applications* 35, no. 9 (2019): 1615–21, <https://doi.org/10.1002/rra.3365>.

20. Office of Treaty Settlements, *Te Kawerau ā Maki Deed of Settlement: Documents*, 20.

21. Office of Treaty Settlements, *Te Kawerau ā Maki Deed of Settlement: Documents*, 20.

22. Office of Treaty Settlements, *Te Kawerau ā Maki Deed of Settlement: Documents*, 20.

23. Lee Hill et al., “Cross-Cultural Leadership Enables Collaborative Approaches to Management of Kauri Dieback in Aotearoa New Zealand,” *Forests* 12, no. 12 (2021): 1671, <https://doi.org/10.3390/f12121671>.

24. *Auckland Weekly News*, “The Dam Ready for ‘Tripping’,” and “The First Rush of Water after the Dam Has Been ‘Tripped’,” photographs, 1922, published in *Supplement to the Auckland Weekly News*, March 9, 1922, 33, J. T. Diamond Collection, Auckland Libraries Heritage Collections, JTD-01B-04378-1 and JTD-01B-04377.



Figure 2. "The Dam Ready for 'Tripping'," *Auckland Weekly News*, 1922. J. T. Diamond Collection, Auckland Libraries Heritage Collections.

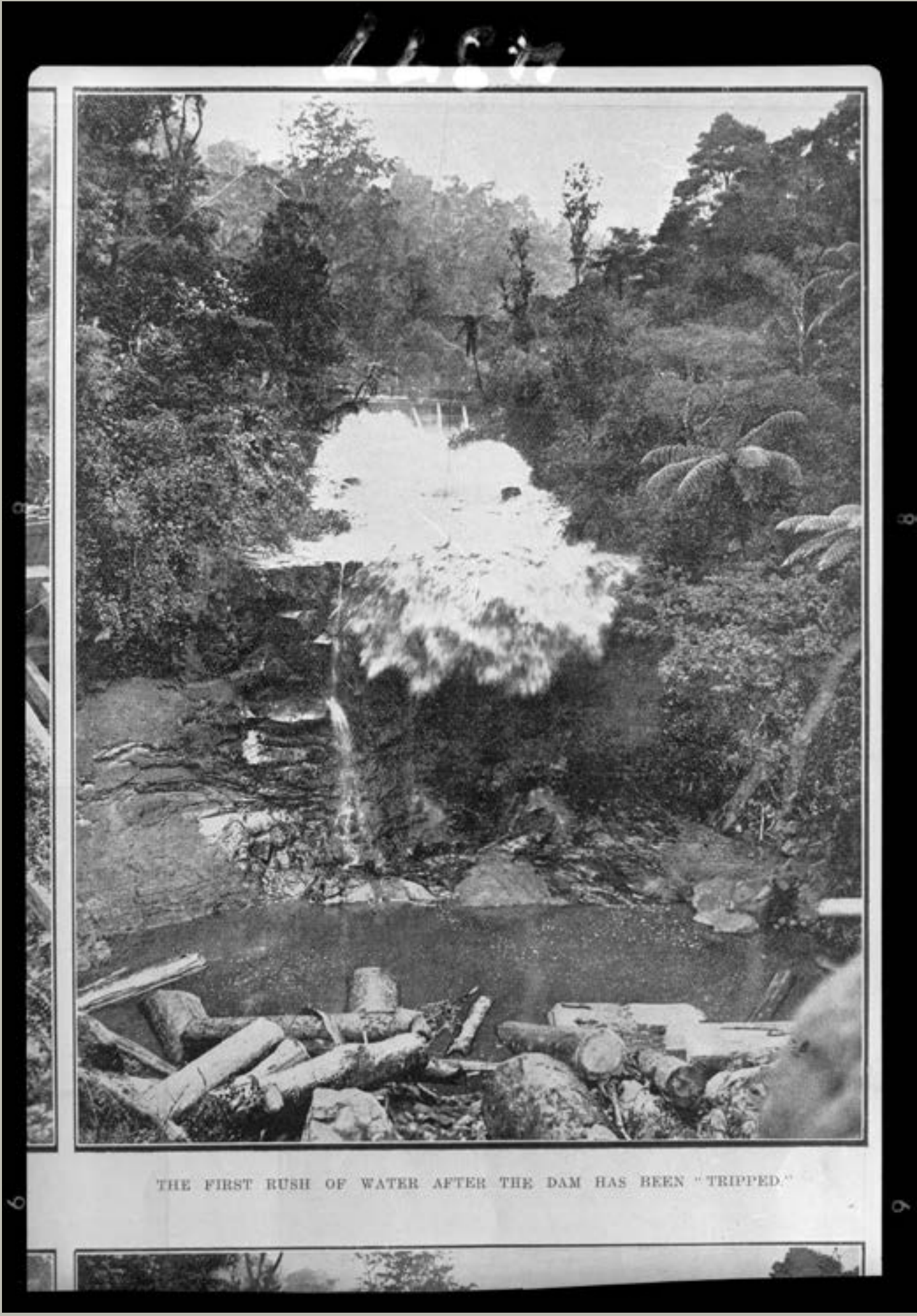


Figure 3. "The First Rush of Water after the Dam Has Been 'Tripped'," *Auckland Weekly News*, 1922. J. T. Diamond Collection, Auckland Libraries Heritage Collections.

stripped Te Taiapa of ancient kauri ngahere through dam-driven transport systems.²⁵ Goldie’s dams released torrents that carried kauri bodies down Mokoroa Stream, past Te Rua ō Te Mokoroa, through Te Awa Waitākere, and out to the moana at Te Henga. The liquid-archive I swam through as a child was not metaphorical: those coastal waters received logged kauri from where I now dwell, ancient beings floating downstream past the taniwha who witnessed their passage, past the confluence where Waiti village once thrived, arriving at the beach where I played unknowingly. These 1922 images represent some of the earliest photographs of Mokoroa, produced when photography functioned as authoritative witness to industrial and, by proxy, settler progress. They became foundational to how this place entered the visual archive (the collection of images shaping collective memory): not as thriving ngahere with whakapapa connections to Te Kawerau ā Maki, but as an industrial site where ‘progress’ occurred through destruction.

What sits with me now is not merely what these images show, but how they show it. Whether intended as celebration or simple record, the photographs objectify kauri rangatira (chief, leader), transforming beings te ao Māori understands as chiefly. These images exemplify what I have come to understand as photography’s ‘colonial grammar’—the violent nomenclature and extractive frameworks embedded within conventional documentary practice. When cameras ‘capture’ or ‘shoot’ their subjects, when photographers ‘take’ images from territories, the language itself enacts possession.²⁶ Equally, commercial photographer Alfred Burton’s 1885–99 documentation of logging operations at Taupaki, Waitākere (Figures 4–6) functions to perpetuate

similar acts of possession. This type of archival photography literalises this grammar.²⁷ Contemporary photography may continue this erasure when forests are positioned as scenic backdrops rather than communities of conscious beings, when kauri appear as aesthetic resources rather than rangatira holding sacred relationships with iwi who carry kaitiakitanga (guardianship) responsibilities. This photographic complicity in violence establishes a precedent my own practice constantly navigates through the present research: how does one work with a medium whose foundational logic emerged from territorial appropriation?

The 2014 Waitangi Tribunal determination clarified what te Tiriti o Waitangi established: Māori never ceded sovereignty, but rather preserved hapū (sub-tribe, kinship group) and iwi tino rangatiratanga (absolute authority) while devolving kāwanatanga (governance) over British settlers to the Crown.²⁸ This constitutional context creates distinct spheres of authority requiring active power-sharing and recognition of tangata whenua as kaitiaki (guardians) with decision-making authority over taonga species including kauri.²⁹ When Te Kawerau ā Maki placed a rāhui (temporary ritual prohibition) over Waitākere Ranges in December 2017 to prevent the spread of kauri dieback disease, they were exercising this constitutional authority, asserting rangatiratanga (self-determination) that Crown structures have consistently attempted to subordinate. The violence those 1922 photographs documented occurred within—and helped entrench—the very constitutional violations that te Tiriti was meant to prevent. Goldie’s operations stripped Te Taiapa decades before formal settlement processes began, yet the patterns his logging established—extracting value

25. David Goldie is the father of artist C. F. Goldie, who is well known for his painted representations of Māori.

26. See also artist Alfredo Jaar, *You Do Not Take a Photograph. You Make It.* 2013, sculptural installation.

27. For broader analysis of how landscape photography functioned as a tool of settler colonialism in nineteenth-century Aotearoa, see Jarrod Hore, *Visions of Nature: How Landscape Photography Shaped Settler Colonialism* (University of California Press, 2022).

28. Waitangi Tribunal, *He Whakaputanga me te Tiriti: The Declaration and the Treaty: The Report on Stage 1 of the Paparahi o Te Raki Inquiry* (Legislation Direct, 2014); Margaret Mutu, “‘To Honour the Treaty, We Must First Settle Colonisation’ (Moana Jackson 2015): The Long Road from Colonial Devastation to Balance, Peace and Harmony,” *Journal of the Royal Society of New Zealand* 49, no. S1 (2019): 6, <https://doi.org/10.1080/03036758.2019.1669670>.

29. Waitangi Tribunal, *Ko Aotearoa Tēnei* (Legislation Direct, 2011), 1–2; Margaret Mutu, “Mana Māori Motuhake: Māori Concepts and Practices of Sovereignty,” in *Routledge Handbook of Critical Indigenous Studies*, ed. Brendan Hokowhitu et al. (Taylor & Francis Group, 2022), 279.



Figure 4. Alfred Burton, *Falling Giant Kauri, Taupaki Bush*, circa 1898-99. Gelatin silver print, 197 × 145mm. Auckland Art Gallery Toi o Tāmaki.



Figure 5. Alfred Burton, *Taupaki Kauri Bush (Mr M. H. Roes)*, circa 1880. Albumen silver print, 190 × 120mm. Museum of New Zealand Te Papa Tongarewa.

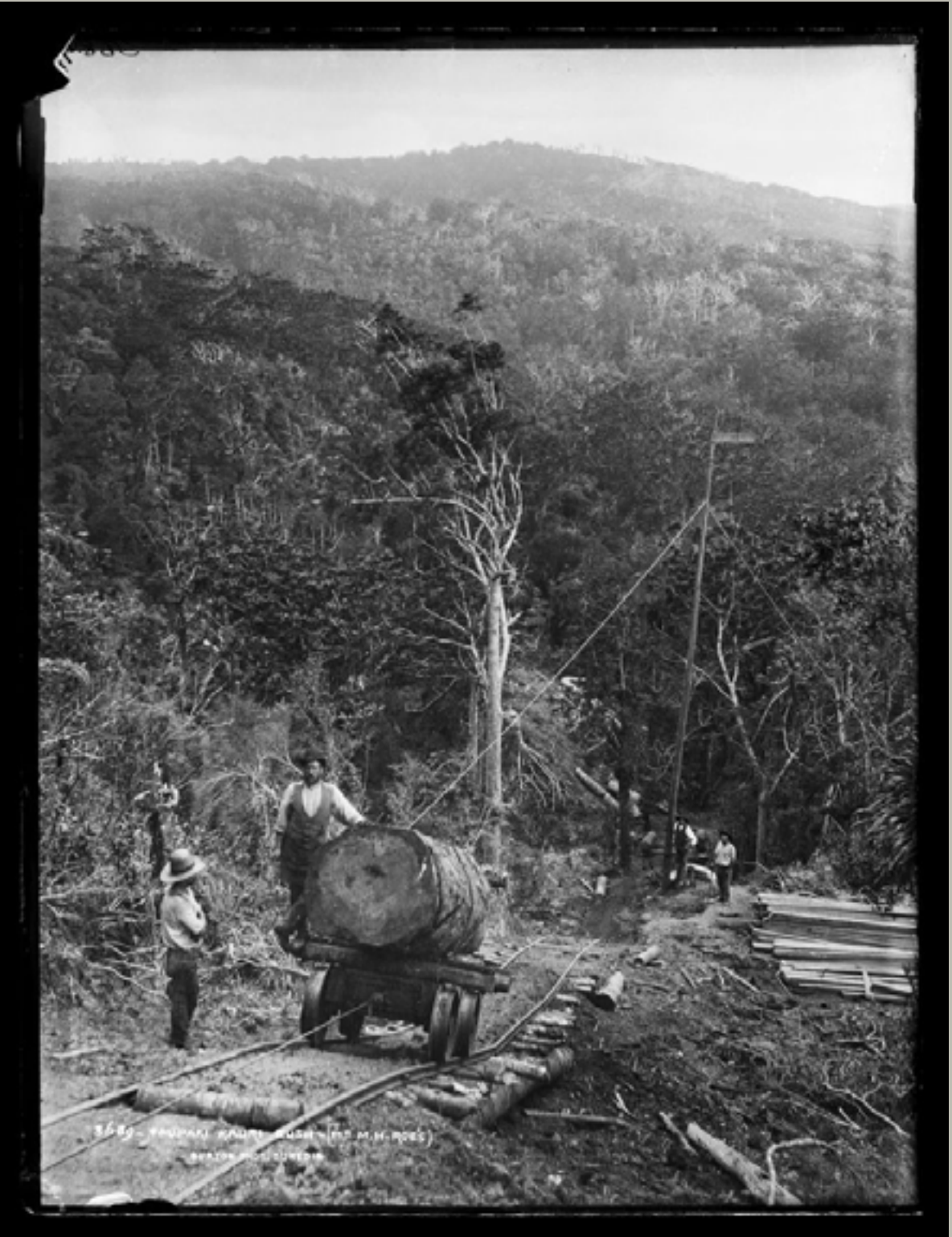


Figure 6. Alfred Burton, *Taupaki Kauri Bush (Mr M. H. Roes)*, circa 1880. Albumen silver print, 190 × 120mm. Museum of New Zealand Te Papa Tongarewa.

from Indigenous territories while denying Indigenous authority—continue through different mechanisms today.

Dieback is not the only crisis moving unseen through these forests, nor the only legacy of colonial intervention still unfolding. Introduced species continue transforming ngahere, their cumulative impact largely invisible to those who walk here. Non-native herbivorous mammals—possums, deer, goats—alter the composition of native tree populations, suppressing recruitment of palatable species while accelerating mortality of those they prefer; introduced predators devastate bird populations without evolved defences.³⁰ Deer browse the understory species upon which forest regeneration depends. My neighbours farm red deer (*Cervus elaphus*) on pastoral land surrounded by kauri ngahere; deer moving through Mokoroa are not wildlife but agricultural escapees, domesticated ungulates whose presence generates cascading harm. These beings—treasured in the ecosystems they evolved within—cause damage here through no fault of their own, displaced into territories where their appetites become destruction. The violence is systemic rather than intentional, arising from colonial introductions that continue unfolding more than a century later. Like dieback, like the constitutional violations preceding it, this harm operates persistently, pervasively, and largely out of sight.

For nearly a decade, I walked these forests in ignorance—not wilful ignorance, but the kind that emerges when a crisis spreads invisibly through soil, beyond public awareness. What generates the vigilance my current photographic practice requires is not just shame about past unknowing, but also recognition of how easily unknowing happens, how

proximity does not guarantee understanding, and how loving something does not automatically translate into a knowing of needs. This gap between presence and comprehension, between affection and awareness, between walking carefully and actually knowing what care is required, is foundational to my research. The discomfort of recognising how long I had remained unseeing keeps me perpetually alert to what I do not yet know, what harm continues despite intentions, and what unseen catastrophe may be happening beneath approaches I believe are careful. If I could miss a decade of dieback crisis while walking these forests regularly, what am I missing now? This question—uncomfortable, unresolved, necessary—shapes every photographic decision of this project; every claim to relationship and every assertion of care.

Everything changed with the rāhui over the Waitākere Ranges. It was not merely a track closure, but an assertion of tino rangatiratanga—mana whenua exercising territorial authority to protect kauri from the spreading pathogen, asking people to stay away so the ngahere might heal. This was an act of love, of grief, of desperate hope that removing human pressure may give kauri time to develop resistance, and for science to find solutions.³¹ Initially, I did not know. Communication gaps between council bureaucracy and community meant many people continued walking, unknowing of the rāhui, in territories requiring rest. I was among them. After December 2017, I walked a trail within the rāhui, unaware that my presence violated Indigenous environmental governance. My learning came late. The shame that arrived with this recognition would transform into determination: if Crown institutional channels were not

30 Amy Hawcroft et al., “Are Populations of Trees Threatened by Non-Native Herbivorous Mammals More Secure in New Zealand’s National Parks?,” *Biological Conservation* 295 (2024): 110637, <https://doi.org/10.1016/j.biocon.2024.110637>. Hawcroft et al. found species preferred by both ungulates and possums had average annual mortality of 5.9% compared to 1.1% for avoided species, with mortality exceeding recruitment across all protected forests regardless of legal protection level. On the ethical complexities of conservation responses to introduced species in Aotearoa, including tensions between preservation and unforeseen consequences, see Mark Fisher, *A Land Before Humans, a Land After Humans* (5m Books, 2025).

31 Hill et al., “Cross-Cultural Leadership.”

communicating iwi protective frameworks, then perhaps other forms of witnessing and advocacy are needed.

Returning to Te Taiapa after learning about the rāhui, I encountered institutional ambivalence made visible through infrastructure. The Department of Conservation (DOC) had installed orange plastic mesh fencing several metres back from the track entrance (Figure 7)—a temporary barrier supposedly protecting kauri while their cleaning station underwent installation. For me, the mesh announced ‘we know kauri are dying’ and ‘we will not honour Indigenous sovereignty over how to protect them’. It was not collaboration with mana whenua authority but a kind of performance of concern. When DOC removed the mesh and reopened the track with their upgraded cleaning station, they still refused to recognise the rāhui, maintaining Crown infrastructure as ultimate authority over territorial access. Standing at Te Taiapa, where logging had once stripped ngahere, where photography had once celebrated destruction, where institutional barriers now performed protection while denying sovereignty, I understood that my approach to photography required expansion. If photography’s colonial grammar had helped normalise kauri extraction, perhaps photography may also serve to make visible the ongoing patterns of sovereignty denial that continued to threaten these territories. This recognition—that photography’s capacity to make certain things visible while rendering others invisible operates as a political choice rather than technical limitation—seeded what would become the photographic-kinship methodology developed through this doctoral research. What began as activism at Te Taiapa grew into sustained inquiry. I started reflecting on how a

camera may facilitate kauri conservation through te Tiriti responsibilities, while acknowledging my complicity in the systems that continue harm.

Within the expanded field of contemporary documentary photography, at its relational and accountable end, I locate my practice as a place-based photographic-kinship that cares and bears witness rather than laying claim to territory. By place-based, I mean place in the relational sense that geographer Doreen Massey describes, not as a bounded location but “a particular constellation of social relations, meeting and weaving together at a particular locus”, always in process, not fixed.³² It is shaped by the specificity of place and is answerable to it, which, for my project, is a tauiwi practice working from te Tiriti accountability. It is from here that my research asks how documentary and landscape photography might be practised in ways that shift from extractive modes of representation, towards relational and accountable ones. In particular, landscape photography, in its inherited picturesque and topographic conventions, has tended to present land as scenery available to a surveying eye, which renders inhabited Indigenous places as empty wildernesses. My practice works within landscape’s long attention to land while refusing that scenic detachment: I photograph not a view but ground that is inhabited and storied.

Conventional documentary photography has claimed an evidentiary authority to bear neutral witness, positioning the photographer as detached recorder and the photographed as object of record; this extractive lineage is evidenced in the 1922 dam photographs (Figures 2 and 3). Extraction is not inherent to documentary, nor to the camera itself.

³² Doreen Massey, “A Global Sense of Place,” in *Space, Place and Gender* (Polity Press, 1994), 154.

Whether a photograph extracts from its subject or relates to it depends on the relations from which it is made, meaning who holds authority in the encounter; if the photographed has consented; and whether an image is taken or given. Documentary can therefore be practised as relational without loosening its commitment to bearing witness. My practice keeps this commitment, and documentary’s attention to actual places and events, reorienting both from detached record towards consented, reciprocal relation, so that photography may operate within Indigenous frameworks of authority, not above them. To do so is a place-based act: it means photographing that is answerable to particular ground, not as a surveyor passing across it. I position photographic-kinship not as a new genre but as a reorientation within and across documentary, landscape, and place-based photography, one that is practised from accountability instead of extraction.

For my project, place-based, in the relational sense I have described, is not the same as environmental photography. Although my work belongs to this genre, it enters it from a place-based orientation, one that holds land as particular and relational rather than as backdrop. Art critic and curator Lucy Lippard, when writing about how one might rightly relate to land that is not one’s own by descent, understands place as a layered location, dense with the histories and belongings of those who came before, to which newcomers belong not by possession but by learning those histories and answering to them.³³ Lippard offers a kind of settler-reflexive attention that I recognise as close to my own: a relationship to land grounded in knowledge and responsibility, not in claim. My practice is place-based in exactly this sense. It grows from

a single watershed—the waters that held me as a child at Te Henga and run through the Mokoroa valley I call home. This ground was named and known by Te Kawerau ā Maki long before I walked it, and I work here now under mana whenua authority. These places are not interchangeable, and my photographs could not have been made anywhere else. My work is environmental because it is place-based: I do not photograph the environment in general but this particular ground and the relations that hold it. As a research contribution, then, photographic-kinship is practice-led and specific: it demonstrates how documentary and landscape photography may be practised through ongoing, accountable relation to place. Its significance resides in showing how a tauiwi tangata Tiriti practice can work from inside these fields to reshape the ethical and methodological terms on which they are made. I offer it as one practice among many, one I reached not theoretically but through years of return to this valley.

Walking each morning through Mokoroa (without my camera equipment) offers forms of sustained presence with te taiao, cultivating the clairsentient awareness central to my research. Gazing up at kauri crowns along the ridgeline, sensing their presence across distances, my body settles into communion. The kauri stands healthy—no visible dieback in this section of the valley—yet the ground carries wounds due to historical logging. The forest that grows now is second-growth, recovery forest. This daily walking practice distinguishes itself from my photographic encounters. Walking cultivates relationships through presence alone, building the embodied knowledge that later informs the photographic collaborations that make up this project.

³³ Lucy R. Lippard, *The Lure of the Local: Senses of Place in a Multicentered Society* (The New Press, 1997), 7.

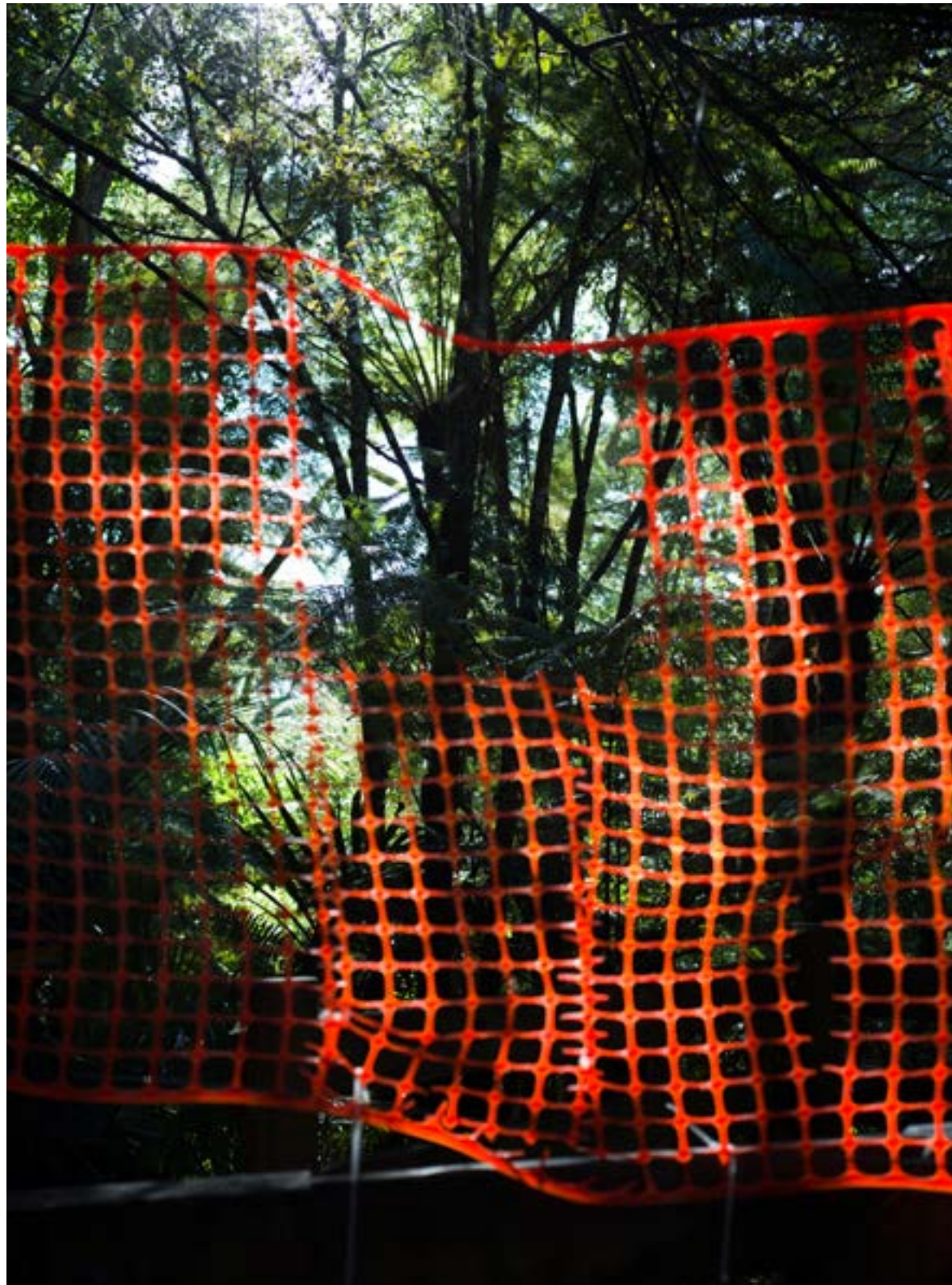


Figure 7. Chervelle Athena, *Te Taiapa track temporarily closed*, *Te Taiapa*, Waitākere, 2018. Digital photograph, inkjet print, 300 × 220mm.

34. Adrian Harris, “Embodied Eco-Paganism,” in *The Handbook of Contemporary Animism*, ed. Graham Harvey (Taylor & Francis Group, 2013), 577, 584.

35. Harris, “Embodied Eco-Paganism,” 586.

This capacity for clairsentient awareness has emerged through specific aspects of my heritage. My eco-pagan animist practice and tree veneration, rooted in northern English family lineage, grounds my research in its own spiritual soil—separate from but respectful of mātauranga Māori (Māori knowledge), whose teachings guide but do not belong to me. Ecopsychologist Adrian Harris identifies this embodied knowing as “somatic, physical knowing,” describing how earth-based spiritual traditions encourage “meaningful relationship” with the organic environment through felt sense rather than cognitive understanding.³⁴ My capacity to sense tree consciousness through what Harris calls “a feeling more than words” exists as a knowledge system operating in respectful relation to Indigenous knowledge systems that understand kauri as ancestors with mauri.³⁵ The ‘ear of the heart’ that Celtic contemplative traditions name—this listening beyond verbal language—prepared ground for my recognition of communication with all-beings, which is central to my project.

This research is situated within interdisciplinary discussions of embodied knowing across practice-led research and Indigenous epistemologies. I take the position that embodied knowing, as articulated by Harris, constitutes the methodological foundation through which photographic-kinship with kauri persons emerges. In doing so, my project extends these frameworks by foregrounding photographic practice as a site where relational knowing is not only interpreted but enacted. This embodied knowing unfolds through multiple, interrelated dimensions of attention. Knowledge arises between beings, in the relational encounters that accrue through sustained co-presence

between photographer, materials, and kauri persons—what scholar Tyson Yunkaporta (Apalech Clan) names as collective intelligence emerging through sustained reciprocal exchange.³⁶ Knowledge also arises through place-based engagement with whenua (land), where social anthropologist and phenomenologist Tim Ingold’s dwelling perspective frames knowing as something that grows through embodied presence in place rather than through analytical distance.³⁷ And knowledge is registered through sensation: in the somatic vocabulary of held breath, atmospheric pressure, and the body’s quiet recognitions of welcome or refusal. Taken together, these dimensions demonstrate how embodied knowing operates as both method and relation within this research, directly addressing the project’s focus on how photographic practice can enter into kinship with kauri persons. These dimensions are developed in detail across the chapters ahead.

Embodied knowing also arrives through wounding. In March 2022, I experienced a violation when helicopter spray drift settled on my skin and Louis’s fur while walking Mokoroa Valley Road. Herbicide entered our lungs, synthetic auxins designed to make plants die now circulating through our bloodstreams. The irony was not lost on me—trying to document environmental damage while becoming damaged ourselves. This unwanted chemical initiation transformed my body regardless of intention. My contamination altered my capacity for research, shifting me from observer to subjected, from documenter to documented. My body became an inadvertent sensing instrument, calibrated through violation to recognise violations elsewhere. This is not romanticism about wounding—I would not wish

chemical exposure on anyone—but recognition that damage sometimes generates unexpected capacities for witnessing. My contaminated body recognises contaminated ground. My compromised lungs sense atmospheric violence. As such, what emerged for this research was contamination as methodology: a type of wounded positioning that enables recognition of how harm operates across species boundaries. My own cellular experience becomes linked to slow cellular death spreading through kauri root systems elsewhere in the Ranges, to herbicide damage spreading through understory vegetation, to the accumulated violences that this valley—protected by Te Mokoroa yet continuously violated by disregard—continues to absorb.

My photographic practice seeks to contribute to collective efforts to protect ancient kauri beings as dieback disease continues to spread. This care shapes every aspect of my work, held within respect for Te Kawerau ā Maki authority under the rāhui protecting kauri ngahere. Kaumātua (respected elder) George Taua (Te Kawerau ā Maki) launched Kauri Rescue™ in 2017, a citizen science programme funded by the Biological Heritage National Science Challenge.³⁸ Through this programme, I learned that my role extends beyond documentation to physical care—learning that has shaped the way conservation mahi (work, practice) and photographic practice interweave. As a Kauri Rescue Ambassador, I contribute through practical mahi—injecting phosphite (phosphorous acid) into infected trees, sharing conservation knowledge, working alongside other volunteers. These acts of care deepen my relationship with the ngahere, teaching me different ways of attending to kauri wellbeing. This deepening extends to my photographic

36. Tyson Yunkaporta, “Fire in the Belly,” in *Fire*, vol. 4 of *Elementals*, ed. Stephanie Krzywonos, Gavin Van Horn, and Bruce Jennings (Rizzoli International Publications, 2024), 78.

37. Tim Ingold, *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill* (Routledge, 2000), 291–311.

38. See Kauri Rescue™ Trust programme <https://kaurirescue.org.nz/>

encounters, which, although remaining their own form of practice, emerge through my embodied sensing of kauri invitation, within mana whenua protocols, that years of presence have taught me to recognise.

Working within mana whenua protocols requires ongoing learning from multiple sources. Both prior to and over the course of this PhD, my understanding has developed through varied engagement: through cultural induction, with Te Roroa sharing frameworks for engaging with kauri as rangatira; through participation in Toi Taiao Whakatairanga (TTW)—a cross-cultural research collaboration addressing ngahere threats through arts, science, and te ao Māori; through conservation work with environmental scientist and advocate Mels Barton, whose relationships with Te Kawerau ā Maki shaped collective rāhui protection efforts; through participation in community gatherings and conservation events around these ancient beings. My involvement with TTW has deepened my understanding of how artistic practice and scientific research may work alongside mātauranga Māori to address environmental crises, providing methodological companionship for the photographic-kinship methodology that informs this study.

Cultural engagement with Te Kawerau ā Maki through hui (gatherings/meetings) and formal induction processes discussing ngahere protection and governance complexities deepens my understanding of specific histories of this rohe and my responsibilities. Further correspondence with iwi has provided guidance on specific questions concerning where photography may occur without violation, and when to step back entirely. I continue learning through these relationships,

asking permission rather than assuming access, receiving guidance as a gift rather than a right. The journey from being someone who unknowingly breached the rāhui to someone attempting accountable relationship is an ongoing process. These relationships deepen my practice while I remain positioned as tangata Tiriti, carrying European ancestry that participated in the systems now threatening kauri.

Understanding that the system of white supremacy is maintained and upheld by everyone who holds white privilege informed my decision to actively critique my role in colonisation—to question, challenge, and work to dismantle systems that have caused devastating impacts on the whenua of Aotearoa and the peoples who whakapapa to these territories. My European ancestry threads through two generations of settlement in Aotearoa, each generation adding another layer to the palimpsest of occupation that my photographic practice constantly interrogates. Throughout this research I have realised that I cannot photograph kauri without acknowledging that my ancestors participated in the very systems that now threaten these ancient beings. The kauri dieback disease spreading through Waitākere is not separate from colonisation—it is another expression of the same violence that clear-felled these forests, that built dams that flooded sacred sites, that continues to subordinate Indigenous environmental authority within Crown governance frameworks.

This positioning generates a type of productive discomfort that is akin to the “hyphen space” that education researchers Kuni Jenkins (Ngāti Porou) and Alison Jones theorise—the space between coloniser and indigene that refuses easy

resolution.³⁹ Working as tangata Tiriti within Te Kawerau ā Maki rohe means accepting that my camera will always carry genealogies, even as I work to reorientate its operation. Aerochrome also embodies this hyphen space: film designed to facilitate imperial violence now witnesses the forests that colonialism wounded, never fully cleansed of its military genealogy yet continuously reoriented toward care. My herbicide-contaminated body creates another form of recognition—cellular damage that attunes me to atmospheric violence, to the slow poisoning of kauri, to harm operating beneath visibility. Three contaminations meet: degraded film, diseased forests, violated flesh. These wounds do not compromise practice but constitute it, generating the particular sensitivities and vigilances this project requires. Contamination becomes capacity for witness; damage becomes instrument for recognition.

This research has developed a photographic-kinship methodology that frames how I use a camera to collaborate with all-beings. Key to this methodology are photographic methods that focus on not ‘capturing’ but receiving through relationship and consent; and not extraction but reciprocity through offerings and care. My photographic-kinship methodology emerged through collaborative participation with kauri, te taiao, and Aerochrome as active participants in knowledge-making. This collaborative emergence reflects the methodology’s foundational epistemology: knowledge arises through relationship, not from individual intention. As a methodology, photographic-kinship recognises, names, and systematises these emergent patterns into a framework—though the knowledge itself belongs to the relationships that made it possible. This tension between scholarly authorship

and collaborative emergence cannot be resolved, only held—like the other productive tensions shaping this work. The methodology operates through five interconnected dimensions—material-consciousness that recognises agency in all-beings, inclusive of film and forest; embodied-consent that reads permission through somatic response; spectral-kinship that holds histories alongside present care; photographic-communion that dissolves subject/object boundaries between photographer, materials, and all-beings into unified consciousness; and wounded-witnessing that sees through rather than beyond wounding, recognising that damage generates unique capacities.

Throughout my research, I specifically position myself as tangata Tiriti, carrying particular responsibilities and limitations. I cannot speak from Indigenous authority, cannot claim mātauranga Māori, and cannot position myself as environmental leader within Indigenous territories. My engagement with mātauranga Māori in this exegesis is limited to knowledge that has been explicitly shared in public academic and cultural forums by Māori scholars and knowledge holders themselves—acknowledging that much mātauranga Māori is sacred, restricted, and appropriately not accessible to those outside its relevant cultural contexts. As such, as part of my research, I explore how to redirect my settler privilege towards supporting Te Kawerau ā Maki environmental governance; I use my institutional access to document conservation needs, employ my contaminated body as sensing instrument for atmospheric violence, and reorientate technology towards environmental witnessing. Kauri cannot wait for perfect methodologies or pure positions from which to work. They need imperfect allies willing

39. Alison Jones and Kuni Jenkins, “Rethinking Collaboration: Working the Indigene-Colonizer Hyphen,” in *Handbook of Critical and Indigenous Methodologies*, ed. Norman Denzin, Yvonna Lincoln, and Linda Tuhiwai Smith (SAGE, 2008), 5.

to work within contradiction, to act in spite of holding incomplete knowledge, and to love with the probability of loss.

Kauri are teachers, persons, ancestors whose bodies hold centuries of knowledge. A kauri cannot be rushed; its growth follows rhythms across decades and centuries, each ring recording relationships with soil, water, air, kin.

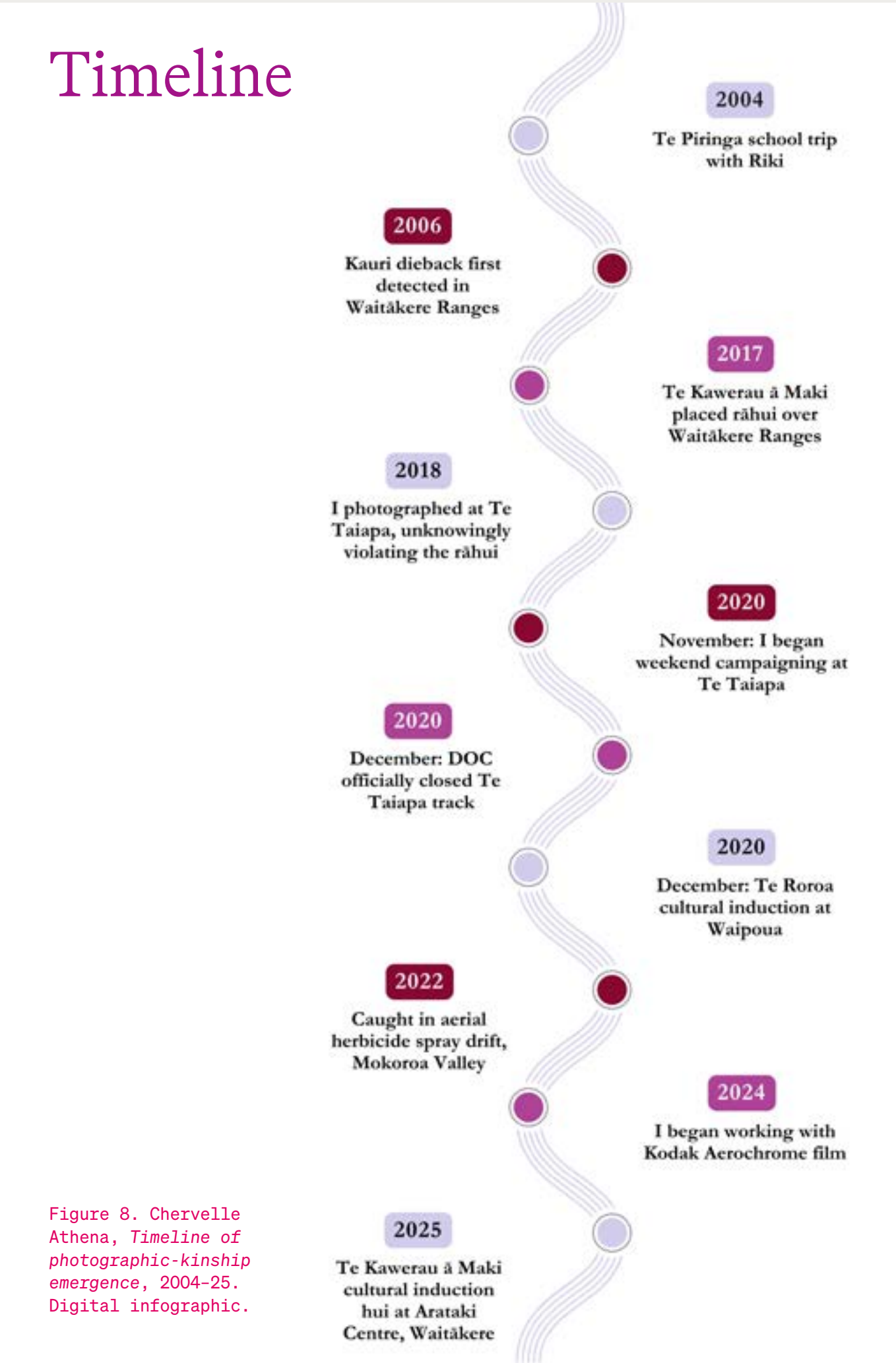
- Inspired by kauri anatomy and the organic temporality of practice-led research, this exegesis adopts the structure of a living kauri, where each element operates interdependently to sustain the whole:
- The Soil — the foundational ground of practice from which methodology emerges.
- The Roots — theoretical foundations reaching deep into Indigenous philosophy, photographic theory, and te Tiriti frameworks.
- The Trunk — structural methodology carrying knowledge through conducting vessels and living cambium.
- The Branches — wounded materials extending towards collaborative witness.
- The Crown — what emerges and continues through photographic communion.

The Forest Floor — where material wisdom returns, continuing cyclical reciprocity.

The preceding narrative has established The Soil—the generative ground containing the conditions, stories, and practice contexts from which photographic-kinship methodology grows. The 2018 rāhui violation at Te Taiapa, years of dwelling in Mokoroa, and the 2022 herbicide contamination incident all constitute this fertile ground (Figure 8).

Throughout this research, I have taken on the role not of documenter but of student—learning from kauri how kinship emerges through presence, consent approaches, and reciprocal care. Each chapter unfolds like a section of the tree, interdependent and alive. Throughout this exegesis, my photographic works are identified by research site, date, and contextual description, rather than series titles. The work organises itself through place-based relationship: Te Taiapa and Mokoroa are within Te Kawerau ā Maki rohe; Waipoua is within Te Roroa rohe. This organisation honours the forest communities of kin within each territory, acknowledging territorial sovereignty while allowing the photographic practice to unfold as a continuous evolution. My approach privileges the material-consciousness and collaborative agency that my project seeks to honour.

The first chapter, *The Roots: Foundations Reaching Deep*, encompasses a literature review showing how my photographic-kinship methodology emerged from recognising kauri persons, photographic materials, and photographers as conscious collaborators. This chapter examines theoretical foundations where Indigenous knowledge systems meet Western frameworks, where the consciousness of all-beings meets material complicity, and



where photography’s violence sits alongside possibilities for reorientation. It demonstrates that meaningful environmental photography within Indigenous territories requires three simultaneous recognitions: all-beings possess consciousness requiring reciprocity; materials carrying embedded violence may be tentatively reoriented through deeply considered practice; and te Tiriti creates boundaries and openings for this work. These foundations create the nutrient networks nourishing my practice-led discoveries, showing the kind of thinking my sustained kauri engagement generates, preparing ground for the photographic encounters that follow.

Chapter 2, *The Lower Trunk: Photographic-Kinship as Structure*, outlines how the methodological dimensions, developed in this research, emerged through sustained practice. This chapter demonstrates how photographic-kinship develops through accumulated encounters, not predetermined frameworks. Drawing from my sustained photographic engagement within Mokoroa across four years (2021–25)—from early conventional photography through Polaroid experiments testing embodied-consent approaches, to recent Aerochrome witnessing (October–November 2024)—I explore how each dimension manifests through specific material and territorial relationships. Material-consciousness becomes visible through film’s exercising of selective editorial authority in photographs showing herbicide contamination, excavator clearing of mānuka (*Leptospermum scoparium*) and kānuka (*Kunzea ericoides*), and dead and surviving vegetation. The chapter also examines responsive practice ecologies—walking-meditation, composting cycles documented through garden

beds enriched by failed prints (September 2024), reciprocal relationships with valley beehives photographed through an infrared lens—detailing cyclical photographic research.

Chapter 3, *The Upper Trunk: Ethics Rising Through Practice*, examines how ethical orientations emerge from lived violation, demonstrating how accountability structures grow from wounded ground. Referencing photographs documenting Te Taiapa track closure activism (November 2020), I explore how the 2018 rāhui violation became a teacher, creating my project’s foundational accountability framework, rather than a wound requiring resolution. The chapter develops a ‘scar-tissue methodology’, where harm redirects growth, visualised through a triangular framework diagram showing how irresolvable-complicity, dwelling-kinship, and collaborative-reorientation create protective structures. It examines breath-sharing methods as part of my photographic practice, developed through the 2020 Waipoua blessing. The chapter illustrates how working within irresolvable contradictions creates ethical vigilance, with political positioning requiring perpetual recalibration between constitutional responsibility and inherited complicity visible across these documented encounters spanning Te Taiapa activism and Waipoua transformation.

Chapter 4, *The Branches: Wounded Materials as Collaborative Witness*, examines how Aerochrome participates as a conscious collaborator in image-making. I do this by focusing on how decades of chemical degradation create rather than compromise witness capacity through material-consciousness that exercises selective editorial authority beyond photographer control. Through infrared photographs

from Mokoroa (October–November 2024) the chapter presents spectral-kinship as temporal methodology, revealing how violence embedded within photographic materials cannot be erased, yet may be tentatively reoriented through ceremonial negotiation. Two key images anchor this exploration: *Material Refusal* (October 2024), showing Aerochrome’s selective agency in choosing how to render scenes, and *Ordinary Yellow* (November 2024), showing the film’s muted restraint, refusing spectacular rendering of damaged ground even while changing living forest into brilliant magenta. The chapter asks what happens when wounded materials meet wounded forests, navigating tensions where infrared glamour morphs suffering into dreamlike spectra—cleared tree-bodies rendered in mottled purple while surrounding kin glow magenta—showing how contaminated film redistributes power toward collaborative emergence.

Chapter 5, *The Crown: Reorientation Seeking Light*, presents photographic-kinship reaching full expression. The chapter examines how my aesthetic strategies facilitate sustained attention to environmental harm without either spectacularising suffering or retreating into defensive critique. The chapter then turns toward photographs of kauri persons coexisting with doe and fawn in paddocks within Mokoroa (November 2021, and December 2025), where film exposes molecular kinship across introduced deer and Indigenous kauri sharing breath and ground. This work presents photographic-kinship in maturity—material-consciousness, embodied-consent, spectral-kinship, photographic-communion, and wounded-witnessing exist simultaneously. Aerochrome’s infrared rendering

exposes atmospheric intimacies invisible to human eyes: chlorophyll’s photosynthetic labour connecting pasture and forest, respiratory exchanges between species, metabolic kinship transcending boundaries. The chapter closes by asking what such ambivalent attention—holding grief for absent seedlings alongside tenderness for present fawn, recognising enclosure while witnessing unexpected intimacy—may seed for future relationships through te Tiriti partnerships that honour complexity over purity, and relationship over resolution.

In December 2020, when DOC officially closed Te Taiapa, something shifted for me—not transformation, but acknowledgment. My weekend presence at track entrances, my remaking of signs after vandalism, the documentation of ongoing violations: these acts did not resolve constitutional inequity but created one instance where Indigenous authority received institutional recognition. Three years after Te Kawerau ā Maki declared the rāhui, the track closure honoured what mana whenua had established through their exercise of rangatiratanga. Yet constitutional patterns persist. In August 2025 the Waitākere Ranges Heritage Area Deed was signed after seventeen years of legally mandated delay—years during which kauri dieback spread from 8 to 19 percent across the Ranges.⁴⁰ The deed grants Te Kawerau ā Maki advisory status within a six-to-five majority structure where Crown entities maintain ultimate decision-making authority.⁴¹ Operating under the Local Government Act rather than Tiriti-based constitutional arrangements, the framework continues subordinating Indigenous environmental authority within Crown governance.⁴²

The rāhui continues. The dieback continues. The constitutional tensions examined throughout this introduction remain unresolved. My work cannot fix what seventeen years of institutional delay and ongoing governance failure reveal: that tactical acknowledgments do not transform structural relationships, that love for ngahere meets constitutional limitation, and that care persists within systems designed to extract rather than protect. What continues is not victory but presence. I cannot photograph kauri back to health, yet each day in Mokoroa inscribes another line in an endless love letter to what remains. My project calls in the kind of love that expects nothing in return—not healing, not redemption, not even understanding.⁴³ Only presence, sustained across seasons, until attention becomes offering. Some days, the only offering I have is returning—showing up becoming its own form of prayer.

The photographs emerging from my project refuse simple narratives. They hold spectacle and suffering together like soil holds decomposition and germination. What follows in the chapters ahead is not a resolved framework, but ongoing negotiation within impossible circumstances—not answers, but more tender questions about what becomes possible through staying present to complexity rather than seeking its resolution. In Chapter 1, we begin underground, in the dark tangle where nutrient exchange and contamination share the same substrate, preparing to understand how photographic encounters may transform tools towards instruments of kinship—incompletely, impossibly, yet necessarily.

The ngahere is waiting.

40. Bradshaw et al., “Phytophthora agathidicida: Research Progress, Cultural Perspectives and Knowledge Gaps in the Control and Management of Kauri Dieback in New Zealand.”

41. Waitākere Ranges Heritage Area Act 2008, Public Act 2008 No. 1, Section 29; Auckland Council Policy and Planning Committee, “Waitākere Ranges Heritage Area Deed of Acknowledgement,” Agenda Item 8, File No. CP2025/14798, 14 August 2025.

42. Michaela Ryan-Lentini, “Co-Governance in Aotearoa New Zealand: Controversy and Cooperation,” Equal Justice Project, June 30, 2022, <https://www.equaljusticeproject.co.nz/articles/co-governance-in-aotearoa-new-zealand-controversy-and-cooperation2022>.

43. See bell hooks, *All About Love: New Visions* (William Morrow, 2000), for discussion of love as ethical practice rather than transactional exchange.

Chapter 1

—The Roots: Foundations Reaching Deep

In the ngahere, a seed opens into simultaneity—taproot reaching towards earth’s depths while cotyledons unfold towards the sun, each movement nurturing the other’s possibility. This primary root finds its gravitropic path downward, creating the channel through which deep moisture will eventually flow to every branch, every leaf, every cone. Such reciprocal unfolding mirrors this research project—consciousness of all-beings growing alongside photographic practice and Tiriti relationships, each root system feeding the others. The taproot’s journey through anthropocentric soil becomes less about forceful breaking and more about finding passages towards deeper nourishment, creating pathways for lateral roots to spread their own networks of connection. This botanical unfolding provides metaphor and method for examining how photographic-kinship emerges through theoretical and practical nourishment.

1.1—The Taproot: Agency Across All-Beings

The photographic-kinship methodology emerging through this research, which informs my practice, depends upon recognising consciousness in all participants—kauri, film, photographer. Māori philosopher Nepia Pohuhu (Ngāti Kahungunu, Ngāti Porou) suggests that “all things unfold their nature, live, have form, whether trees, stones, birds, reptiles, fish, quadrupeds or human beings.”⁴⁴ His framing provides the ontological ground where expired military film can exercise editorial choice, where kauri can extend or refuse

invitation, where photographic encounter becomes reciprocal exchange rather than extraction.

Kuni Jenkins and Alison Jones analyse the complexities of cross-cultural research relationships in “Rethinking Collaboration: Working the Indigene-Colonizer Hyphen” (2008), positing that in Indigenous–settler contexts effective collaboration is “based on the tension of difference, not on its erasure.”⁴⁵ This position suggests that attempts to create collaborative methodologies often fail because they seek to dissolve rather than work within relationships defined by “power and inequality.”⁴⁶ They critique research approaches that assume mutual understanding is possible, demonstrating instead that cross-cultural engagement asks for maintaining rather than bridging difference. Their framework illuminates my photographic encounters with kauri, where productive difference becomes even more pronounced, and where full understanding remains impossible. This unknowability becomes methodologically foundational rather than a barrier to overcome. Working within territories where these whakapapa connections are sacred, my research recognises that acknowledging kauri agency enables reciprocal engagement that honours kauri as the rangatira (chief, leader) they are within the care of Te Kawerau ā Maki.

This commitment to productive tension finds companionship in artists who transform photographic materials themselves into sites of collaboration. Artist Nova Paul (Te Uriroi, Te Parawhau, Te Māhurehure, Ngāpuhi) explores plant-based film development methods in *Ngā Pūrākau Nō Ngā Rākau* (2023) (Figure 9). Paul creates ‘tree juice’ developer from the

44. Te Matorohanga, Nepia Pohuhu, and H. Whatahoro, *The Lore of the Whare-Wānanga or Teachings of the Maori College on Religion, Cosmogony, and History*, trans. and ed. S. Percy Smith (AMS Press, 1978).

45. Jones and Jenkins, “Rethinking Collaboration,” 5.

46. Jones and Jenkins, “Rethinking Collaboration,” 5.

leaves and bark of the rākau (tree) she films, demonstrating what she describes as “co-creation between tree, human, and celluloid” that transforms image-making from potential extraction and appropriation into “collaborative making.”⁴⁷ Her understanding that “the tree would give me an image, I wouldn’t take the image” resonates with my approach to working within constraints through material collaboration—as an attempt to reorient photography’s colonial grammar—suggesting how cameras may learn different ways of being.⁴⁸

The convergence of ontological recognition of consciousness, productive difference, and material collaboration creates theoretical ground for reconsidering photographic practice beyond extraction. This theoretical convergence suggests that photographic encounters with all-beings require approaches that embrace opacity as epistemologically productive. As such, photographic-kinship emerges not only as a methodological framework but also as practice that honours partial knowing while maintaining sustained engagement.

These recognitions find deeper grounding in mātauranga Māori scholarship, which has long articulated frameworks for relationships with all-beings. Architecture scholar Amanda Monehu Yates (Ngāti Rangiwewehi, Ngāti Whakaue, Te Aitanga a Māhaki, Rongowhakaata) connects more-than-human thinking to Māori spatial governance through her work on mauri ora (flourishing life-force) as holistic hauora (health, wellbeing).⁴⁹ Yates’ research articulates how “spatial governance models oriented to the hauora of the more-than-human might better enable Indigenous peoples’ capacity to live-well-with and care for our more-than-human whanaunga [kin].”⁵⁰ Her work

challenges approaches to environmental management through recognition of agency and spiritual presence. Yates’ emphasis on mauri ora as “socio-cultural-ecological vitality” builds theoretical foundations for understanding how photographic materials may participate in ecological relationships rather than function as neutral tools for human documentation.⁵¹ This paradigmatic shift invites recognition of territories as relational networks. Yates shows that mauri flows through all beings and materials. My research explores how this understanding applies to photographic materials—specifically how film exercises agency as an active collaborator, possessing what I recognise as material-consciousness grounded in Yates’ articulation of mauri.

Such recognition of material participation within spiritual networks connects to education scholar Mere Skerrett (Ngāi Tahu, Ngāti Rakiāmoa, Ngāti Ruahikihiki, Ngāti Māhuta, Ngāti Unu, Ngāti Maniapoto, Ngāti Pīkiao, Ngāti Te Rangiunuora, Ngāti Pūkeko) and Yates, who demonstrate how mātauranga Māori frameworks recognise personhood as extending beyond metaphorical understanding into practical legal and spiritual relationships. Skerrett’s analysis of kaitiakitanga describes reciprocal relationships where “Mana Wahine or Māori Women’s agency in relationality with Papatūānuku (Earth Mother) is about understanding her (Papatūānuku) personhood and divinity.”⁵² This position gains practical expression through legal recognition of environmental entities as persons, exemplified by Te Urewera, Whanganui River (Te Awa Tupua), and Taranaki Mounga (mountain). Yates extends this analysis by unpacking how such legislation “register[s] or perform[s] a radically different, more-than-human oriented ontology” within legal systems.⁵³

47. Nova Paul and Tessa Laird, “Ngā Pūrākau Nō Ngā Rākau: Stories from Trees,” *Philosophies* 8, no. 1 (2023): 5, <https://doi.org/10.3390/philosophies8010015>.

48. Karl Chitham and Nova Paul, “Nova Paul: ‘You Point to the World’,” *Art News Aotearoa*, November 9, 2023, <https://artnews.co.nz/nova-paul-you-point-to-the-world/>

49. Amanda Monehu Yates, “Ngā Whakatōhea: Articulating Māori Spatial Governance” (PhD dissertation, University of Auckland, 2019), 45.

50. Yates, “Ngā Whakatōhea,” 47.

51. Yates, “Ngā Whakatōhea,” 89.

52. Mere Skerrett, “A Critical Analysis of Māori Cosmologies and the Tyranny of Epistemic Western Centrism,” *Gender and Education* 35, no. 2 (2023): 167, <https://doi.org/10.1080/09540253.2022.2152103>.

53. Yates, “Ngā Whakatōhea,” 156.



Figure 9. Nova Paul, *Ngā Pūrakau Nō Ngā Rākau*, 2023. 16mm film reproduced as a film still. Courtesy of the artists, photo by Cheska Brown.

I find a correlation with Yates’ understanding that environmental knowledge requires recognition of relationships that extend beyond immediate material appearances. Through mauri ora she navigates whakapapa connections that position Māori as participants within what she describes as “multi-species lineage” and “kinship,” relationships that enable direct engagement with “the life-field whose hauora comes from its connectivity.” As tauiwi, I cannot claim these whakapapa connections in Aotearoa, but rather work with what Yates identifies as the need for “appropriate and non-appropriating Te Tiriti allies” who support Indigenous environmental authority instead of creating competing structures.⁵⁴ Yates emphasises that “mauri is understood as a connective or binding force” that “situates interconnectedness and mutually dependent hauora as ontology, as the everyday vital living of more-than-human-beings.”⁵⁵ This understanding resonates with my approach to film as possessing material agency within the spiritual land that contains mauri and wairua. My project is concerned with how to reposition film from a tool of military surveillance towards a potential medium for relationship building.

This repositioning requires recognising spiritual dimensions that Western secular materialism cannot fully articulate. While my own ancestral earth-based practices help me recognise that materials possess consciousness, mātauranga Māori provides established frameworks that articulate these relationships with greater depth. Although political theorist Jane Bennett’s secular ‘new’ materialism is useful for my project, it cannot fully reach these spiritual dimensions—her philosophical concepts stop short of the embodied relationships I seek to encounter with photographic

materials.⁵⁶ In contrast, Yates’ discussion of whanaungatanga (relationships, kinship) as “the inherent connectivity and relationality of ‘livingness’” and mauritanga as “the immanent vitality, hauora and enmeshing of life as a field or more-than-human collective” allows for a reshaping of the relationships between photographic apparatus and trees by repositioning them as participants within networks of kinship and reciprocity.⁵⁷

Education scholar Te Kawehau Hoskins (Ngāti Hau, Ngāpuhi) and Alison Jones’ analysis in *Critical Conversations in Kaupapa Māori* (2017) articulates relational ontologies showing how documentary photography can function as research violence when conducted without appropriate cultural practices and reciprocal relationships.⁵⁸ Drawing from their analysis that “Māori constantly evoke relational ontologies and recognise that the non-human world has agency,”⁵⁹ these insights directly challenge photography’s colonial grammar—the visual practices through which conventional documentary photography facilitates territorial appropriation and cultural violence. Building on this understanding, I develop photographic-kinship methods that position all beings as active participants, not passive objects. My processes honour cyclical time instead of imposing linear ‘before’ and ‘after’ distinctions,⁶⁰ and maintain ancestral pathways.⁶¹

Hoskins and Jones demonstrate how Māori ontological understandings inform research approaches. They explain that “terms such as mauri and mana name the interconnectivity of the human and non-human worlds.”⁶² Their insight that “material things of the world—whether

54. Yates, “Ngā Whakatōhea,” 97-98.

55. Yates, “Ngā Whakatōhea,” 91.

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

57. Yates, “Ngā Whakatōhea,” 127.

58. Te Kawehau Hoskins and Alison Jones, “Non-human Others and Kaupapa Māori Research,” in *Critical Conversations in Kaupapa Māori*, ed. Te Kawehau Hoskins and Alison Jones (Huia Publishers, 2017).

59. Hoskins and Jones, “Non-human Others and Kaupapa Māori Research,” 55.

60. Ariella Azoulay, *Potential History: Unlearning Imperialism* (Verso Books, 2019), 5-6; C. Schotten, “Before Violence, after Empire: Ariella Azoulay’s *Potential History*; *Unlearning Imperialism*,” *Journal of Palestine Studies* 50, no. 1 (2020): 92.

61. Tim Ingold, “The Temporality of the Landscape,” in *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill* (Routledge, 2000), 189.

62. Hoskins and Jones, “Non-human Others and Kaupapa Māori Research,” 57.

a forest, a lake, or a building—can ‘speak’ to human beings” reveals how places carry mauri.⁶³ Their analysis shows that these things exist within relational ontologies where “the identity of ‘things’ in the world is not understood as discrete or independent, but emerges through and relates to everything else.”⁶⁴ Seeking to work alongside these ontologies, I approach kauri and film as participants whose agency shapes what becomes possible. Hoskins and Jones’ relational ontology articulates what arises through my photographic practice. Their grounding enables me to approach understanding these relationships not as metaphorical but as actual material exchanges where all participants possess agency that eclipses binary subject and object demarcations. Hoskins and Jones’ insight that “we are always already in relation with certain material objects” grounds my research into how film may facilitate kauri conservation—positioning photographic practice as emerging from pre-existing relationships with kauri persons and contaminated materials, rather than initiating documentation of passive environmental subjects.⁶⁵

Botanist and author Robin Wall Kimmerer’s (Potawatomi) reflects on methods that “ask permission before taking” and “abide by the answer,” demonstrates a precedent for all-being consent within Potawatomi knowledge.⁶⁶ Yet considering how to develop respectful approaches as tauiwi while honouring such principles raises questions for my research. These tensions generate practical inquiries: How does ‘asking permission’ operate across species boundaries where communication transcends anthropocentric frameworks? What constitutes ‘abiding by the answer’ when working with aged military surveillance equipment in Indigenous

territories? Kimmerer’s insight that “the land is not a commodity, but a relationship” aligns with my project’s spiritual recognition of kauri personhood, yet creating relational approaches through photographic methods requires acknowledging contradictions—such as using surveillance film for environmental protection—rather than attempting to overcome them.⁶⁷ Working within mana whenua rohe and established cultural protocols deepens these tensions—tensions that require sustained negotiation between embodied spiritual practices, Indigenous territorial sovereignty, and photographic collaboration with materials carrying embedded violence. For my project, this negotiation unfolds through reflective presence, spiritual preparation, and ongoing accountability to conservation priorities that emerge via responsive Tiriti relationships.

Negotiating different ways of knowing draws on the kind of embodied knowing that Tyson Yunkaporta outlines in “Fire in the Belly” (2024). This essay pushed my understanding of why privileging mental cognition over embodied knowledge can become catastrophic for environmental relationships.

Individualistic thinking is never enough to sustain life. That’s why our custodial species has developed two brains—one for thought and one for thinking-feeling.⁶⁸

Yunkaporta’s articulation of “thinking-feeling” resonates deeply with my embodied practice, offering precise language for the gut wisdom that guides me. He states that “executive function should always be signed off by the gut before any action is taken,” which articulates what my body already knows.⁶⁹ Each morning unfolds through embodied

63. Hoskins and Jones, “Non-human Others and Kaupapa Māori Research,” 58.

64. Hoskins and Jones, “Non-human Others and Kaupapa Māori Research,” 58.

65. Hoskins and Jones, “Non-human Others and Kaupapa Māori Research,” 55.

66. Robin Wall Kimmerer, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants* (Milkweed Editions, 2013), 183.

67. Robin Wall Kimmerer, *The Serviceberry: An Economy of Gifts and Abundance* (Allen Lane, 2024), 62-63.

68. Yunkaporta, “Fire in the Belly,” 78.

69. Yunkaporta, “Fire in the Belly,” 80.

response rather than predetermined routine—my body sensing whether this is a day for lingering or brief presence, responding to rain’s arrival, a dog’s sudden need, my own fluctuating energy. These seemingly mundane negotiations reveal how gut wisdom manifests: not through planning but through moment-by-moment attunement to the irreducible complexity of being alive in relationship. Yunkaporta’s understanding that meaningful environmental knowledge emerges through “thought-felt” processes grounds my project by unsettling the separation of rational analysis from embodied awareness that persists in documentary traditions. This embodied approach informs how my project seeks to shift film from surveillance into environmental kinship.

While Yunkaporta articulates how embodied knowing guides photographic practice, feminist theorist and physicist Karen Barad’s ‘agential realism’ supports how my project may shift from extraction to relationship in kauri conservation. Barad articulates that agency is “only distinct in a relational, not an absolute, sense,” which can disrupt the reductive logic of active photographer and passive subject.⁷⁰ Barad’s insight that “matter and meaning are not separate elements” resonates with Indigenous understandings of agency among all-beings, albeit through physics not mātauranga Māori.⁷¹ Her concept of “agential cuts”—temporary boundaries that form through measurement and observation—suggests photography creates momentary configurations of relationship rather than permanent captures.⁷² This perspective opens space for my project to consider how different photographic materials may enable different qualities of relationship within kauri ngahere. While conservation photography tends to work through

documentary evidence, and new materialist scholars rarely engage with photographic practice, Barad’s work enables possibilities for my project’s photographic-kinship methodology, which seeks to engage material agency and Indigenous knowledge in developing reciprocal practices.

What emerged through practice found concepts that crystallised the philosophical commitments steadying this work. Reading cultural ecologist and geophilosopher David Abram’s *The Spell of the Sensuous* (1996), which introduced the term “more-than-human,” felt like finding a distant relative who was attuned to similar frequencies. Abram recognises that “the delicately interlaced biosphere that sustains us displays its own ongoing and improvisational sentience, in which our human intelligence is thoroughly entangled”—a sentience that eludes our full comprehension.⁷³ His phenomenological approach offered the vocabulary for consciousness I had been sensing. More-than-human is not a single theory but a convergence of overlapping fields that, across recent decades, have refused the idea of humans as separate from the rest of the living world. My research draws on this confluence as the conceptual ground by which my approach to relational photographic practice is framed. Abram’s thinking, like posthumanism more broadly, unsettles the human exceptionalism that places humans above and apart from other beings.

Multispecies ethnography extends this refusal of human separateness into ethnographic form, attending to the lived entanglements through which humans and other organisms make worlds together. For example, feminist science

70. Karen Barad, *Meeting the Universe Halfway* (Duke University Press, 2007), 33.

71. Barad, *Meeting the Universe Halfway*, 3.

72. Barad, *Meeting the Universe Halfway*, 140.

73. David Abram, “On the Origin of the Phrase ‘More-Than-Human’,” in *More Than Human Rights: An Ecology of Law, Thought and Narrative for Earthly Flourishing*, ed. César Rodríguez-Garavito (New York University Press, 2024), 316. Abram first introduced this term in *The Spell of the Sensuous: Perception and Language in a More-Than-Human World* (Pantheon Books, 1996).

74. Donna Haraway, *When Species Meet* (University of Minnesota Press, 2008), 4; Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton University Press, 2015), 28.

75. Bennett, *Vibrant Matter*, 47; Barad, *Meeting the Universe Halfway*, 33.

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

77. Zoe Todd, “An Indigenous Feminist’s Take on the Ontological Turn: ‘Ontology’ Is Just Another Word for Colonialism,” *Journal of Historical Sociology* 29, no. 1 (2016): 7, 12, <https://doi.org/10.1111/johs.12124>.

78. Contemporary ecocritical scholarship engages with similar non-anthropocentric frameworks. See Timothy Morton, *Being Ecological* (The MIT Press, 2018); Federico Luisetti, *Nonhuman Subjects: An Ecology of Earth-Beings* (Cambridge University Press, 2023). These terminologies also appear in deep ecology studies, where terms such as ‘all-beings’ and ‘earth-beings’ centre aquatic, terrestrial, and celestial beings rather than positioning them in relation to humans.

79. See Graeme Harvey, ed., *The Handbook of Contemporary Animism* (Routledge, 2013); Christopher Braddock, ed., *Animism in Art and Performance* (Springer International Publishing, 2017); Bennett, *Vibrant Matter* (2010).

80. Brendan Hokowhitu, “Indigenous Materialisms and Disciplinary Colonialism,” *Somatechnics* 11, no. 2 (2021): 158, <https://doi.org/10.3366/soma.2021.0349>; citing Jerry Rosiek, Jimmy Snyder, and Scott Pratt, “The New Materialisms and Indigenous Theories of Non-Human Agency: Making the Case for Respectful Anti-Colonial Engagement,” *Qualitative Inquiry* 26, no. 3–4 (2020): 332.

81. Bennett, *Vibrant Matter*, 47; Hokowhitu, “Indigenous Materialisms,” 157.

82. Hokowhitu, “Indigenous Materialisms,” 158; Rosiek, Snyder, and Pratt, “The New Materialisms,” 332–33.

studies scholar Donna Haraway describes a “becoming with” in which beings are constituted only in relation to one another, while anthropologist Anna Tsing follows the matsutake mushroom to trace forms of collaborative survival that proceed through encounters across difference rather than through human design.⁷⁴ New materialism, in turn, recognises matter itself as active and lively, dissolving the assumption of inert material awaiting human use. This conviction is articulated in Bennett’s conceiving of matter as vibrant, and Barad’s positioning of intra-active agency.⁷⁵ Their thinking relates to Tim Ingold’s perspective that situates every being within a meshwork of ongoing relation.⁷⁶

While these frameworks emerge from distinct disciplines, my project carries them into a practice-led register, where relationality is met through photographic process as much as theorised. Distinct as these positions are, they share a single premise: that the human is co-constituted with other beings and systems rather than standing apart from them. From this shared ground, my research advances photographic-kinship with kauri persons as a situated, place-based enactment of co-constitution, realised materially and sensorially through practice.

This recognition came with immediate complication: anthropologist and scholar Zoe Todd’s (Métis) critique of “citational colonialism” exposed how academics celebrate European thinkers for insights that “many an Indigenous thinker around the world could have told you for generations.”⁷⁷ This brought clarity: Indigenous knowledge systems predate Western articulations of consciousness among all-beings, locating my practice within the wake of these knowledge traditions. Through photographic-kinship

with kauri, I came to work primarily with the idea of ‘all-beings’ rather than ‘more-than-human’. My practice requires terminology centred on inclusion, kinship across species and materials, and refusal of anthropocentric measurement.⁷⁸ While the term more-than-human has enabled real relational work, it continues to orient the human as its reference point, naming other beings in relation to what exceeds the human and so preserving the very centre it seeks to unsettle. All-beings sets this reference aside, holding kauri, Aerochrome, and photographer within a single field of relation in place of ranking them against a human standard.

Eco-pagan animism and Western materialism both recognise material agency and reject subject/object dualisms. However, engaging these approaches within Indigenous territories requires acknowledging that these frameworks often obscure the primacy of Indigenous knowledge.⁷⁹ For example, Indigenous studies scholar Brendan Hokowhitu (Ngāti Pūkenga) challenges the theoretical foundations of Bennett’s material vitalism concerning how matter possesses its own vitality and agency. Hokowhitu argues that Indigenous knowledge systems understood material agency and spiritual relationships “thousands of years earlier than contemporary philosophers of science.”⁸⁰ Bennett’s challenge to the “image of dead or thoroughly instrumentalized matter” does support my approach to Aerochrome film as a collaborative partner. However, her secular theory cannot account for the spiritual dimensions that mātauranga Māori recognises within all matter.⁸¹ Bennett’s work, like much of ‘new’ materialism, centres Western thought without acknowledging Indigenous precedence, perpetuating what Hokowhitu terms “disciplinary colonialism.”⁸² This erasure

gathers as heaviness in my bones when reading—all those citations that could have honoured deeper knowings, all those footnotes that may have gestured towards different wisdoms. When I close these books and walk through the ngahere, I notice how these trees have always carried what Western theory struggles to articulate—consciousness in every unfurling frond.

Recognising these limitations invites a different kind of attention—one that listens for what has always been known. Given Western ‘new’ materialism’s limitations, this distinction between relational and theoretical approaches to agency guides my project by recognising irreconcilable differences between Western new materialist frameworks and Indigenous knowledge systems in the way agency is understood and enacted. This critique extends to education scholars Jerry Lee Rosiek, Jimmy Snyder, and Scott Pratt’s identification of “racism and settler colonial bias in the academy” that positions Indigenous scholarship as “primitive, less rigorous, less theoretically refined.”⁸³ Their analysis reveals how new materialism’s “highly provincial obsession” with justifying agent ontologies distracts from Indigenous scholarship’s established work of “shaping productive ontological relations with a world full of human and non-human agents.”⁸⁴ My approach aligns with what they describe as “solidarity with Indigenous peoples in their struggles against colonialist violence in the academy and beyond.” This solidarity unfolds through working within productive tensions between Western theoretical vocabularies and mātauranga Māori frameworks. This positioning aims to align my research with tangata whenua environmental priorities.⁸⁵

As Hoskins and Jones note, where Western frameworks require “creating new vocabulary” to theorise material agency, mātauranga Māori scholarship demonstrates that Indigenous knowledge systems have always already recognised spiritual presence within te taiao as established understanding rather than theoretical innovation.⁸⁶ My research remains accountable to Indigenous precedence in environmental relationships, seeking to develop camera-based approaches responsive to tangata whenua environmental priorities. This seeking unfolds through quiet recalibrations—learning when the work may support and when it may inadvertently extract, feeling for the edge where support becomes imposition. In practice, this means continual returning to the question beneath every image—does this honour the relationships already held here, or does it impose another layer of looking? Such thinking recognises both photographic and environmental agency. Through these recognitions, something begins to shift in how the camera may participate—less tool, more companion in an unfolding conversation.

This emergent understanding finds theoretical grounding in the work of photography theorist Ariella Azoulay, who demonstrates that photography involves distributed agency across what she terms “four protagonists at least—a camera, whoever stands behind the lens, whoever faces the lens, and whoever might become a spectator.”⁸⁷ Azoulay positions non-human elements—including camera, photographed environment, and objects—as active participants rather than passive instruments within what she terms photography’s “apparatus of power.”⁸⁸ She argues that “collaboration always already lies at the basis of the event of photography”—

83. Hokowhitu, “Indigenous Materialisms,” 157; Rosiek, Snyder, and Pratt, “The New Materialisms,” 333.

84. Rosiek, Snyder, and Pratt, “The New Materialisms,” 337.

85. Rosiek, Snyder, and Pratt, “The New Materialisms,” 332.

86 Rosiek, Snyder, and Pratt, “The New Materialisms,” 336; Alison Jones and Te Kawehau Hoskins, “A Mark on Paper: The Matter of Indigenous Settler History,” in *Posthuman Research Practices in Education*, ed. Carol Taylor and Christina Hughes (Palgrave Macmillan, 2016), 84.

87. Ariella Azoulay, *Civil Imagination: A Political Ontology of Photography* (Verso, 2015), 225.

88 Ariella Azoulay, *The Civil Contract of Photography* (Zone Books, 2008), 85.

meaning all photography involves multiple participants, even within exploitative power relations.⁸⁹ While Azoulay analyses how this distributed structure operates within violent state power, her recognition that photography resists singular authorship provides language for this research. Photographic-kinship attempts to work with—rather than against— this distributed agency, approaching kauri and film as participants whose agency shapes what emerges.

Working within photography’s apparatus of power, practitioners have developed counter-forensic approaches that turn evidentiary capacity toward environmental justice. For example, research agency Forensic Architecture (FA) investigates ecological damage and human-rights violations through spatial and media analysis, employing what photography theorist Jane Tormey describes as an approach that aims to “rebalance privileged evidence by presenting a clinical synthesis of information.”⁹⁰ Architect and founding director Eyal Weizman describes FA’s counter-forensic practice as revealing environmental violence at the “threshold of detectability”—that critical space where destruction becomes visible through alternative documentation approaches.⁹¹ This threshold also highlights the point where ecological warfare hovers between being identifiable and remaining invisible to conventional documentation methods.⁹² Drawing from these precedents, I define photographic-reorientation as the systematic transformation of imperial surveillance tools into environmental witness via material processes that witness rather than facilitate violence. For my research, Aerochrome’s witnessing capacity lies in its ability to register ongoing methods of harm targeting all beings. The aged emulsion’s

differential chemical responses to vegetation health create forensic evidence of ongoing environmental warfare.

My working with military surveillance materials requires navigating constraints that are fundamentally different to Indigenous artists. My research addresses these constraints through what I term spectral-kinship. These temporal relationships between kauri, material participants, and photographer hold space for the history embedded within all-beings while creating possibilities for respectful collaborative engagement. Spectral-kinship embodies Jones and Jenkins’ concept of “working the hyphen” by maintaining the “complex gap at the Self-Other border”—the productive space where my project sustains the hyphen that “joins as well as separates” photographic capability and cultural accountability, reorienting this film from surveillance tool into collaborative witness of kauri ngahere.⁹³

Photographic-reorientation involves sustained relationship with kauri as conscious participants, developing embodied-consent practices, and generating collaborative witness that aligns with mana whenua conservation priorities. These theoretical explorations break through anthropocentric resistance to recognise consciousness across all beings, trace mycorrhizal exchanges where Indigenous and Western knowledge systems speak across difference, and map nutrient flows revealing photography as distributed agency. Such foundations establish a central recognition: consciousness pervades all participants in the photographic encounter, blurring perceived boundaries between self and other. This recognition prepares the ground for confronting how these same conscious materials carry molecular violence inseparable from their being.

89. Ariella Azoulay, “Photography Consists of Collaboration: Susan Meiselas, Wendy Ewald, and Ariella Azoulay,” *Camera Obscura* 31, no. 1 (91) (2016): 187.

90. Jane Tormey, *Photography and Political Aesthetics* (Taylor & Francis Group, 2023), 98.

91. Eyal Weizman, *Forensic Architecture: Violence at the Threshold of Detectability* (Zone Books, 2017), 65.

92. Weizman, *Forensic Architecture*, 63.

93. Jones and Jenkins, “Rethinking Collaboration,” 9.

1.2—Lateral Roots: Photographic-Reorientation

The helicopter contractors’ deployment of aerially sprayed herbicide without community notification (outlined in the Preface) exemplifies what film and visual studies scholar Paula Amad describes as the colonial assumption of unlimited rights to territorial observation.⁹⁴ This assumption extends from visual surveillance to chemical appropriation of atmospheric space. Her position connects to my project’s understanding of documentary photography’s violence.⁹⁵ In *Regarding the Pain of Others* (2003), essayist and cultural critic Susan Sontag states that “there is an aggression implicit in every use of the camera,” which starkly reveals photography’s inherent relationship to violence and possession. Her recognition that “photographs objectify: they turn an event or a person into something that can be possessed” exposes a fundamental extractive logic inscribed within photographic representation.⁹⁶ I encounter her framework through its historical precedent in the documentation of timber (1900–26), which rendered kauri as possessable commodities through celebratory images of their destruction. Sontag’s analysis of photographic selectivity—“It is always the image that someone chose; to photograph is to frame, and to frame is to exclude”—demonstrates how this logic operates through deliberate choices that determine what remains visible and what is excluded.⁹⁷ Sontag’s ethical questioning generates necessary discomfort when documenting environmental harm, which, in turn, shapes my project’s exploration of whether surveillance materials can support kauri protection.

Beyond individual photographic encounters, Sontag’s framework illuminates how documentation perpetuates systematic violence against te taiao across multiple temporal and material scales. My photographic practice encounters not merely kauri dieback disease as an isolated crisis, but the accumulated violence enacted against te taiao for over two centuries—land alienation, forest clearance, chemical contamination, and systematic erasure of Indigenous knowledge systems and personhood. As tauiwi, I remain implicated in systems that extract value from documenting Indigenous environmental suffering. This multilayered violence extends beyond representational harm into the material apparatus—what Azoulay theorises as photography’s distributed power.

Azoulay’s *The Civil Contract of Photography* (2008) demonstrates photography as “an apparatus of power that cannot be reduced to any of its components: a camera, a photographer, a photographed environment, object, person, or spectator.”⁹⁸ This apparatus becomes particularly problematic within frameworks where photography has historically facilitated what Azoulay terms “the instrumentalization of the photographed person.”⁹⁹ Her analysis of the camera’s shutter exposes a threefold violence: temporal distinctions between ‘before’ and ‘after’ that deny Indigenous cyclical time, spatial demarcations between photographer and subject that replicate power relationships, and cultural differentiation between those who possess recording technologies and those subjected to documentation without consent.¹⁰⁰ This threefold violence extends into the material itself, which manifests in my work with Aerochrome, which carries military violence not merely

94. Paula Amad, “From God’s-eye to Camera-eye: Aerial Photography’s Post-humanist and Neo-humanist Visions of the World,” *History of Photography* 36, no. 1 (2012): 33.

95 Susan Sontag, *Regarding the Pain of Others* (Farrar, Straus and Giroux, 2003), 81.

96. Sontag, *Regarding the Pain of Others*, 81.

97. Sontag, *Regarding the Pain of Others*, 42.

98. Azoulay, *The Civil Contract*, 85.

99. Azoulay, *The Civil Contract*, 99.

100. Azoulay, *Potential History*, 5–6; Schotten, “Before Violence, after Empire,” 92.

as historical reference but within its molecular structure—a material complicity I examine fully in Chapter 3.

Raising critical questions for photographic practice, molecular violence operates within broader infrastructures of atmospheric control. My term—atmospheric wounding—which refers to the ongoing violation of the air as a medium for environmental warfare—connects to the military genealogy of infrared film technology, building on historical evidence of aerial photography’s militarisation.¹⁰¹ Chemical drift that violates community sovereignty through contamination of autonomous water systems and breathing space exemplifies how this wounding operates through historical and contemporary mechanisms. Such mechanisms create vertical appropriation of Indigenous territories while serving corporate instead of environmental interests.

Reorientating surveillance materials that simultaneously witness violence while serving protection finds precedent in counter-forensic practices that transform documentation from tools of control into evidence for justice. For example, FA’s “Herbicidal Warfare in Gaza” (2019) (Figure 10) documents environmental violence through material evidence. Their work shows how environmental photography may function as legal evidence of systematic chemical violence. They combine satellite imagery analysis, soil contamination studies, witness testimonies, and agricultural impact assessments to document how herbicidal spraying along Gaza’s border functions as “a method of territorial control” that deliberately targets agricultural lands and food security systems.¹⁰² They expose how chemical warfare continues to enable land annexation through environmental

101. Curator Ala Roushan and artist Charles Stankiech analyse “weaponisation of the atmosphere” as “a means of inflicting harm and exerting dominance.” What they identify as weaponisation, I experienced as wounding. Ala Roushan and Charles Stankiech, “Shaping Atmospheres: From Terraforming Land to Geoengineering Air,” *Afterall: A Journal of Art, Context and Enquiry* 55-56 (2023): 304.

102. Forensic Architecture, “Herbicidal Warfare in Gaza,” investigation report, July 19, 2019, <https://forensic-architecture.org/investigation/herbicidal-warfare-in-gaza>



Figure 10. Forensic Architecture and Ain Media Gaza, Damaged leaves collected by Shourideh C. Molavi, 2018. Documentation from Herbicidal Warfare in Gaza investigation, 2019. Courtesy of Forensic Architecture.

destruction disguised as security measures. In my project, my witnessing of herbicide contamination across Mokoroa exposes how territorial control patterns operate locally within Waitākere.

Artist and researcher Susan Schuppli introduces the concept of material witness—ontological transformations in which photographic, and other, materials themselves can bear witness to environmental damage, even if invisible to conventional perception.¹⁰³ Schuppli’s concept offers a theoretical framing for understanding how Aerochrome emulsion functions as an archive registering environmental violence through persistent material inscription that exceeds human intention or control. As Schuppli explains:

‘Material witness’ is a legal term; it refers to someone who has knowledge pertinent to a criminal act or event that could be significant to the outcome of a trial. In my work, I poach the term ‘material witness’ to express the ways in which matter carries trace evidence of external events. But the material witness also performs a twofold operation; it is a double agent. The material witness does not only refer to the *evidence of event* but also the *event of evidence*.¹⁰⁴

Her framework speaks of witnessing not only through human testimony, but also through material processes in which “substances literally embody the conditions of their exposure.”¹⁰⁵ Schuppli’s framework does not account for spiritual agency—where she positions materials as being altered by external circumstances, my research explores how Aerochrome exercises selective consciousness, generating what I term ‘kinship-witness’ testimony through

collaborative relationships. In my research, material witnessing relates to both biological systems (such as kauri) and photographic systems (such as Aerochrome) that may register and reveal chemical contamination across time—‘capturing’ immediate exposure events and the generational impacts that continue to live within material structures decades after initial contact.

Drawing from these frameworks of counter-forensics and material witness, my research explores how the film’s selective consciousness—manifested through editorial responses—can generate kinship-witness testimony. Where FA employs technical analysis to expose expropriation, my project explores how wounded-witnessing chemical degradation emerges through a sustained embodied collaborative relationship with kauri. Reorienting this aerial surveillance technology requires critical engagement with what Amad identifies as the god’s-eye view—the totalising aerial perspective that has historically facilitated occupation while systematically denying Indigenous communities similar rights to visual authority over their own territories.¹⁰⁶ In *The Violence of Colonial Photography* (2022) historian Daniel Foliard’s analysis contextualises atmospheric wounding as systematic strategy.¹⁰⁷ Crown authorities deployed photography as “technology of conquest” to render Indigenous lands “legible to capital” through aerial surveillance. The technology that once enabled armed forces to distinguish artificial camouflage from living vegetation carries that hostile purpose in its chemical structure, its surveillance capacities persisting even through ongoing photographic-reorientation. The aerial perspective creates what Amad describes as an imaginative geography that

103. Susan Schuppli, *Material Witness: Media, Forensics, Evidence* (The MIT Press, 2020), 272.

104. Lucas van der Velden and Rosa Menkman, “Dark Matters: An Interview with Susan Schuppli,” *Sonic Acts*, June 14, 2016, <https://sonicacts.com/archive/dark-matters-an-interview-with-susan-schuppli>.

105. Schuppli, *Material Witness*, 147.

106. Amad, “From God’s-eye to Camera-eye,” 31.

107. Daniel Foliard, *The Violence of Colonial Photography* (Manchester University Press, 2022), 28, 201.

reinforces power relationships via the very act of looking down upon territories and peoples.¹⁰⁸ While my practice refuses aerial distance—working instead through sustained proximity with kauri at ground level—this shift in perspective alone cannot erase the military genealogy.

Diné (Navajo) artist Will Wilson directly confronts this aerial colonial gaze in *Auto Immune Response No. 2* (2005), part of his ongoing *AIR* series (Figure 11). Wilson positions himself atop a canyon ridge on Navajo Nation lands—territories where nearly four million tons of uranium ore was extracted between 1944 and 1986, leaving contamination that causes ongoing health crises.¹⁰⁹ Wearing a respirator that signals atmospheric wounding, he appears three times within the frame, reversing the surveillant aerial perspective by claiming visual authority over ancestral lands while refusing to erase respirator-visible evidence of colonial violence. Wilson describes this as “claiming agency and trying to figure out how to exist in that space and move forward and survive”—photographic witnessing that holds contamination and continuance together.¹¹⁰

Using Aerochrome to document ongoing conflict in the Eastern Democratic Republic of Congo, artist Richard Mosse’s series *The Enclave* (2012–13) (Figure 12) seeks to “up-end generic conventions” and “challenge representation” of “forgotten conflict.”¹¹¹ His images render sites of violence in characteristic infrared colours of vivid magentas. The film’s selective consciousness creates ethical complexity: some days it renders ecological destruction in candyfloss colours that make trauma seductive; other days it retreats into monochromatic testimony, as if exercising its own ethics about

what deserves colour and what requires restraint, refusing to spectacularise certain violences. This unpredictability holds me in a sustained questioning that drives my project: when military surveillance technology documents contemporary crisis, who bears the weight of its violent origins? The infrared renders present what conventional photography cannot see, yet this capacity carries responsibility: when do aesthetics risk becoming spectacle? Art historian Gabrielle Moser’s analysis positions how Aerochrome images circulate and are received. She observes that critical response to Mosse’s work remains “overwhelmingly positive, but also remarkably one-dimensional, seemingly stuck on the novel way in which Aerochrome depicts the Congolese landscape” while failing to examine “how Mosse draws on, and diverges from, historical precedents for picturing racialized bodies and colonial violence.”¹¹²

Moser’s analysis of visual pleasure in depictions of violence poses inescapable questions for what I experience as the ethical weight of working with these materials. Her observation that reviews consistently focus on the “seductive and entrancing quality” describing infrared imagery through terms such as “sensuous, candy-coloured, feminine, seductive, alluring,” assists my understanding and negotiations of how aesthetic transformation can enable voyeuristic consumption of another’s suffering.¹¹³ This critique shapes my understanding that meaningful photographic-reorientation prioritises ecological and cultural hauora over aesthetic spectacle, ensuring my infrared work within Waitākere aligns with Māori environmental care, instead of creating competing narratives about environmental crisis.

108. Amad, “From God’s-eye to Camera-eye,” 32.

109. Portland Art Museum, “Auto Immune Response No. 2: Will Wilson,” educational poster, accessed November 11, 2025, <https://portlandartmuseum.org/exhibitions/will-wilson-auto-immune-response/>.

110. Will Wilson, quoted in Portland Art Museum, “Auto Immune Response.”

111. Richard Mosse, quoted in D. L. Cade, “The Enclave: A Powerful Documentary on the Congo Shot Entirely on Infrared Film,” *PetaPixel*, June 2, 2013, <https://petapixel.com/2013/06/02/the-enclave-a-powerful-documentary-on-the-congo-shot-entirely-on-infrared-film/>.

112. Gabrielle Moser, “Chromophobia–Race, Colour and Visual Pleasure in Richard Mosse’s ‘The Enclave’,” *Prefix Photo* 32 (Winter 2015): 25.

113. Moser, “Chromophobia,” 44.



Figure 11. Will Wilson, *Auto Immune Response No. 2*, 2005. Archival pigment print, 1119 × 1856mm. Portland Art Museum, Portland, Oregon.



Figure 12. Richard Mosse, *Love is the Drug*, 2012. Digital c-print, 2794 × 5345mm. Courtesy of the artist and Jack Shainman Gallery, New York.

Moser’s observation that Mosse’s work continues “a long history of documentary photography traditions that always already manipulated our sense of what the world looks like and the colours that things—and bodies—are ‘supposed to be’” resonates with my understanding that infrared photography participates in constructing—not simply revealing—environmental realities.¹¹⁴ This reflects precisely the danger my project negotiates, that the film’s capacity to transform ecological damage into seductive colours creates a particular kind of nausea, a recognition that aesthetic seduction can become violence’s most effective disguise. This recognition underscores the importance of collaborative approaches that situate nuanced and multiple ways of seeing. The ethical complications Moser identifies reveal a paradox in my own photographic research with Aerochrome in Waitākere: scenes of devastating land clearance rendered in otherworldly pink, disturbingly magnetic, yet alien. This aesthetic dissonance generates what my project terms ‘infrared-witnessing’—a visual testimony that makes ecological warfare visible through surreal colours rather than remaining in their non-visible spectrum. Yet this approach raises critical questions: Does this project’s infrared-witnessing uphold iwi environmental governance, or does it create what cultural theorist Sara Ahmed calls “non-performative” anti-racism—documents that circulate as evidence of caring without redistributing power or resources?¹¹⁵ Rather than invalidating my project’s approach, these questions clarify its obligations.

These contexts reveal how infrared-witnessing potentially repositions the ongoing trauma of mana whenua into aesthetic experience for those who have participated

in the structural systems causing this harm. Infrared-witnessing disruptions target those who profit from ongoing extraction, who have been able to look away, not those who carry this violence in their bones, their waters, their ancestral memories. Through this analysis of spectacular entanglements, what becomes clear is that aesthetic transformation alone cannot reorient military surveillance materials—such transformation risks perpetuating the viewing relationships these materials were designed to enable. Where these materials raise questions that I negotiate from a tauiwi position, Indigenous artists enact fundamentally different possibilities for temporal and spatial sovereignty. For example, Nova Paul’s *This Is Not Dying* (2010) (Figure 13) uses three-colour separation methods to create multi-layered temporal images in which past, present and future “slip, lag and ghost through each other”—transforming linear time into what Paul describes as circular wānanga (learning, gathering, discussion) space, bringing forth “radiant cosmic echoes.”¹¹⁶

Filmed on her marae (ceremonial grounds, meeting place) in Porotī, Te Tai Tokerau (Northland), the film documents everyday whānau activities—setting tables, fixing bikes, swimming in the local spring—it demonstrates filmic sovereignty emerging from kaupapa Māori (philosophy, principles) foundations, creating films by Māori, for Māori, that tautoko (support) mana motuhake (self-determination, sovereignty) from positions that exist beyond settler frameworks rather than attempting to transform them.¹¹⁷

Paul’s approach embodies what Hokowhitu theorises as Māori insurrections that create space for new subjectivities

114. Moser, “Chromophobia,” 48.

115. Sara Ahmed, *On Being Included: Racism and Diversity in Institutional Life* (Duke University Press, 2012), 117.

116. Nova Paul, quoted in Melanie Oliver and Bridget Reweti, “Nova Paul,” in *Māori Moving Image*, ed. Melanie Oliver et al., trans. Paora Tibble (Christchurch Art Gallery Te Puna o Waiwhetū, 2022), 61. The temporal effects that “slip, lag and ghost through each other” and “radiant cosmic echoes” are described in Trish Clark Gallery exhibition materials: “Nova Paul,” Trish Clark Gallery, <https://trishclark.co.nz/non-rep-artists/nova-paul/>.

117. Nigel Borell, ed., *Toi Tū Toi Ora: Contemporary Māori Art* (Penguin Random House New Zealand in association with Auckland Art Gallery Toi o Tāmaki, 2022), 188.

118. Brendan Hokowhitu, “The Emperor’s ‘New’ Materialisms: Indigenous Materialisms and Disciplinary Colonialism,” in *Routledge Handbook of Critical Indigenous Studies*, ed. Chris Andersen, Brendan Hokowhitu, Steve Larkin, Aileen Moreton-Robinson, and Linda Tuhiwai Smith (Routledge, Taylor & Francis Group, 2021), 143.

119. The Yanomami are one of the largest Indigenous peoples of the Amazon rainforest, with approximately 35,000 people living across Brazil and Venezuela.

120. Patricia Bonchristiano, “Claudia Andujar and the Yanomami: Photography and Activism in the Changing Light of the Amazon Forest,” *Journal of Latin American Cultural Studies* 33, no. 4 (2024): 570–78, <https://doi.org/10.1080/13569325.2024.2431005>; Barbican Centre, “Claudia Andujar: The Yanomami Struggle,” press release, 2021, <https://www.barbican.org.uk/sites/default/files/documents/202103/Claudia%20Andujar%20The%20Yanomami%20Struggle%20Press%20Release%20FINAL%2C%2009.03.21.pdf>.

121. Bonchristiano, “Claudia Andujar and the Yanomami,” 570–92. The territory was officially recognised by the Brazilian government in 1992, following the campaign led by Claudia Andujar, Carlo Zacquini, Bruce Albert, and Davi Kopenawa, among many others. This territory remains threatened by illegal mining and logging operations.



Figure 13. Nova Paul, *This Is Not Dying*, 2010. 16mm film reproduced as a film still. Courtesy of the artists, photo by Cheska Brown.

through resistance to disciplinary structures.¹¹⁸ Her use of three-colour separation does not reform photographic or filmic time, but shows Māori temporal realities where ancestors remain present—a technical insurrection that breathes alternative ways of being through the medium. Paul’s sovereign temporal practice reveals the fundamental distinction between Indigenous creation from whakapapa authority and this project’s approach of facilitating conditions where materials may respond to kauri agency. This distinction reveals that photographic-reorientation unfolds not through sovereign direction, but through submission to responsibilities beyond artistic control—learning to support Indigenous environmental governance from a position that, unlike Paul’s sovereignty, acknowledges its own complicity with wounded materials.

Similarly, activist and artist Claudia Andujar’s five-decade commitment to photographing and advocating for the Yanomami peoples of the Amazon provides compelling precedent for infrared film’s transformation from military surveillance into effective environmental and cultural protection.¹¹⁹ Her progression from initial aesthetic experimentation using Vaseline on lenses, infrared film, and multiple exposures towards community-authorised political advocacy exemplifies the fundamental transformation of photographer–subject relationships that meaningful photographic-reorientation requires.¹²⁰ Andujar’s work has contributed to the establishment of 96,000 square kilometres of protected Yanomami territory.¹²¹

These artistic precedents reveal the nuance behind visual studies scholar Jennifer Bajorek’s concept of photography’s

122. Jennifer Bajorek, *Unfixed: Photography and Decolonial Imagination in West Africa* (Duke University Press, 2020), 9.

123. Bajorek, *Unfixed*, 22.

124. Jackson’s constitutional analysis extends beyond formal legal structures to encompass what he terms “the constitutional dimensions of Māori-Crown relationships,” where te Tiriti establishes ongoing obligations requiring systemic transformation of power relations. See also Margaret Mutu, “The Treaty Claims Settlement Process in New Zealand and Its Impact on Māori,” in *Treaty of Waitangi Settlements*, ed. Nicola Wheen and Janine Hayward (Bridget Williams Books, 2012), 47–64, on constitutional suspension as permanent state.

125. Moana Jackson, “The Constitutional Status of Māori,” in *Treaty of Waitangi: Contemporary Relationships*, ed. Graham Harrison and Paul Callister (Oxford University Press, 1999), 112–28.

126. Moana Jackson, “Decolonising Education,” in *Decolonisation in Aotearoa: Education, Research and Practice*, ed. Jessica Hutchings (NZCER Press, 2016), 43.

127. Margaret Mutu, “Mana Māori Motuhake: Māori Concepts and Practices of Sovereignty,” in *Routledge Handbook of Critical Indigenous Studies*, ed. Brendan Hokowhitu et al. (Taylor & Francis Group, 2022), 279.

128. Molly Mullen et al., “Artistic Practice, Public Awareness, and the Ngāhere: Art-Science-Indigenous Māori Collaborations for Raising Awareness of Threats to Native Forests,” *Ecology and Society* 28, no. 4 (2023): 5, <https://doi.org/10.5751/ES-14479-280413>.

129. Simon Lambert et al., “Indigenous Biosecurity: Māori Responses to Kauri Dieback and Myrtle Rust in Aotearoa New Zealand,” in *The Human Dimensions of Forest and Tree Health*, ed. Julie Urquhart, Mariella Marzano, and Clive Potter (Palgrave Macmillan, 2018), 121–22; Hill et al., “Cross-Cultural Leadership,” 3.

“essential appropriability.”¹²² While she demonstrates the medium’s capacity for change across Indigenous and decolonial contexts, I cannot claim such transformative authority. What emerges instead through this research is the recognition that Aerochrome exercises its own wounded-witnessing—demonstrating what Bajorek describes as photography’s “lack of fixity” and “enduring manipulability” through selective responses that choose magenta revelation for some scenes, desaturated testimony for others.¹²³ These material choices create relationships between film and kauri consciousness, beyond predetermined military purposes. Materials cannot be cleansed of their violent genealogies through artistic reorientation alone; they carry atmospheric wounding, structural viewing relationships, and chemical harm as permanent conditions. Yet, by engaging with counter-forensic practices and material-witness frameworks, what emerges is the possibility of working through instead of beyond this contamination, welcoming the film’s own damaged agency to determine what testimony becomes possible.

1.3—Nutrient Networks: Te Tiriti Responsiveness

My project is interested in how photographic images can address the ongoing failure to honour te Tiriti obligations.¹²⁴ Constitutional lawyer and scholar Moana Jackson (Ngāti Kahungunu, Ngāti Porou, Rongomaiwahine) articulates that te Tiriti o Waitangi creates a constitutional relationship as ongoing obligation that does not resolve—a weight that shapes every aspect of photographic practice within

Indigenous territories.¹²⁵ His analysis exposes how Crown education systems operate as “a deliberate process of re-education” that colonises minds “to accept a particular political and social order where all power (and, therefore, all valid modes of thinking) is vested in the colonisers”—a pattern continuing within contemporary academic institutions that privilege Western research paradigms over Indigenous knowledge systems.¹²⁶ These systemetic violations operate within broader constitutional breaches. Comparably Margaret Mutu (Ngāti Kahu, Te Rarawa, Ngāti Whātua) identifies “different spheres of influence”—the rangatiratanga sphere where Māori exercise authority, the kāwanatanga sphere for Crown governance, and the relational sphere where both work together as what Mutu describes as “equals.”¹²⁷ Though te Tiriti gains legal force only when incorporated into legislation, her analysis reveals how this framework creates what Jackson identifies as perpetual relationship, not resolvable contract.¹²⁸

Despite these constitutional obligations, conservation researchers Lee Hill and colleagues’ analysis reveals that even in programmes explicitly established as partnerships, the inclusion of mātauranga Māori has met “strong resistance,” with Māori expressing frustration over “missed opportunities” to exercise their kaitiaki responsibilities.¹²⁹ This gap between constitutional obligation and governance practice—where Crown agencies maintain ultimate decision-making authority while limiting mana whenua to advisory roles—demonstrates how structural power differentials persist despite formal recognition of Tiriti requirements. These constitutional dynamics manifest in contemporary governance arrangements, particularly the 2025 Waitākere



Figure 14. Claudia Andujar, *Collective house near the Catholic mission on the Catrimani River, Roraima state*, 1976. Courtesy of the artist and Fondation Cartier, Paris.

Ranges Heritage Area Deed. What grows in such constrained ground finds its own routes, working through rather than against these limitations. Jackson, Tina Ngata (Ngāti Porou), and Mutu identify such governance structures that limit Indigenous authority to advisory roles as “institutional capture”¹³⁰ and “Indigenous participation in colonial agendas”¹³¹—providing legitimacy to ongoing Crown control while falling drastically short of te Tiriti obligations.¹³²

These patterns of constraining Indigenous authority extend into visual representation, where control over environmental narratives faces similar limitations. Visual historian and curator Jolene Rickard (Tuscarora Nation, Turtle Clan) theorises visual sovereignty as encompassing both “Indigenous peoples’ fundamental right to represent themselves (to look and be seen)” and “a central strategy for decolonization that can serve as an overarching concept for interpreting Indigeneity, the interconnected space of the colonial gaze, and deconstruction of the colonizing image or text.”¹³³ Her framework establishes that Indigenous peoples control “the capacity to visualize” their own territories, instead of simply changing subjects or adopting sympathetic perspectives within existing frameworks, guides my understanding of photographic boundaries within Indigenous territories.

These principles ensure that mana whenua authority over environmental representation takes priority over artistic vision, offering guidance for collaborative structures that support rather than appropriate Māori sovereignty projects.¹³⁴ Rickard’s concept of visual sovereignty as resistance to “the colonial gaze” informs my project’s

understanding of how documentary photography has historically facilitated dispossession and erasure by positioning Indigenous lands and all beings as subjects for external documentation.¹³⁵ Her insights illuminate crucial boundaries—not as limitations but as generative constraints.

Further challenging the colonial gaze, filmmaker Barry Barclay’s (Ngāti Apa) Fourth Cinema framework distinguishes between the camera on the ship’s deck and the camera ashore, providing a valuable model for understanding how photographic practice can operate within Indigenous authority structures. Barclay asks what happens when the camera shifts from ship to shore: “Will it matter whether it’s in the hands of the officers from the ship, or in the hands of the Indigenous people there?”¹³⁶ He argues that “The First Cinema Camera sits firmly on the deck of the ship. It sits there by definition. The Camera Ashore, the Fourth Cinema Camera, is the one held by the people for whom ‘ashore’ is their ancestral home.”¹³⁷ This distinction reveals how the ship’s camera operates through colonial assumptions and presumptions, employed to ‘capture’ and record what visiting cultures deem important. The camera ashore works differently—positioned within Indigenous authority to reveal rather than appropriate, held by those for whom the land is ancestral home rather than temporary shore.

As tangata Tiriti, I operate neither on the deck nor fully ashore, but in the intertidal zone where partnership obligations shape practice. This liminal positioning may enable forms of collaborative witness, but such collaboration requires ongoing negotiation rather than predetermined outcomes. The reciprocal offering practices I develop with

130. Moana Jackson, *He Whakaaro Here Whakaumu Mō Aotearoa: The Report of Matike Mai Aotearoa* (National Iwi Chairs Forum, 2016).

131. Tina Ngata, *Kia Mau: Resisting Colonial Fictions* (Rebel Press, 2019).

132. Margaret Mutu, “Behind the Smoke and Mirrors of the Treaty of Waitangi Claims Settlement Process,” *Journal of Global Ethics* 14, no. 2 (2018): 208-21.

133. Jolene Rickard, “Diversifying Sovereignty and the Reception of Indigenous Art,” *Art Journal* 76, no. 2 (2017): 83.

134. Rickard, “Diversifying Sovereignty,” 82.

135. Rickard, “Diversifying Sovereignty,” 81-84.

136. Barry Barclay, “Celebrating Fourth Cinema,” *Illusions: A New Zealand Magazine of Film, Television and Theatre Criticism*, no. 35 (July 2003): 8.

137. Barclay, “Celebrating Fourth Cinema,” 9.

kauri work alongside, rather than within, Indigenous visual sovereignty—a crucial distinction that filmmaker Barclay’s concept of “camera ashore” helps illuminate.¹³⁸ Working within protocols established by mana whenua, this project seeks to honour Barclay’s camera ashore approach—acknowledging mana whenua as the hosts who determine appropriate engagement within their territories, while I maintain my responsibility as manuhiri.

Barclay’s positioning of mana tuturu (spiritual guardianship) challenges assumptions that Indigenous cultural heritage can be accommodated within Western intellectual property frameworks, arguing instead that “Māori values and principles have to stand on their own.”¹³⁹ Mana tuturu affirms Indigenous knowledge operates through entirely different principles—reciprocal relationships and collective responsibility that cannot be translated into frameworks of individual ownership or copyright. Mana tuturu provides a crucial framework for understanding how my research may engage with te ao Māori respectfully. This principle establishes that spiritual guardianship over Indigenous cultural treasures cannot be captured, transferred, or commodified—remaining with source communities.¹⁴⁰ While Barclay’s framework specifically addresses cultural objects and intellectual property, my project considers how such principles may apply to photographic engagement with kauri, recognised within te ao Māori as ancestral beings under kaitiakitanga.

As an iwi member, artist and academic Natalie Robertson (Ngāti Porou, Clann Dhònnchaidh) holds genealogical responsibility to protect the mauri of the Waiapu River.

This responsibility enacts what she describes as “Mātauranga Waiapu: cultural knowledge systems specific to this place and oriented to the restoration of the Waiapu River and the wider taiao.”¹⁴¹ Extending Barclay’s ideas relating to the camera ashore, Robertson argues for what she terms a “whakapapa lens”—photography to activate genealogical connections between land, people, and time, while respecting cultural protocols.¹⁴² In her exhibition *Tātara E Maru Ana—The Sacred Rain Cape of Waiapu* (2020–21) (Figures 15 and 16), Robertson transformed the mōteatea (traditional Māori lament) into visual form, using drone cinematography to trace the Waiapu River’s path while documenting its catastrophic sedimentation.¹⁴³ By combining historical aerial photographs with contemporary documentation of puna wai (freshwater springs) and collaborative videos of riverine and marine sediment plumes, she demonstrates how her whakaahua Māori lens-based practices may amplify iwi environmental restoration aspirations.¹⁴⁴ Her practice demonstrates how photography can be an expression of mana motuhake, grounded in tangata whenua authority.

This whakapapa-grounded positioning clearly distinguishes her practice from my own. By contrast, my work requires distinctly different accountability structures. Where Robertson operates from inherited responsibility to document and advocate for the Waiapu River, I work within boundaries established by Te Kawerau ā Maki through the rāhui. Indigenous photographers such as Robertson access direct reciprocal relationships with all beings through cultural inheritance. They possess temporal sovereignty, ancestral connections to technologies, and whakapapa-grounded authority—accountability structures that remain

138. Barry Barclay, *Mana Tuturu: Māori Treasures and Intellectual Property Rights* (Auckland University Press, 2005), 45.

139. Barclay, *Mana Tuturu*, 45.

140. Stephen Turner, “Reflections on Barry Barclay and Fourth Cinema,” in *The Fourth Eye: Māori Media in Aotearoa New Zealand*, ed. Brendan Hokowhitu and Vijay Devadas (University of Minnesota Press, 2013), 172.

141. Natalie Robertson, “Tātara e maru ana: Renewing Ancestral Connections with the Sacred Rain Cape of Waiapu Kōkā Hūhua,” *Pacific Arts* 23, no. 1 (2023): 107, <https://doi.org/10.5070/PC223162493>.

142. Natalie Robertson, *Tātara E Maru Ana—The Sacred Rain Cape of Waiapu*, exhibition, ST PAUL St Gallery, Auckland University of Technology, Tāmaki Makaurau Auckland, July 17–August 28, 2021; Natalie Robertson, “Tātara E Maru Ana: Renewing Ancestral Connections with the Sacred Rain Cape of Waiapu Kōkā Hūhua” (PhD diss., University of Auckland, 2022).

143. Natalie Robertson, “Swirling Currents Emerge at the Waiapu River Mouth: Lens-based Witnessing, Documenting and Storytelling of Slow Catastrophes,” *Journal of Environmental Media* 2, supplement (2021): 6.11, https://doi.org/10.1386/jem_00054_1.

144. Robertson, “Swirling Currents,” 6.11.



Figure 15. Natalie Robertson, *A Red-Tipped Dawn – Pōhautea at Waiapu Ngutu Awa (7th August 2020)*, 2020. C-type gloss photographic print, 790 × 1000mm. Courtesy of the artist and Auckland Art Gallery Toi o Tāmaki.



Figure 16. Natalie Robertson, *Te Puna o Tangitauāki, Te Rimu*, 2018. C-type photographic print, 790 × 1000mm. Courtesy of the artist and Auckland Art Gallery Toi o Tāmaki.

unavailable to me as tauiwi. Her practice thus clarifies why my photographic-kinship methodology develops along different pathways of permission and protocol—approaches that honour rather than appropriate whakapapa-grounded authority.¹⁴⁵

Angus and Sonja Macfarlane identify a growing recognition in Aotearoa of culturally relevant research approaches, where mātauranga Māori becomes integral to knowledge production.¹⁴⁶

Their call for researchers to “listen to culture” resonates with me.¹⁴⁷ Yet this kind of listening demands more than academic acknowledgement and theoretical positioning. Decolonising methodologies scholar Linda Tuhiwai Smith’s (Ngāti Awa, Ngāti Porou) seminal work, *Decolonizing Methodologies: Research and Indigenous Peoples* (2012), prompts researchers to explore Indigenous epistemology as fact, ideology, practice, and critique.¹⁴⁸ Through years of photographic encounters with kauri, I have learned that this epistemological shift requires what I experience as constitutional intimacy—where every breath shared with kauri connects me to living relationships that precede my individual presence. This understanding informs my research, as I feel the weight of persistent obligation—a reminder that meaningful research emerges from sustained relationship, not extractive practice.

Smith’s emphasis that decolonising research demands “a more critical understanding of the underlying assumptions, motivations and values which inform research practices” establishes foundations for understanding how this photographic-kinship research in Waitākere operates

through sustained accountability.¹⁴⁹ Her analysis informs how photographic documentation may be transformed to support Indigenous aspirations through what she identifies as responsibilities of research—relationships that move beyond “adding Indigenous perspectives” to Western frameworks, towards comprehensive transformation that honours ongoing constitutional obligations.¹⁵⁰ This transformation requires recognising research as enduring relationship, not a discrete project, where each photographic encounter carries forward the weight of previous violations while contributing to collective environmental protection guided by Indigenous authority. Her decolonising framework offers insights for repositioning photography within Indigenous struggles for environmental conservation.

Smith’s critique that research is “inextricably linked to European imperialism and colonialism” applies directly to documentary photography’s role in extracting cultural and aesthetic value from Indigenous relationships with whenua, regardless of individual intention.¹⁵¹ Individual good intentions remain insufficient against systemic extraction. Her critique that researchers remain “in receipt of privileged information” exposes how this project acknowledges that even reciprocal consent approaches with kauri persons cannot absolve the work from broader complicity in institutional systems designed to extract value from Indigenous territories.¹⁵² This dual positioning—simultaneously violated and violator—operates within what Jones and Jenkins theorise as the indigene-coloniser hyphen, working the productive tension of maintained difference.¹⁵³ My positioning as both affected community member experiencing chemical poisoning and settler researcher

145. Natalie Robertson, “Activating Photographic Mana Rangatiratanga Through Kōrero,” in *Animism in Art and Performance*, ed. Christopher Braddock (Springer International Publishing, 2017), 47.

146. Angus Macfarlane and Sonja Macfarlane, “Listen to Culture: Māori Scholars’ Plea to Researchers,” *Journal of the Royal Society of New Zealand* 49, sup.1 (2019): 48–57.

147. Macfarlane and Macfarlane, “Listen to Culture,” 52.

148. Linda Tuhiwai Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 2nd ed. (Zed Books, 2012), 144.

149. Smith, *Decolonizing Methodologies*, 144.

150. Smith, *Decolonizing Methodologies*, 174.

151. Smith, *Decolonizing Methodologies*, 1.

152. Smith, *Decolonizing Methodologies*, 173.

153. Jones and Jenkins, “Rethinking Collaboration,” 473.

embodies this tension. This recognition of irresolvable-complicity generates embodied accountability—accepting participation in harmful systems while working to redirect institutional resources towards mana whenua priorities, and moving beyond claims of innocence through sustained collective action rather than individual absolution.

Artist Mark Adams and anthropologist Nicholas Thomas’s collaborative book *Cook’s Sites: Revisiting History* (1999) (Figure 17) develops accountability through sustained engagement over time. Adams’ twenty-year practice of repeatedly photographing Captain James Cook’s landing sites reveals how patient return reconfigures contact sites into spaces of ongoing teaching. When I first encountered their collaborative articulation of “com[ing] to terms with the burden of this history in a new way,” something in my chest recognised the weight I carry each morning—how I and my camera are learning to work with rather than against ngahere sites.¹⁵⁴

Adams’ photographic practice operates differently from photography’s historical celebration of “discovery.” Through prolonged engagement with contact sites in Aotearoa and throughout Te Moana-nui-a-Kiwa (the Pacific) where Cook voyaged, Adams and Thomas create dialogue that avoids “the certainties of celebration and condemnation alike.”¹⁵⁵ Instead of simply documenting historical locations, they distinguish between encountering “the traces of the past” versus finding “signs of a national history”—recognising that contact sites carry lived violence instead of sanitised narratives.¹⁵⁶ This distinction resonates with my emerging understanding that my every walk (a method I discuss in Chapter 2) reveals

different dimensions of kauri agency. Adams and Thomas’s recognition that “traces left on the landscape don’t tell the whole story” offers theoretical grounding for approaches that prioritise relational engagement over visual extraction.¹⁵⁷

While Adams’ work offers precedent for prolonged engagement, his positioning within predominantly Pākehā (New Zealander of European descent) cultural networks reveals systemic constraints that individual ethical practice cannot resolve alone.¹⁵⁸ His commitment suggests a way of working not as resolution but as method for remaining responsive to what I term irresolvable-complicity: building collaborative relationships necessary for environmental advocacy while recognising these relationships remain partial, contested, and necessarily incomplete. This understanding shapes the way my research approaches kauri conservation—not through transcending constraints, but through sustained engagement that acknowledges ongoing tensions within inherited structures.

Artist Rebecca Ann Hobbs’ *Ngā Puia o Ihumātao: The Volcanoes of Ihumātao* (2017) (Figure 18) illuminates how a collaborative practice can fundamentally restructure who controls artistic practice and outcomes, instead of simply including Indigenous perspectives within existing frameworks. I sense something familiar in Hobbs’ recognition that “reciprocal relationships are better formed when each in the relationship dynamic requires something from the other.”¹⁵⁹ Her understanding that meaningful collaboration requires mana whenua to direct the terms of engagement resonates for my research. I am interested in how materials that possess embedded relationships can exceed my

154. Mark Adams and Nicholas Thomas, *Cook’s Sites: Revisiting History* (University of Otago Press and Centre for Cross-Cultural Research, Australian National University, 1999), 2.

155. Adams and Thomas, *Cook’s Sites*, 2.

156. Adams and Thomas, *Cook’s Sites*, 8.

157. Damian Skinner, “Cook’s Sites: Revisiting History,” *Eyeline* 42 (2000): 51.

158. Sarah Farrar, *Mark Adams: A Survey / He Kohinga Whakaahua* (Auckland Art Gallery, 2025), 23.

159. Rebecca Hobbs, “Ngā Puia o Ihumātao: The Volcanoes of Ihumātao” (PhD thesis, University of Auckland, 2017), 21.



Figure 17. Mark Adams, *View in Pickersgill Harbour after William Hodges, 17 May 1995, 1995*. Gelatin silver prints (triptych), 608 × 1520mm. Courtesy of the artist and Museum of New Zealand Te Papa Tongarewa.



Figure 18. *Te Karanga a Hape Hīkoi*, 2017. Street poster. Design: DDMYY with Bridget Riggir-Cuddy; commissioned by Artspace for community action organised by Rebecca Ann Hobbs, Ngāti Whātua Ōrākei, and SOUL.

individual artistic vision and require perpetual accountability to community priorities.¹⁶⁰ What I experience as a necessary incompleteness of working within inherited systems finds deeper articulation in Hobbs’ positioning as tauiwi “attempting to be mindful of te Tiriti o Waitangi” while “attempting to conscientiously ‘manifest a subjectivity that refuses the colonial logic’.”¹⁶¹ This emerges not through individual ethical positioning, but through sustained engagement with community-led frameworks—what she describes as working within the “hyphen between colonizer-indigene” (after Jenkins and Jones) through embodied accountability, not theoretical declaration.¹⁶² When mana whenua advised that she “participate in the SOUL campaign, so as to better understand the relationships that community has with ngā puia o Ihumātao,” I recognise how genuine collaboration requires redistributing authority—specifically, how mana whenua priorities, not artistic vision, need to guide the purpose and direction of photographic practice.¹⁶³ This collaborative-reorientation approach asks that community priorities guide how inherited technologies—in my project, *Aerochrome*—may support contemporary environmental projects.

Hobbs’ approach of beginning with “kanohi ki te kanohi meeting with Te Wai-ō-Hua whānau at Makaurau Marae” speaks to what emerges within long-term engagement with mana whenua protocols: that meaningful accountability unfolds through embodied relationship-building rather than institutional permissions.¹⁶⁴ Her recognition of occupying “te tūranga a ngā manuhiri” (the position of the guests) while working within activist frameworks demonstrates the continuing vulnerability that collaborative-reorientation

requires.¹⁶⁵ This positioning resonates with what I have come to understand as the ‘tangata Tiriti gaze’—that particular quality of attention that remains perpetually aware of guest status while seeking to support rather than appropriate. It exists in productive tension, neither claiming Indigenous positioning nor perpetuating settler documentation. Hobbs’ work demonstrates how meaningful collaboration requires constantly recalibrating relationships. Hobbs recognises that “aroaha is the transformative element” that enables genuine partnership while maintaining the necessary differences between tangata whenua and tauwiwi positions—differences that cannot and should not be resolved through individual practice alone.¹⁶⁶ Such partnerships redistribute power instead of seeking individual ethical resolution within existing frameworks.

The differences Hobbs encounters illuminate the persistent institutional constraints facing tauwiwi working within academic structures while attempting meaningful collaboration. Hobbs’ positioning within her doctoral framework while participating in grassroots activism highlights the persistent tensions my project negotiates between university requirements and environmental obligations—recognising that these contradictions require structural transformation extending beyond individual methodological innovation.

Philosopher, theorist, and poet Édouard Glissant’s concept of “the right to opacity” offers language for the development of my embodied-consent practices with kauri (discussed in detail in Chapter 2, Section 2.2). My project recognises that understanding cannot be extracted, that kauri

possess their own truths that exceed my comprehension. Glissant’s suggestion that “transparency no longer seems like the bottom of the mirror in which Western humanity reflected the world in its own image” resonates with the idea of waiting for permission that may never come, and accepting this not-knowing as an ethical position, not a limitation.¹⁶⁷ Glissant’s assertion that colonised subjects possess the “right to difference” can be extended to all beings. This position enables the development of rituals that honour kauri agency to participate in or refuse my camera.¹⁶⁸ When photographing becomes waiting, when waiting becomes listening, opacity recalibrates extraction into relation. Within my research, this position reorients photography from extraction (demanding transparency) to relation (accepting opacity), recognising that ngahere possesses its own illegibility that resists demands for unlimited documentation.

Indigenous scholar Leanne Betasamosake Simpson’s (Michi Saagiig Nishnaabeg) concept of “grounded normativity,” developed collaboratively with Indigenous political theorist Glen Coulthard (Yellowknives Dene), demonstrates that “the ethical frameworks provided by these Indigenous place-based practices and associated forms of knowledge” teach “us how to live our lives in relation to other people and nonhuman life forms in a profoundly nonauthoritarian, nondominating, nonexploitive manner.”¹⁶⁹ Simpson’s grounded normativity understanding challenges my research to move beyond Western documentation approaches towards relational methodologies that emerge from land-based relationships instead of external observation. This approach requires developing seasonal returns that honour

165. Hobbs, “Ngā Puia o Ihumātao,” 80.

166. Hobbs, “Ngā Puia o Ihumātao,” 80.

167. Édouard Glissant, *Poetics of Relation*, trans. Betsy Wing (University of Michigan Press, 1997), 111.

168. Glissant, *Poetics of Relation*, 111.

169. Glen Coulthard and Leanne Betasamosake Simpson, “Grounded Normativity / Place-Based Solidarity,” *American Quarterly* 68, no. 2 (2016): 255, <https://doi.org/10.1353/aq.2016.0038>.

kauri life-cycles. Simpson’s understanding that “land is pedagogy” recognises that “the land itself generates the processes, practices and knowledges” instead of providing a backdrop for human learning activities.¹⁷⁰ Understanding land as pedagogy has the potential to reform my photography from documentation of kauri to participation in land-based knowledge systems that work within appropriate cultural boundaries.¹⁷¹

Simpson’s analysis of Indigenous resurgence as “not a reaction to colonialism, but the continuation of Indigenous living in the midst of ‘the violence of capitalism, heteropatriarchy, white supremacy and expansive dispossession’” provides a framework for understanding how my photographic practice can operate within ongoing contexts.¹⁷² Building on scholar Jarrett Martineau’s concept of “affirmative refusal”—refusing forms of visibility that render Indigenous beings vulnerable to commodification—this framework challenges settler colonial reconciliation narratives while establishing that protective restraint upholds Tiriti partnerships.¹⁷³ This protective refusal connects to temporal dimensions of violence—how past, present, and future collapse into ongoing negotiation, not linear progression.

Environmental justice scholar Kyle Whyte’s (Potawatomi) concept of spiral temporality—where past, present, and future exist in dialogical relationship—invites space for understanding kauri dieback disease within specific contexts.¹⁷⁴ This approach disrupts the linear temporality underpinning Anthropocene periodisation schemes.¹⁷⁵ Whyte’s research identifies Indigenous peoples as those “who approach climate change having already been through

transformations of their societies induced by colonial violence,” demonstrating that environmental crises—such as kauri dieback—represent layered impacts instead of isolated ecological events.¹⁷⁶ Spiral temporality also offers grounding for challenging Western photographic traditions that may assume linear temporal relationships. Whyte’s temporal understanding informs my approach to photographic-reorientation, where reconfiguring this medium from extraction to conservation alignment unfolds through resisting environmental control.¹⁷⁷ While Whyte illuminates Indigenous temporal sovereignty through “constant motion, change, transformation, mobility, and adjustment,” my positioning requires different movement—developing supportive practices that honour instead of appropriate Indigenous relationships with time.¹⁷⁸ For my research, examining how technologies may be mobilised towards environmental witnessing means exploring what I am beginning to recognise as the tangata Tiriti gaze which emerges across interconnected dimensions involving visual boundaries that exist beyond me, temporal layers the film carries, and material complicity living within all participants.

While sitting with the irreconcilable tension of using military-origin emulsion in Waitākere, my project considers how a camera may facilitate conservation through forms of activism and decolonisation work. My inquiry concerns whether recalibration of these technologies represents a necessity and a possibility for responsible Tiriti partnership. Simpson’s emphasis that Indigenous resurgence occurs despite, rather than because of, settler systems challenges my project to ensure that photographic practice aligns with Indigenous environmental governance through respectful

170. Leanne Betasamosake Simpson, “Land as Pedagogy: Nishnaabeg Intelligence and Rebellious Transformation,” *Decolonization: Indigeneity, Education & Society* 3, no. 3 (2014): 9.

171. Simpson, “Land as Pedagogy,” 9.

172. Leanne Betasamosake Simpson, “Resurgence” (paper presented at the 2019 Conference of the Political Concepts Initiative, “Retouch,” Brown University, 2019), https://www.youtube.com/watch?v=xV1_IDtQZsc, 3:24-3:32.

173. Leanne Betasamosake Simpson, *As We Have Always Done: Indigenous Freedom Through Radical Resistance* (University of Minnesota Press, 2017), 198. Simpson discusses Jarrett Martineau’s concept from his dissertation “Creative Combat: Indigenous Art, Resurgence, and Decolonization” (PhD diss., University of Victoria, 2015).

174. Kyle Whyte, “Indigenous Science (Fiction) for the Anthropocene: Ancestral Dystopias and Fantasies of Climate Change Crises,” *Environment and Planning E: Nature and Space* 1, no. 1-2 (2018): 229.

175. Kyle Whyte, Jared L. Talley, and Julia D. Gibson, “Indigenous Mobility Traditions, Colonialism, and the Anthropocene,” *Mobilities* 14, no. 3 (2019): 325, <https://doi.org/10.1080/17450101.2019.1611015>.

176. Whyte, “Indigenous Science (Fiction) for the Anthropocene,” 224.

177. Kyle Whyte, “Indigenous Realism and Climate Change,” in *Climate Realism: The Aesthetics of Weather and Atmosphere in the Anthropocene*, ed. Lynn Badia, Marija Cetinić, and Jeff Diamanti (Routledge, 2020), 69.

178. Whyte, Talley, and Gibson, “Indigenous Mobility Traditions,” 325.

relationship-building, rather than claiming alternative leadership in environmental protection. Barclay’s Fourth Cinema framework directly shapes how I develop responsible photographic relations that prioritise relationship-building over image-making, acknowledging that my documentary practice aims to establish consent and reciprocity with all-beings and mana whenua who hold kaitiakitanga responsibility for this rohe. Yet as Pākehā, the camera ashore is in the hands of hosts rather than visitors. This inability to claim Indigenous positioning generates something different. Through years of working and breathing with kauri, I have come to recognise a way of seeing that aligns with Fourth Cinema’s productive impossibility, opening space for my project to consider how film may facilitate kauri conservation through constitutional accountability that seeks to reorient Aerochrome from extraction tool into collaborative witness.

My research is interested in an evolving way of seeing and being that emerges from the specific responsibilities of te Tiriti partnership. It operates within what Jones and Jenkins indigene-coloniser hyphen—that productive space of difference integral to genuine collaboration. Barry Barclay’s question haunts my practice: “how can we take that camera into the Māori community and be confident it will act with dignity?”¹⁷⁹ His question links to how decolonising photography requires developing entirely new photographic-kinship methodologies through sustained practice instead of incremental reform of existing documentary approaches.

This chapter has traced how photography working through rather than beyond tensions grows through practice-led engagement with three inseparable truths: kauri possess

consciousness that asks for reciprocal relationship instead of objectified documentation; photographic materials carry embedded violence that cannot be erased, yet can be reoriented; and Tiriti responsibilities create boundaries that paradoxically enable action by clarifying what remains unavailable. What emerges from this convergence is something my project names as photographic-kinship—not as resolution, but as a way of being responsive to all these presences at once. These theoretical nutrients form the roots that flow into Chapter 2 which is akin to the trunk—the living architecture where material-consciousness and embodied-consent move into daily practices, where photographic-communion breathes through conducting vessels between bodies and forests.

179. Barry Barclay, *Our Own Image: New Zealand’s Film Heritage* (Longman Paul, 1990), 78.

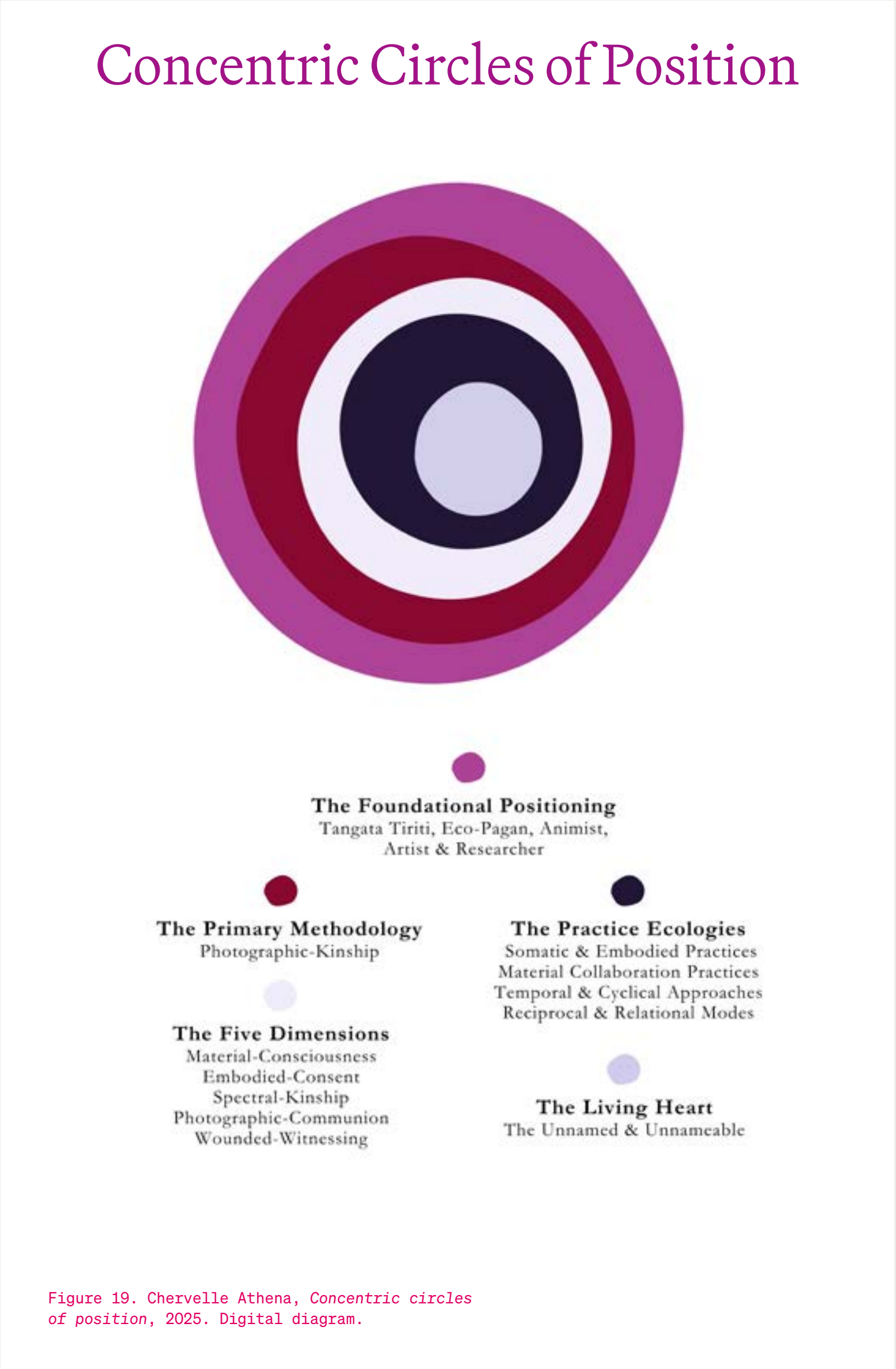
Chapter 2

—The Trunk: Photographic-Kinship as Living Structure

This chapter forms the trunk—the living structure where beneath bark lies the cambium’s generative layer, the conducting vessels, the heartwood holding memory. This is where photographic-kinship takes structural form, emerging from aroha (love/compassion/care) established through childhood relationships with the kauri of Waitākere. At eight years old, during a school trip to Te Piringa (Cascade Kauri), an encounter crystallised my understanding of their scale, presence, and agency. Our guide, park ranger Riki Tamanuitera Bennett (Ngāti Pīkiao, Ngāti Whakaue, Te Arawa, Ngāti Porou), embodied kaitiaki principles through his conservation practice and passion for Te Wao Nui o Tiriwa, planting seeds that would shape my own commitment to te taiao. My mother had taught me from earliest memory to respectfully approach and address plants before touching them—consent practices that now ground my photographic work. This spiritual foundation forms the heartwood around which all subsequent understanding has grown, ring by ring, season by season.

Through sustained photographic practice with kauri in Waitākere, I have learned that these practices emerge through relationship rather than imposition. Understanding is formed through visceral recognition. Something felt wrong about raising a camera to ‘capture’ these beings who had taught me stillness. Through years of practice, I began to recognise the militarist nomenclature embedded in documentary photography’s grammar—the way that “load,” “aim,” “capture,” “shoot,” and “take” treat subjects as targets.¹⁸⁰ Susan Sontag’s observation that “the camera is a sublimation of the gun” provided language for what my body had been sensing: photography’s martial vocabulary reveals

180. Josué Rivas, “Decolonizing Photography: Indigenous Perspectives,” *Aperture* 239 (Summer 2020): 45.



the weapon within the apparatus.¹⁸¹ Kodak’s first advertising slogan made this explicit: “You pull the trigger, we’ll do the rest,” later sanitised to “You press the button, we do the rest.”¹⁸² Yet where Sontag identified the problem and Kodak exploited then concealed it, my embodied-consent practices refuse this linguistic framework, repositioning the camera from weapon to potential participant in reciprocal encounter.

Witnessing kauri dieback disease spread through the rainforest I love revealed uncomfortable aspects of documentary photography. I ineffably knew that my chest tightened when I approached without greeting, that the camera grew heavy when I moved too quickly towards the viewfinder, that warmth spread through my solar plexus when I waited long enough for invitation. A deeper understanding emerged as I began recognising these patterns. Kauri were teaching me their own protocols, and my body was learning a language my mind could not yet articulate. Through years of place-based photographic practice,¹⁸³ understanding accumulated: how to read consent through somatic response or a particular quality of light, when presence alone was sometimes the practice, the subtle atmospheric shift that signalled the camera best stay in its bag, the spreading stillness that preceded collaborative encounter. Accordingly, this chapter examines how photographic-kinship functions as a living and evolving structure for my project.

181. Susan Sontag, *On Photography* (Farrar, Straus and Giroux, 1973), 14.

182. Paul Landau, “Empires of the Visual: Photography and Colonial Administration in Africa,” in *Images and Empires: Visuality in Colonial and Postcolonial Africa*, ed. Paul Landau and Deborah Kaspin (University of California Press, 2002), 165.

183. For a related discussion concerning ‘place’ see Rodrigo Hill and Tom Roa, “Place-making: Wānanga Based Photographic Approaches,” *LINK Proceedings Collection* 3, no. 1 (2022), <https://doi.org/10.24135/link2022.v3i1.188>.

2.1—Heartwood: What Holds the Practice

Photographic-kinship unfolds through nested circles, mapping how different dimensions flow into and through each other. The circles represent permeable boundaries rather than fixed categories, allowing vital exchanges between dimensions while maintaining necessary distinctions. Each dimension enables specific capabilities. My tangata Tiriti obligations maintain accountability to Indigenous authority. My animist recognition positions kauri as persons. My artist-researcher practice generates knowledge through reciprocal, artistic encounter. This configuration does not merely influence methodology—it constitutes it. Photographic-kinship originated through this specific arrangement. These nested circles operate through five interconnected layers, moving from outermost positioning inward to the unnamed centre. Figure 19 illustrates this structure, with each layer detailed below:

- **The Foundational Positioning:** The outermost circle holds my integrated positioning as tangata Tiriti eco-pagan animist artist-researcher.
- **The Primary Methodology:** From this foundational positioning arises the methodology—photographic-kinship as the structure through which knowledge flows.
- **The Five Dimensions:** The methodology operates through five core dimensions: material-consciousness, embodied-consent, spectral-kinship, photographic-

communion, and wounded-witnessing. These dimensions exist in constant conversation, sometimes merging into unified experience during photographic encounters, sometimes separating for analytical clarity.

- **The Practice Ecologies:** This circle contains practice ecologies—living methods flowing between somatic and embodied practices, material collaboration, temporal and cyclical approaches, and reciprocal and relational modes.
- **The Living Heart:** At the centre lies what remains unnamed, opaque—not from secrecy but from recognition that language would diminish what may only be known through experience: that moment when all circles collapse into one—kauri, film, light, and photographer. Directing every other aspect pulses a devotion to realms beyond human knowing, knowledge and understanding.

Questions remain at the living edge. How does consciousness recognise itself across species boundaries? What does film know that I do not? These uncertainties form the generative space where growth continues. These nested circles of positioning orient around the deep care that kauri ngahere require in this time of vulnerability, bringing into focus capabilities and constraints.

My commitment to working within iwi authority extends beyond Te Kawerau ā Maki to include Te Roroa at Waipoua. In December 2020, a cultural induction with Te Roroa repositioned my practice from uninvited presence to

welcomed engagement. Before undertaking fieldwork in their rohe, I organised through DOC to receive both a concession document (one-off filming permit) and cultural induction from Te Roroa. This dual process revealed the tension between bureaucratic permission—in effect, a contract with the Crown, as opposed to iwi Te Roroa—and genuine cultural authorisation through relationship. Heni Matthews (Te Roroa), tourism manager for Te Roroa Development Group, provided guidance during the cultural induction, sharing Te Roroa whakapapa connections to Waipoua and establishing appropriate protocols for my photographic practice within their ancestral whenua.

During this cultural induction, conducted over tea and home-baked goods in an atmosphere of genuine manaakitanga (hospitality, generosity), Heni blessed my sister and me through waiata (song, chant) before telling us that there are quite a few kauri over the track and that we were more than welcome to hongis with them—to press noses and exchange hau (breath, life force).¹⁸⁴ This explicit invitation represented a fundamental shift from my previous visits to Waipoua as uninvited manuhiri (visitor, guest) to blessed guest with cultural permission to engage physically, photographically with these Te Roroa tūpuna (ancestors). Where the DOC permit granted bureaucratic access, the blessing from Heni invited a spiritual relationship of reciprocal kinship—emphasising embodied practices as culturally appropriate rather than potential appropriation. Following this blessing, my photographic practice shifted viscerally. Where previous visits felt tentative—always uncertain whether my presence was welcome—I moved through Waipoua during four predawn sessions with a

184. On hongis as exchange of hau, creating relationships of reciprocal obligation, see Tia Dawes et al., “Hongi, Harirū and Hau: Kaumātua in the Time of COVID-19,” *Journal of the Royal Society of New Zealand* 51, sup. 1 (2021): S24, <https://doi.org/10.1080/03036758.2020.1853182>; Hoskins and Jones, “Non-human Others and Kaupapa Māori Research,” 57.

confidence grounded in proper protocol. The images from these sessions carry a different quality—technically bolder, compositionally closer, emotionally present in ways my earlier Waipoua work could not achieve (Figures 20 and 21).

When Heni later invited me to photograph Te Roroa conservation ambassadors for their website, maintaining absolute control over image use and ownership, this reciprocal request revealed how tikanga (customs, protocols) requires surrendering Western concepts of intellectual property in favour of Indigenous authority over representation. These portraits remain private to Te Roroa, serving their communication needs rather than my research portfolio. Heni invited us to visit Tāne Mahuta, facilitating kōrero (conversation, discussion) with Conrad Marsh (Te Roroa), Tāne Mahuta ambassador for Te Roroa, who shared additional ancestral stories while playing waiata on a kōauau (Māori flute). The reciprocal flow of this relationship demonstrates collaborative reorientation (explored further in Chapter 3, Section 3.2): my technical skills oriented toward hapū priorities while my understanding of ngahere relationships deepened through their generosity.

Some understanding surfaces through unintentional offences that may never fully heal. In my studio sits an archival box containing negatives that hold frequencies of irresolvable accountability. The box holds five rolls of black-and-white film from spring 2018, exposed at Te Taiapa, where I spent a whole day breathing with kauri I had come to know as friends, photographing through what I believed was reciprocal communion. These negatives were developed and scanned when, months later, I learned that

Te Kawerau ā Maki had placed their rāhui in December 2017. I had checked DOC protocols and assumed their permissions sufficed, not yet recognising the gap between institutional systems and Indigenous sovereignty. Worse, the film processing chemicals and scanning fixed my contravention into permanent testimony. The realisation landed in my body as visceral knowing—a sick pull in my gut as understanding dawned. Unwittingly, I had photographed within restricted protection. A hot flush of recognition told me I had transgressed something that could not be rectified. These negatives now exist in suspension, sealed as tapu (sacred, restricted) in their archival box, reminders of photography’s capacity for transgressions, despite careful intentions. With hindsight, the rāhui breach changed how I understand images themselves: every photograph I make now carries that weight—a reminder that respectful practices alone cannot erase my positioning. Months later, a watershed moment occurred when I photographed the rāhui sign at the intersection of Waitākere Road and Bethells Road in Waitākere Township (Figure 22). Surrounded by blooming wisteria (*Wisteria sinensis*), the weathered declaration announced an ecological crisis that evolved my photographic practice from individual aesthetic pursuit towards collaborative conservation activism.¹⁸⁵ For me, the image communicates the intersection of Māori sovereignty and environmental protection that has guided all of my subsequent work.

The understanding of constitutional suspension by legal scholar Margaret Mutu (Ngāti Kahu, Te Rarawa, Ngāti Whātua) clarifies what these negatives epitomise: Tiriti relationships that exist “neither resolved nor abandoned

185. Framing the rāhui sign is Chinese wisteria (*Wisteria sinensis*), an invasive species classified as an environmental weed in Tāmaki Makaurau, capable of killing native trees, embodying the multiple ecological violences facing Waitākere.



Figure 20. Chervelle Athena, *Waipoua light I*, Waipoua, December 2020. Inkjet print. 1467 × 1100mm.



Figure 21. Chervelle Athena, *Waipoua light II*, Waipoua, December 2020. Inkjet print. 1467 × 1100mm.



Figure 22. Chervelle Athena, *Rāhui Sign Surrounded by Invasive Wisteria, Waitākere Township*, October 2020. Inkjet print. 300 × 220mm.

186. Margaret Mutu, “Constitutional Intentions: The Treaty of Waitangi Texts,” in *Treaty of Waitangi Settlements*, ed. Nicola Wheen and Janine Hayward (Bridget Williams Books, 2012), 35.

187. At the time of submission, the negatives remain sealed. I intend to seek guidance from Te Kawerau ā Maki about whether offering them would be appropriate, or whether continued archival suspension better honours the rāhui.

but as ongoing obligation.”¹⁸⁶ Each day’s choice not to look adds another layer of accountability, accumulating years of responsible action without ever dissolving the original harm beneath. My non-observance of the rāhui activated the three accountability pathways: irresolvable-complicity, dwelling-kinship, and collaborative-reorientation transformed from scholarly frameworks into practice through the crucible of that breach. Through this rupture, fuller dimensions of photographic responsibility revealed themselves. The infringement taught me how consent extends beyond the moment of exposure through every stage of the photographic process—from developing and selecting through exhibiting and storage. Most profoundly, it showed me how to carry productive shame instead of seeking absolution, understanding that some hurts become our best teachers. Withholding—understanding that some images cannot circulate—is core to my practice. Questions persist without resolution. Would offering the negatives, along with framed prints, to Te Kawerau ā Maki honour both photographs and ngahere? Does archival suspension better maintain necessary boundaries? Unanswerability is perhaps the answer—some misdemeanours, however unintentional require perpetual questioning, not closure.¹⁸⁷

2.2—Conducting Vessels: Dimensions of Embodied Knowing

In photographic-kinship, understanding moves through vessels of transformation, between breathing bodies that know before minds understand, through materials that assert

their own consciousness, through temporalities that collapse into each other, through boundaries that dissolve in moments of encounter, through wounds that become ways of seeing. These are not methods applied but dimensions of knowing that activate together. These five such dimensions, through which this methodology operates, are defined as:

- Material-consciousness, recognising agency in film and forest.
- Embodied-consent practices reading through somatic response.
- Spectral-kinship, where histories meet present-day care.
- Photographic-communion, where boundaries dissolve into unified witness.
- Wounded-witnessing working through rather than beyond damage as a means of knowing.

These dimensions are ways of knowing that emerge through and are inseparable from practice—each is both conceptual framework and embodied method.

Material-consciousness: Tim Ingold’s articulation that “the properties of materials are not attributes but histories” bolsters my recognition of how photographic technologies may carry histories of violence that persist in spite of contemporary intentions.¹⁸⁸ His premise that “tools are their stories” expresses how the functions of technologies unfold through the narratives of their deployment—not

through inherent attributes—requiring me to confront the military legacy within Aerochrome’s chemical structure while working towards photographic-reorientation through fundamentally different relational approaches.¹⁸⁹ Material-consciousness challenges photographic traditions that view materials as passive instruments, revealing instead that agency operates in all participants. Recognising that photographic materials possess agency and participate actively in meaning-making is also grounded in mātauranga Māori scholarship and agential realism. What emerged through sustained practice within Waitākere was an understanding of how this agency manifests through specific collaborations: film, chemistry, paper, and light operating as participants who shape what images emerge, with their own editorial voices, their own ways of knowing, their own preferences about what they reveal or conceal. Education scholars Stephanie Springgay and Sarah Truman theorise this recognition as “inhuman animacy”—vitality that emerges from within matter’s granular structure rather than through human-ascribed characteristics such as souls, personalities, or intentionality.¹⁹⁰ Aerochrome’s agency, in this understanding, operates through its own materially real processes: chemical degradation, emulsion instability, temporal transformation. This theoretical companionship demonstrates what my photographic practice had already shown me: that film’s consciousness operates materially, not metaphorically.

Early in this research, I approached photographic materials as instruments—things to be deployed, controlled, mastered. When photographing kauri, the materials themselves began asserting presence. The technical lessons gleaned

188. Tim Ingold, “Materials Against Materiality,” *Archaeological Dialogues* 14, no. 1 (2007): 15, <https://doi.org/10.1017/S1380203807002127>.

189. Ingold, *The Perception of the Environment*, 291–311.

190. Stephanie Springgay and Sarah Truman, “Stone Walks: Inhuman Animacies and Queer Archives of Feeling,” *Discourse: Studies in the Cultural Politics of Education* 38, no. 6 (2017): 856, <https://doi.org/10.1080/01596306.2016.1226777>.

from working with twenty-year-old Aerochrome stored beyond manufacturer specifications have highlighted specific responsive behaviours, constituting transferable experiential knowledge. Sustained practice instructed how Aerochrome exercises selective editorial agency—choosing when to reveal infrared magic or retreat to monochrome witness. This selectivity across identical conditions taught me that materials possess consciousness that requires respectful collaboration rather than technical domination. My material fluency with the film was developed through initial months of ‘failure’, during which nearly 50 percent of rolls were fogged. In contrast to the immediacy of digital photography, this created a commitment to each irreplaceable frame, requiring deeply considered material collaboration. Initially, I observed the film’s unpredictable responses as technical inconsistencies. However, ongoing engagement revealed that these photographic materials were participating as conscious co-collaborators. Within these degraded rolls, kauri agency and material agency meet to negotiate their complex relationships, their kinship. The film’s selective responsiveness deepens my understanding of photographic-kinship: this film carries its complete biography—military origins from the 1940s, manufacture in the 2000s, decades of storage since—into our encounters, exercising memory and choice in what it reveals and what it withholds (Figure 23). Like ecological relationships, working with Aerochrome requires accepting factors beyond my control. This acceptance establishes spiritual foundations for photographic-kinship. The shared precarity between degraded film and endangered kauri communities creates patterns for approaching each encounter with humility and grace. Working with film becomes ceremony. When

chemical temperatures match body temperature through attunement over measurement, when bamboo paper substrate selects through plant-to-plant solidarity, materials teach that photographic practice requires consent from *all* participants. Rather than imposing synthetic substrates divorced from ecological relationality, this collaborative dialogue between botanical agencies requires sensitivity to recognise invitation—learning to read what film desires, what chemistry requests, what paper accepts. Permission and refusal become readable as felt sense.

Embodied-consent: the methodological principle where permission arrives through somatic recognition. Through sustained spiritual practice rooted in my pagan heritage and contemporary European earth-based practices, I have developed clairsentient awareness.¹⁹¹ This practice manifests through contemplative presence and embodied awareness that cultivate what I describe as “losing the self.” The permission-seeking process begins with energetic introduction—announcing my presence to the ngahere aloud, speaking to the forest as I would when entering someone’s home. The intuitive sense of welcome or resistance manifests differently each time. In the context of working with kauri, I recognise embodied-consent as involving a felt sense of awareness through atmospheric and somatic channels: a particular quality of morning light, shifts in atmospheric pressure or temperature, wind settling into stillness, and the forest quieting into a specific quality of silence may each signal receptivity. At times I notice the ngahere itself changing before my body responds—spreading calm that precedes genuine encounter—while at other times atmospheric shifts confirm what my body is already sensing.

191. For more context, see Harris, “Embodied Eco-Paganism,” 577–93.



Figure 23. Chervelle Athena, *Dead Vegetation from Herbicide Contamination, Mokoroa, Waitākere*, October 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.

Sometimes embodied-consent is holding breath—suspension that creates a pause in one type of exchange, allowing recognition without interference. In such moments, I often sense whether photography is welcome. The quality of stillness following a held breath carries data: sometimes my body settles into receptivity, sometimes tension in my chest indicates closure, sometimes tingling in my spine suggests waiting longer, sometimes belly-warmth suggests readiness for encounter, sometimes womb-sensing provides deeper recognition of safety and appropriateness. Yet these signals shift and recalibrate constantly—what meant “yes” last month may mean “wait” today. In the early months of this research, chest-tightening felt absolute, definitive. Three years later, I recognise gradations—the difference between not today and not yet, between too extractive and timing requires patience. These same practices separate, facilitating analytical clarity, before flowing back together. My work dwells in this productive tension. The pulse I keep is not metronomic but respiratory—expansion and contraction mirroring the exchange between my lungs and kauri stomata. My consent practices, developed through embodied engagement over time rather than theoretical application, resist learned assumptions about unlimited photographic access to Indigenous territories and kauri persons. Learning to distinguish genuine invitation from projection, to trust somatic signals over technical certainty, repositions the camera from an instrument of one to a potential participant in reciprocal encounter.

Spectral-kinship: the helicopter spray incident instilled a chemical memory in my flesh. When I later encountered Aerochrome metallic recognition flared: wounded material

met wounded witness. This kinship revealed spectral relationships, in which I find resonance in Springgay and Truman’s insight that materials “are only inert when considered anthropocentrically.” Perhaps Aerochrome’s transformations and my body’s ongoing chemical interactions generate knowledge through processes operating below conventional thresholds of measurement—knowledge that emerges somatically rather than through clinical documentation.¹⁹² Spectral-kinship names temporal relationships in which past and present meet through materials and methods. Vietnam-era surveillance, contemporary kauri, and future ecological possibilities—all converge within each photographic encounter. Such kinship is not redemptive—instead, practice evolves as ongoing negotiation between what materials were designed to do and what they may become capable of. Wounded materials possess the capacity to witness wounded beings through their shared temporal scarring, acknowledging entangled histories (Figure 24). I have learned to hold multiplicity without resolution: kauri exist simultaneously as ancient sovereign beings, as ‘resources’, and as taonga in te ao Māori; film holds its malignant legacy and potential care. Spectral-kinship’s multiplicity cannot be collapsed into singularity.

Spectral-kinship offers no resolution: working within rather than beyond violent histories, allowing compromised materials to teach what only they know. The film operates as what Springgay and Truman term a catalyst—a substance that “accelerates or decelerates a chemical reaction without being changed itself,” inciting transformation while maintaining rather than consuming its embedded

192. Springgay and Truman, “Stone Walks,” 857.

Figure 24. Chervelle Athena, *Dead trees among living kākūka and ponga I, Mokoroa, Waitākere*, October 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.



histories.¹⁹³ This catalytic relationship sustains productive tension: it cannot become neutral, but possesses a unique capacity to register and witness current ecological destruction, operating *through* rather than despite its Agent Orange association, preventing redemption narratives while enabling photographic reparation.

Photographic-communion: is distinguished from the other dimensions of photographic-kinship by dissolution—not working *with* but dissolving *into*. I define ‘photographic-communion’ as the ephemeral state of unified consciousness that emerges during photographic encounters in which dualities dissolve between photographer, materials, and all beings, where all participants merge into collaborative relationship. While ineffable in nature, photographic-communion manifests as an all-encompassing knowing of belonging. ‘Photographer’ and ‘photographed’ become obsolete categories. I most often experience dissolution bodily, through respiratory communion, in which kauri and I exchange oxygen and carbon dioxide within the same atmospheric field, creating a circular flow. The chest-knowing, the womb-recognition, the way my body becomes a permeable membrane beyond the confines of the bounded self—these mark communion’s arrival. This state facilitates photography’s flow from settler ‘capture’ towards spiritual ‘rapture’ or union, where photographs unfold from collaborative consciousness.

During winter fieldwork at Aotea (Great Barrier Island) in July 2020, walking a ridge trail through light rain and fog at dawn, I felt kauri presence before I saw it. The ricker kauri stood vibrant despite the weather, dewdrops clinging

to the crown. I sat without unpacking my camera and introduced myself, and time dissolved during the subsequent meditation. My breathing synchronised with rain, wind, the tree’s own presence. When other walkers passed, their voices created what felt like a jump between energy states—communion to ordinary consciousness. I had no idea whether ten minutes or two hours had passed. Only then did I introduce equipment. The composition found itself with ease—I did not choose the angle so much as recognise it emerging through the porous boundaries between my sensing and the kauri being. The resulting image (Figure 25) carries that collaborative quality—neither mine nor kauri, but arising from dissolved boundaries. Such dissolution is ephemeral rather than permanent—a momentary state that does not resolve the ongoing tensions of positioning, history, and difference that structure my practice.¹⁹⁴ Weather eventually necessitated retreat, yet the encounter lingered, felt full, satisfying, complete.

Knowledge emerges through undoing rather than constructing, through dissolving rather than defining. Loading film becomes ceremony—fingers learning the emulsion’s brittleness, adjusting touch to match its fragility. Such careful handling teaches how the quality of touch can communicate respect, how gentleness opens different possibilities than efficiency ever could. The resulting images belong neither to me, nor to kauri, nor to film, but arise from the collaborative field. Some aspects of photographic-communion resist description, not from secrecy, but from the need for opacity—sacred protection of what would diminish if forced into language, and the literal ineffability of experiences that defies

193. Springgay and Truman, “Stone Walks,” 857, drawing on Deleuze and Guattari’s metallurgical theories as extended by Manuel Delanda. I recognise resonance between their catalytic agency and what my practice with Aerochrome revealed about our photographic work.

194. Karen Barad’s agential realism offers vocabulary for these dissolved boundaries, yet through its spiritual dimensions, photographic-communion augments her framework.



Figure 25. Chervelle Athena, *Young kauri in morning mist*, Aotea, July 2020. Medium-format film, inkjet print. 1100 × 1100mm.

human articulation. The moment when all participants dissolve into light approaches what in my practice remains partially unnamed. Media theorist Sean Cubitt suggests we may “see ourselves as transfigured in our implications in natural and technological worlds, to experience ourselves as light and as technologies of light.”¹⁹⁵ To fully articulate would be to lose what makes my practice transformative: its ability to undo me, reorganise my understanding, teach me something I do not yet have words for—and perhaps never will.

Wounded-witnessing: emerges when damaged bodies and damaged materials access capacities available only through rupture. Unlike material-consciousness—where film exercises choice—wounded-witnessing reveals how damage itself can become a form of power, creating specific capacities for recognition and witnessing that intact bodies and materials cannot achieve. This operates through dimensions simultaneously—the capacity to persist through damage as scarred-but-capable beings while recognising that impairment itself generates unique forms of knowledge and understanding that wholeness cannot access. When I first held Aerochrome, knowing its genealogy, I felt something my contaminated body already knew—some wounds carry split consciousness, simultaneously revealing and concealing traumatic experiences.

195. Sean Cubitt, *The Practice of Light: A Genealogy of Visual Technologies from Prints to Pixels* (The MIT Press, 2014), 274.

196. The Waitākere Ranges formed from volcanic activity approximately 20 million years ago; R. L. Brathwaite et al., “Provenance of Titanomagnetite in Ironsands,” *Journal of Geochemical Exploration* 178 (2017): 23–34.

2.3—Living Cambium: Responsive Practice Ecologies

The methods that permeate photographic-kinship have qualities akin to cambium—forever forming, forever responsive, forever creating what the moment requires. As discussed, my practice involves breath-sharing, walking-meditation, and permeable listening. My awareness develops through two complementary walking practices. Weekly barefoot walks on Te Henga Beach’s magnetic iron sand ground this practice through direct contact with Earth’s electromagnetic field. The black magnetite particles draw toward each other through magnetic attraction, teaching my body to recognise material kinship.¹⁹⁶ Each morning in Mokoroa, I climb the hills with my dogs. My body functions as a primary research instrument: feet learning valley rhythms through repeated contact, chest sensing shifts in air quality, womb recognising when close encounter may honour relationship. These are not metaphorical framings, but methodological precision—somatic data generation as rigorous as cognitive analysis. These walks have become a foundational practice, teaching my body to attune to whenua. Walking the same paths across seasons, I observe areas affected by illegal herbicide spraying, industrial dumping, and accumulated environmental harm alongside paddocks where piles of lifeless mānuka and kānuka bodies are stacked, waiting to dry before burning (Figure 26).



Walking as research practice has deep roots across contemplative traditions, artistic practice, and phenomenological inquiry.¹⁹⁷ Within Waitākere, my walking-meditation approach resonates with Springgay and Truman’s theorisation of “walking-with” as accountable engagement that “demands that we forgo universal claims about how humans and nonhumans experience walking, and consider the ethics and politics of the material intra-actions of walking research.”¹⁹⁸ Rather than systematic observation or predetermined routes, walking-with constitutes “a form of solidarity, unlearning, and critical engagement with situated knowledges” that reveals “our entanglements with settler colonization.”¹⁹⁹ Springgay and Truman’s walking-with gives me language for what I understand as the accountability woven through these daily movements—my positioning, my solidarity with contaminated ground, my intentional refusal to extract observations as if from outside.²⁰⁰

Embodied questioning—learned through success and failure—flows through breath-sharing, walking-meditation, somatic-recognition, and prayer. In the ngahere, the rhythm of footfalls synchronises with inhalation and exhalation. Walking-meditation differs from hiking because it follows breath rather than trail—stopping, changing direction, or standing still as respiration requires.

Navigating somatic ambiguity has become part of my practice too. Over time, I have learned that ambiguous signals often mean the timing requires patience—perhaps photographing from a distance rather than intimate proximity, or returning tomorrow when the relationship has settled. On one spring

morning, strong belly-warmth drew me towards a particular grove while simultaneous chest-tightening suggested caution. I sat with the kauri for a time, observing how the tree crown moved differently in the wind to their neighbours. Noticing fresh scarring on its trunk where branches had been torn away, I eventually understood that the warmth signalled welcome for presence while the tightening indicated that the kauri was processing recent storm damage and did not wish to be recorded in their vulnerability. Learning to hold contradictory somatic information without forcing resolution has taught me that bodies, like forests, contain multiple truths. What viewers of my photographs receive is not this somatic knowledge but its outcome—photographs shaped by restraint as much as revelation, existing only because invitation was given. Beyond ambiguity lies another form of somatic information: encounters during which my body registers nothing at all—somatic silence. On one autumn morning, approaching a kauri I had photographed previously, I felt no chest response, no womb recognition, no tingling or warmth or tension. Only neutral presence. I sat, breathing, waiting for sensation to arrive. None came. I left without photographing, trusting somatic silence as refusal.

While participating in Toi Taiao Whakatairanga (TTW) wānanga, a growing understanding of permeable-listening transformed my understanding of somatic practice entirely. My position as student rather than expert, guided by the pedagogical framework of titiro, whakarongo, kōrero—look, listen, and then speak—revealed how my natural quietude could become rigorous research practice. ²⁰¹ I recognise in it a profound articulation of what my practice independently came to know: receptive presence generates fundamentally

197. Rebecca Solnit, *Wanderlust: A History of Walking* (Penguin, 2000).

198. Stephanie Springgay and Sarah Truman, *Walking Methodologies in a More-than-Human World: WalkingLab* (Routledge, 2018), 11.

199. Springgay and Truman, *Walking Methodologies*, 11.

200. Tim Ingold’s dwelling perspective offers companionate articulation-knowledge emerging through sustained bodily engagement rather than mental construction. See Ingold, *The Perception of the Environment*, 172–89.

201. Smith, *Decolonizing Methodologies*, 124.

different knowledge than assertive participation. Where my solitary photographic practice produces immediate insights, wānanga required different somatic engagement entirely. My body became permeable membrane, consciously releasing photographic assumptions, creating space where others’ understanding could enter.

At Auckland Art Gallery Toi o Tāmaki, I entered Charlotte Graham’s (Ngāti Mahuta, Ngāti Tamaoho, Te Ākitai Waiohua, Ngāti Whanaunga, Ngāti Pāoa, Ngāti Kotimana) installation *Te Hā o te Wao Nui a Tāne / The Breath of Tāne* (2021). Inside this space—where forest consciousness held material form—my chest cavity reorganised to receive understanding differently.²⁰² As Indigenous knowledge holders, Western scientists, and artists shared their distinct relationships with ngahere, I felt ribs create space for what could not enter through ears. Through permeable-listening, holding rather than generating knowledge could itself become research. My silence created conditions where knowledge could circulate between speakers and listeners rather than reside within individuals—a relational pattern Pacific scholars describe as vā in talanoa.²⁰³ Perhaps my tangata Tiriti orientation offered a way to participate in Indigenous-led frameworks by cultivating receptivity, not claiming space. These collective encounters transformed my solitary practice. Where individual engagement had revealed spiritual connection, permeable-listening exposed additional political dimensions.

Materials themselves actively participate in photographic-kinship. I have found that printing materials, photographic equipment, and the environmental substances surrounding my encounters exercise their own forms of consciousness—

teaching through unpredictable responses. What emerges is collaborative testimony. My own body is a material collaborator—not merely the instrument through which I work, but a participant carrying its own memory and agency, knowledge that lives in my cells, creating recognition when I work with materials that carry their own histories. Embodied participation means my body is not a neutral observer but an active material collaborator whose sensation, contamination, and physical presence shape every encounter. Cognitive scientists Francisco Varela, Evan Thompson, and Eleanor Rosch describe this as enaction—the bringing forth of an interdependent world through embodied action—where cognition arises not from mental representation but from the body’s sensorimotor capacities engaging directly with materials and the environment.²⁰⁴ Body and mind function as integrated systems in which knowledge emerges through sensations, emotions, physical actions, and environmental engagement—creating understanding that is both richer and more enduring than cognitive analysis alone.²⁰⁵

The camera itself participates as material presence. Its weight shapes how I move through the ngahere—walking-meditation-with-camera creates a different embodied practice than walking unburdened. The equipment’s physical requirements influence my positioning, the mechanical noise of shutter and film advance join forest sounds, and the camera’s capacities and limitations shape which encounters are possible. The camera mediates between my body and kauri presence through its own material properties. While I wait for film processing, Polaroid images live throughout my whare, maintaining an active connection with the ngahere, each photograph continuing its material conversation as

202. Charlotte Graham, *Te Hā o te Wao Nui a Tāne / The Breath of Tāne*, presented within *Ngārara in the Ngahere / Infections in Our Forests*, Auckland Art Gallery Toi o Tāmaki, 12 June 2021.

203. Vā refers to relational space in Pacific epistemologies—not empty space that separates, but space that connects and holds things together. In talanoa (dialogue), vā describes how understanding circulates between speakers. Jacoba Matapo and Judy Taligalu McFall-McCaffery, “Towards a Vā Knowledge Ecology: Mobilising Pacific Philosophy to Transform Higher Education for Pasifika in Aotearoa New Zealand,” *Journal of Higher Education Policy and Management* 44, no. 2 (2022): 124–25, <https://doi.org/10.1080/1360080X.2022.2041258>; Albert Wendt, “Tatauing the Postcolonial Body,” in *Inside Out: Literature, Cultural Politics, and Identity in the New Pacific*, ed. Vilsoni Hereniko and Rob Wilson (Rowman & Littlefield, 1999), 339–412.

204. Francisco J. Varela, Evan Thompson, and Eleanor Rosch, *The Embodied Mind: Cognitive Science and Human Experience*, rev. ed. (The MIT Press, 2016), 2, 211–16.

205. See Maxine Sheets-Johnstone, *The Primacy of Movement*, expanded 2nd ed. (John Benjamins, 2011), on thinking in movement, corporeal consciousness, and kinesthetic knowing in arts practice.



Figure 27. Chervelle Athena, *Herbicide-Contaminated Whenua, Mokoroa, Waitākere*, August 2024. Instant film photograph. 62 × 62mm.

206. Azoulay, *The Civil Contract of Photography*, 103.

I move through daily routines (Figure 27). Working with instant and analogue film processing creates complementary temporal relationships: Polaroid’s immediate materialisation allows ongoing domestic presence, while film’s delayed processing requires patience. Both systems resist digital replication through material constraints, their physical presence generating creative tension with extractive assumptions about photographic control. Azoulay’s assertion that “the concepts of property and ownership are foreign to the logic of photography” supports recognising these materials as participants rather than possessions.²⁰⁶ Her understanding that photographs function as “deposits, temporarily given over to whomever has it for safekeeping” informs how Polaroid’s domestic presence and film’s temporal delay both contribute to ongoing relationship.

The environmental materials surrounding every encounter participate as collaborative ecology, never neutral backdrop. Dawn light shifts the atmospheric quality from cool stillness to warming movement, communicating environmental awakening and readiness. Wind moving through the canopy determines which leaves catch light, which branches sway into frame—environmental materials exercising editorial choices about composition before the shutter opens. During breath exchange with trees, oxygen and carbon dioxide pass in molecular reciprocity, the soil beneath my feet connects me to mycelial networks. After heavy rain, soil saturation creates a palpable connection between my feet and kauri root systems, the earth’s water content facilitating material communication that dry conditions inhibit. Environmental materials possess agency—communicate through movement and pressure during photographic encounters.

Film preparation practices collapse distinctions between ceremonial attention and technical care, as Aerochrome requires specific conditions for optimal collaboration: packaging kept in airtight containers, freezer storage to preserve chemical integrity, a warming period to prevent moisture condensation. These technical requirements create more than practical constraints—they establish ceremonial temporality. The gradual warming of the film becomes spiritual preparation, aligning with contemplative rather than immediate approaches to ngahere engagement. Fieldwork begins hours before leaving home. This extended preparation fosters patience required for respectful encounters with kauri-kin. Working with 120 film at 6 × 6cm format generates twelve exposures per roll, creating temporal pressure, establishing material conditions that demand careful consideration before each exposure. This constraint generates collaborative temporality with kauri. The material rarity of discontinued stock invites ceremonial temporality that honours the thousand-year lifespans of kauri-kin rather than human urgency, maintaining awareness of the finite nature of specific photographic resources and their embedded histories.

I work with Hahnemühle Bamboo photographic paper, made of 90 percent bamboo fibre. This plant-based substrate creates material-kinship with kauri images—cellulose holding cellulose, one plant form receiving another. I also tested other Hahnemühle Natural Line papers—hemp, agave, and sugar cane. However, when I held the bamboo print, the greens looked just so—right in the way my body recognises truth, the cool neutral brightness I know. Equally, when I later printed Aerochrome images, this substrate selected for accurate greens also held infrared pink spectra perfectly. The

natural white base without optical brighteners maintained authenticity across standard and spectral photography. Ingold’s insight that “materials are not passive substances but active participants in making” articulates how my practice learns through curious and tactile engagement with them.²⁰⁷ Testing these materials revealed the scope that kauri presence could be held. Bamboo fibres responded uniquely, welcoming kauri through shared botanical materiality that spoke plant to plant. Bamboo, belonging to the grass family (*Poaceae*), creates kinship with kauri across botanical species—a material solidarity between materially distinct plant forms rather than sameness.²⁰⁸

This same attention to material relationships extends to my composting practices involving photographic paper. Robin Wall Kimmerer describes this as gift economy cycles, in which “the currency is the relationship, which is expressed as gratitude, interdependence, and ongoing cycles of reciprocity.”²⁰⁹ Test prints, failed images, practice exposures are returned annually to our raised garden beds as mulch for next season’s community meals, creating material accountability that redirects potential waste into community nourishment and extending collaborative relationship beyond photographic encounter (Figure 28). The ink in photographic paper, toxic at concentration, disperses safely through the soil upon dilution. The cellulose fibres feed soil organisms. This composting practice echoes Tyson Yunkaporta’s insight that meaningful environmental relationships may emerge through “every agent in an Earth-based system operating independently while responding to interdependent relations.”²¹⁰ The image compositions literally become soil, transformed through decomposition.

207. Ingold, “Materials Against Materiality,” 12.

208. Unnati Chaudhary, Shuank Malik, Vikas Rana, and Gyanesh Joshi, “Bamboo in the Pulp, Paper, and Allied Industries,” *Advances in Bamboo Science* 7 (2024): 100069, <https://doi.org/10.1016/j.bamboo.2024.100069>. Bamboo is considered an alternative source of non-wood raw materials. This botanical distinction—grass family meeting tree—reinforces that material-consciousness operates through recognition across difference: bamboo substrate welcoming kauri images through solidarity rather than taxonomic sameness, demonstrating how plant-to-plant kinship transcends botanical classification to generate cross-kingdom collaboration.

209. Kimmerer, *Braiding Sweetgrass*, 383.

210. Yunkaporta, “Fire in the Belly,” 76-85.

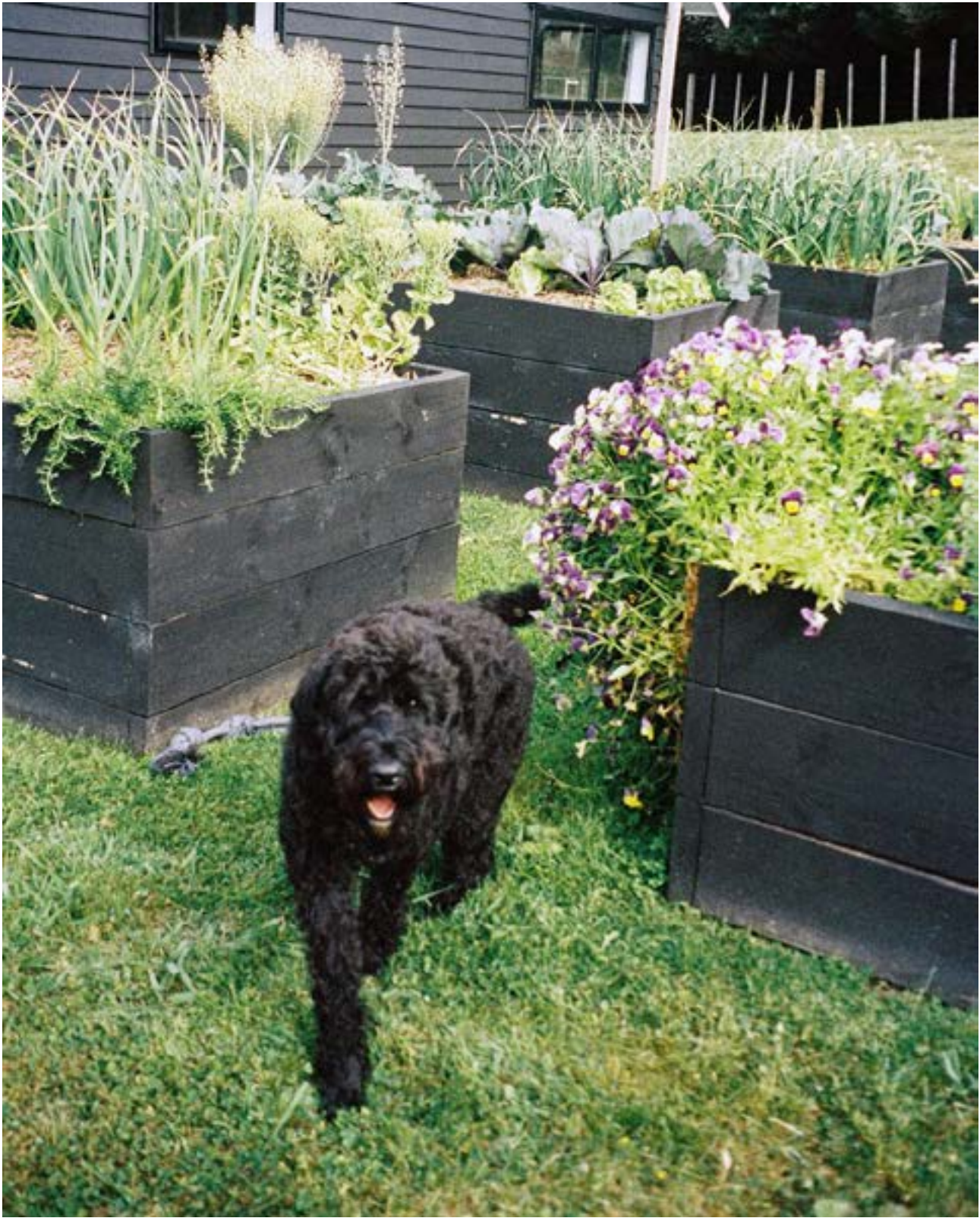


Figure 28. Chervelle Athena, *Garden beds enriched by composting cycle with Rory the black Russian terrier, home, Mokoroa, Waitākere*, September 2024. 35mm film, digital scan. 108 × 86mm.

211. Tina M. Campt, *Listening to Images* (Duke University Press, 2017), 7.

212. Tina M. Campt, *Image Matters: Archive, Photography, and the African Diaspora in Europe* (Duke University Press, 2012), 202; Doria E. Charlson, “Listening to Images,” *Women & Performance: A Journal of Feminist Theory* 28, no. 1 (2018): 90, <https://doi.org/10.1080/14767430.2018.1429189>.

213. Kate van der Drift, *In the Presence of Absence*, exhibition, Sanderson Contemporary, July 2024, <https://sanderson.co.nz/exhibitions/14-kate-van-der-drift-in-the-presence-of/overview/>.

Black feminist theorist of visual culture Tina Campt’s concept of “listening to images” provides vocabulary for what these material collaborations can teach.²¹¹ Her recognition of photography’s “different modalities of touch” and capacity to affect us through what she describes as “felt sound” emanating from the photographic materials illuminates how my practice extends listening beyond finished images into the materials themselves.²¹² I hear what bamboo substrate requests by observing how it receives kauri presence, and I recognise composting as materials continuing their conversations even in decomposition, their voices transforming but never silent. My material collaborations also exist within a broader context of contemporary Aotearoa artists exploring agency through lens-based practice. Artist Kate van der Drift’s camera-less peat water cyanotypes with kahikatea trees in *In the Presence of Absence* (2024) (Figure 29) demonstrate how tauiwi artists can develop respectful relationships with Indigenous ecologies.²¹³ Where Van der Drift creates direct material contact between photographic emulsion and trees, my practice works through camera-based encounters with kauri mediated by infrared film. These different material approaches—camera-less versus camera-based, contact versus proximate distance—demonstrate the range of possibilities for repositioning photographic technologies, each method generating distinct forms of testimony while operating under different cultural protocols and relationships with whenua.

Sustained photographic practice within my home in Mokoroa has taught me temporal layering—that awareness operates as a lived ecology rather than an abstract concept. Dwelling alongside the kauri, witnessing each other across seasons,



Figure 29. Kate van der Drift, *Nature Writing (Waipā) IV*, from the series *In the Presence of Absence*, 2024. Cyanotype toned with peat water on canvas, 410 × 310mm. Courtesy of the artist and Sanderson Contemporary.

I have developed practices that are simultaneously attuned to multiple temporalities. I have discovered that temporal and cyclical engagement generates knowledge that is inaccessible through brief encounters. What initially appears to be repetition—walking the same paths across seasons—reveals incrementally accrued knowledge: returning to familiar kauri with a deepened capacity to recognise what their presence offers, each encounter teaching what previous visits quietly prepared me to witness. Spring emergence after winter stillness, summer vitality giving way to autumn preparation—these cycles teach through their returns. What kauri revealed during spring three years ago differs from what they offer during this year’s blossoming, not simply because the trees have changed but because, simultaneously, sustained dwelling has changed how I recognise them.

This accumulated understanding through temporal commitment expands Ingold’s dwelling perspective—sustained engagement with place enables recognition of changes too gradual for extractive photography to register.²¹⁴ Over the years, I have witnessed how the same grove responds to drought stress across multiple summers and how it weathers storm damage differently. The longitudinal experiences I have observed—dumping incidents documented across multiple years and hectares of illegal herbicide damage tracked through seasonal returns—reveal patterns. Working within te maramataka (Māori lunar calendar) rhythms has deepened these temporal practices beyond solar seasons into lunar cycles. I schedule intensive fieldwork during high-energy phases such as Rākaunui (full moon), when both te taiao and my own vitality peak, while reserving contemplative tasks—editing, administrative

214. Ingold, *The Perception of the Environment*.

work, processing—for low-energy phases such as Whiro (new moon). This lunar awareness extends into community reciprocity that follows seasonal rhythms. Our neighbour tends beehives throughout the valley, gifting honey based on koha (voluntary reciprocal gift or contribution), while we respond with home-grown organic vegetables. These exchanges follow seasonal patterns of planting, tending, and harvesting that echo the cyclical nature of my photographic practice—material moving through cycles of growth, documentation, decomposition, and return to earth. Through such rhythms, institutional urgency gives way to what feels like sacred anticipation, where patience becomes method. These practices open into material conversation with film, which requests return at solstice or full moon.

Temporal practice instils that what one season withholds, another may offer. Patient engagement can yield gifts—not merely photographic images but an understanding of how these beings breathe through seasonal rhythms measured in centuries, while my own breath marks seasons measured in decades. Dwelling across these different time scales creates a paradox: I return to familiar trees with unfamiliar wisdom, ascending through accumulated knowledge while descending into deeper humility about what I cannot know. In this temporal ecology, hope lives not in resolution but in return—the certainty that seasons will cycle again, that kauri will continue teaching, that tomorrow morning’s walk through the valley may reveal what years of presence have been quietly preparing me to witness. The ngahere does not withhold forever; it teaches timing, and through dwelling practice, my body is slowly learning to read what each season offers if I am patient enough to receive it.

Volunteer work through local restoration groups—pest trapping to protect seed-dispersing birds and community education about kauri dieback—creates long reciprocal cycles. This conservation work exists independently of photography yet creates the relational conditions photographic-kinship requires. Through accumulated exchanges—digestive incorporation, immediate offerings, seasonal commitments, material returns, protective withholding, possum traps, community care—individual practices reveal themselves as participants akin to Kimmerer’s “webs of reciprocity” that generate collective intelligence through material exchange.²¹⁵

Reciprocal practices extend beyond photographic encounters into how my body participates in cyclical exchange with the ngahere. By consuming local mānuka honey from Mokoroa bees, I practice digestive-kinship—literally incorporating place into my body at a cellular level (Figure 30). The honey contains pollens from the very plants and trees I photograph, creating bodily connection to the ecosystem where photographic-kinship unfolds. Honey’s seasonal variations in flavour reflect ngahere cyclical changes, connecting my digestive system to the same temporal rhythms my photographic practice navigates.²¹⁶

A particular experience revealed reciprocal depth through an unexpected encounter. After I returned from a morning walk, a honeybee appeared from my toilet bowl as I stood, creating the illusion that she had emerged from my womb-space. My scream was appropriate—in that startling moment, years of consuming local honey, photographing alongside kauri, and practising reciprocal care suddenly

215. Kimmerer, *Braiding Sweetgrass*, 383.

216. This mirrors Robertson’s wairākau-tea infusions made from the leaves of forest trees—which she describes as “experiencing the whenua at a cellular level,” in order to bring herself “closer to the world they dwelt in, where all sustenance came from the environment they [her ancestors] lived in.” Robertson, *Tātara E Maru Ana*, 34.

Figure 30. Chervelle Athena, *Mānuka honey beehives*, Mokoroa, Waitākere, October 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.



collapsed into a tangible reminder: I participate in networks beyond my understanding or control. In spiritual traditions across cultures, bees have been understood as messengers that bridge physical and spiritual realms,²¹⁷ and in eco-pagan traditions, the womb-space is recognised as a sacred portal—the opening through which life emerges.²¹⁸ Whether meaningful connection or mere coincidence, the bee’s unexpected appearance created vulnerability to being surprised by the very relationships I thought I understood. I wanted this to be reciprocal recognition, wanted the bee to confirm years of love and care. But perhaps the deeper teaching was about relinquishing certainty: digestive-kinship means that my body participates in networks that manifest unexpectedly—through allergic responses, startling bathroom encounters, or moments that feel (though I cannot prove it) like being seen. The uncertainty became the teaching.

Through digestive-kinship, the boundary between self and ecosystem becomes permeable at a molecular level—I become partially composed of Mokoroa pollen, my cells carrying the ngahere within them. This reciprocity cannot be separated into discrete practices; digestive-kinship and photographic-kinship breathe together, the bees serving as intermediaries who pollinate the ngahere I photograph and nourish the body that does the photographing. When I photograph kauri, I do so as someone whose body already holds relationship with the forest through consumed honey, transforming documentation into dialogue between beings who share cellular material, who breathe each other’s air, who participate in the same cyclical exchanges of nourishment and release.

This cellular incorporation extends into other reciprocal exchanges explored throughout my practice ecologies. This molecular reciprocity extends into offering practices where photographing alongside kauri generates an obligation to give back through physical care, including removing invasive species and witnessing kauri grief. These immediate exchanges create what Yunkaporta recognises as collective intelligence—knowledge that emerges through sustained material relationships rather than individual mastery.²¹⁹ My reciprocal practices create conditions in which collaborative relationship and conservation obligation breathe together—neither resolved nor abandoned, but enlivened through ongoing exchange. These reciprocal structures hold photographic-kinship accountable to all-beings and Indigenous sovereignty.

Some aspects of photographic-kinship resist articulation, not from an inability to describe but from a recognition that naming would diminish or violate what requires protection through silence. These unnamed practices exist at the margins of this methodology. This withholding is not mystification masquerading as rigour, but methodological precision about what belongs in academic discourse and what does not. The sacred negatives from Te Taiapa are the most obvious example—those five rolls sealed in their archival box, teaching through what cannot be shown. Yet, other forms of deliberate opacity also shape this practice. There are specific trees whose locations remain unrecorded, whose images stay safeguarded, whose existence is personally evidenced only through the changed quality of my attention after encountering them. When I return from certain groves, the camera has remained unused, not because consent

217. Mattat Adar Bunis, “Samson and the Bees as a Myth: An Anthropological Reading,” *Journal for the Study of Religion, Nature and Culture* 14, no. 3 (2020): 351–69, <https://doi.org/10.1558/jsrnc.38751>; Arthur Bernard Cook, “The Bee in Greek Mythology,” *The Journal of Hellenic Studies* 15 (1895): 1–24.

218. Thomas H. Harbold, “The Earth Is a Witch: Ecofeminism, Deep Ecology, and the Pagan Movement,” *Spiral Nature Magazine*, July 20, 2001, <https://www.spiralnature.com/spirituality/earthwitch/>.

219. Yunkaporta, “Fire in the Belly,” 76–85.

was denied, but because the encounter was the practice—presence without documentation, the encounter complete in itself. There are moments of communication that exceed photographic ‘capture’—synchronicities possibly too precise for coincidence arrive as teaching; dreams where kauri appeared to have influenced subsequent practice but cannot be reduced to technique; equipment failures that feel deliberately orchestrated beyond mechanical malfunction; a GPS module lost before use; film fogging despite careful handling; and batteries draining inexplicably. These may be technical issues, or they may be the ngahere protecting itself through technological refusal. I have learned not to force photography when equipment resists, understanding these refusals as lessons rather than obstacles.

Édouard Glissant’s concept of opacity provides a theoretical framework for this kind of withholding. He argues that demanding transparency and understanding of others constitutes a form of violence, that we should “clamor for the right to opacity for everyone.”²²⁰ For Glissant, opacity is not obscurantism but ethical recognition—not everything need be revealed; some knowledge protects itself through remaining impenetrable to extractive scrutiny.²²¹ This principle resonates with Indigenous knowledge systems that understand certain information as protected, to be disseminated only within appropriate relationships. As tauiwi, I recognise that some knowledge belongs to mana whenua alone—protocols, histories, relationships with specific places that remain beyond my reach. The opacity I maintain extends to some ritual practices developed through intuition—movements preparing my body for forest encounter that exist in gesture rather than language, micro-

rituals that shape every encounter yet resist explanation. I cannot prove whether kauri communicate directly, or not, nor whether my body processes environmental information beyond my comprehension, or if this is one and the same. What I can state is that maintaining appropriate boundaries encourages my research to honour forms of knowing that live beyond systematic methods. These unnamed practices complete the ecology of methods explored in this chapter. They are the dark spaces where transformation happens beyond observation, the protected mysteries that make honest encounter possible.

A tree’s trunk holds everything together—memory and possibility, wound and growth, the ascending movement of nutrients and the descending flow of photosynthetic sugars. Photographic-kinship, like that trunk, does not simply support but actively conducts, translating between the deep knowledge of roots and the reaching experiences of branches. The five dimensions of photographic-kinship interweave through my practice. The kauri themselves—growing and dying, teaching through endurance and decline—ensure the methodology continues developing through each encounter; not fixing the methods, but remaining as alive as the forests it collaborates with. Like growth rings in heartwood, each season of practice adds another layer to understanding, another ring of knowledge that emerges through doing rather than thinking. These methodological nutrients now rise into Chapter 3, which forms the upper trunk—where ethical orientations emerge from lived violation, where a rāhui transgression becomes teacher, breath-sharing develops through blessing, and scar-tissue redirects growth toward accountability.

220. Glissant, *Poetics of Relation*, 194.

221. Glissant, *Poetics of Relation*, 189-94.

Chapter 3

—The Upper Trunk: Ethics Rising Through Practice

The kauri greenhood orchid (*Pterostylis agathicola*) grows only in kauri leaf litter, sheltered close to their trunks. Without kauri, it cannot exist—one of a distinctive suite of plant species that depend entirely on the conditions kauri create.²²² Protection and relationship cannot be separated in kauri ngahere. The upper trunk’s protective bark forms the tree’s interface with weather and wounding. This chapter examines three ethical orientations that crystallised from Te Taiapa violation and Waipoua transformation: irresolvable-complicity, dwelling-kinship, and collaborative-reorientation. Together, they form the protective triangular structure within which photographic-kinship operates. These orientations generate accountability to mana whenua and Tiriti frameworks through ethical tension. These are not fixed rules imposed on practice, but living responses that emerge from specific encounters and continue adapting as conditions change and accountability requirements shift. Irresolvable-complicity emerges from the violation that cannot heal, creating hypervigilance. Dwelling-kinship builds relational depth through decades of presence. Collaborative-reorientation redistributes authority, reorienting photography’s extractive inheritance. These three orientations establish the conditions through which photography can participate in care while remaining perpetually responsive to Indigenous territorial sovereignty—what manifests as my tangata Tiriti gaze.

222. Sarah Wyse, Bruce Burns, and Shane Wright, “Distinctive Vegetation Communities Are Associated with the Long-Lived Conifer *Agathis australis* (New Zealand Kauri, Araucariaceae) in New Zealand Rainforests,” *Austral Ecology* 39, no. 4 (2014): 388–400, <https://doi.org/10.1111/aec.12089>.

3.1—Interfacing Bark: Orange Hi-Vis & Pink T-Shirts

Although my photographic encounters with kauri are one form of relationship, witnessing structures that failed to protect kauri require something else. I started working with my grandfather Alfie’s compact camera. Through this inherited lens, something quietly shifted for my project. The camera’s worn body carried the weight of ordinary moments made precious through time. What Alfie had used to document garden abundance for future memory, I now used to document ecological violation for future accountability. As a response to the rāhui not being honoured, I decided to install (October 2020) and photograph a sign that read ‘Track Closed’ at Te Taiapa track entrance (Figure 31). Activism required a camera I could use while my hands worked—installing, repairing, protecting. The compact camera’s automatic settings freed my hands for the physical work of installation. My mother’s hands steadied the aluminium plate while I twisted wire with pliers (Figure 32). My grandfather’s camera hung around my neck—the same device that had photographed me as a child, now present as I worked to protect ngahere. Together, my mother and I continued the intergenerational care the camera had always recorded—now oriented towards conservation rather than celebration.

In the early stages of this research, I posted information about the rāhui on Waitākere Township’s Facebook page, to share what I had learned about Te Kawerau ā Maki conservation leadership. Within twenty-four hours, the post was deleted.



Figure 31. Chervelle Athena, *Vandalised track closure sign, Te Taiapa, Waitākere*, November 2020. 35mm film, inkjet print. 300 × 220mm.

223. Te Kawerau ā Maki, “Take Action,” Waitākere Rāhui, accessed April 26, 2018, <https://waitakererahui.org.nz/take-action>. The page provided specific directives: respect the rāhui, make signs, volunteer, get social, and make donations.

Comments before removal ranged from dismissive to aggressive—the hostility was breathtaking in its casual violence. If these spaces could not hold any forms of witnessing, perhaps a physical presence would prove harder to erase. Three days after installing that first sign, I returned to find ‘NOT’ scrawled in permanent marker between ‘TRACK’ and ‘CLOSED’. The vandalism felt personal—as if someone had deliberately brought a marker specifically to negate our work, to refuse Indigenous protection of these territories? I photographed the defacement before removing the sign, taking it home to clean before reinstallation. This became ritual: installation, violation, documentation, reinstallation; every three days, the ten-minute drive down gravel roads to check. Each time I found wires cut, signs thrown into bushes, stakes pulled from the ground (Figure 33). Each documented act of vandalism created accumulating testimony of hostility towards Indigenous territorial protection. The compact camera’s vernacular aesthetic—the grain of consumer film stock, automatic flash, unrefined clarity—refused artistic pretension in favour of urgent testimony. Following iwi ‘Take Action’ guidance, weekend education became our practice.²²³ My mother and I, sometimes my sister, too, stationed ourselves at Te Taiapa track entrance wearing pink and hi-vis vests (Figure 34). We carried clipboards and homemade flyers, engaging every arrival with patient explanation about kauri dieback, the rāhui, and alternative walking tracks. Some people swore at us. Some pushed past. One man shouted about his tax dollars and recreational rights. But through accumulated weekends, we achieved something: 88 percent of people, once they understood, chose to respect the rāhui and walked elsewhere. In November 2020, frustrated by weekday violations I could

not prevent, I chained the gate closed (Figure 35). This escalation brought institutional attention. Two DOC representatives arrived, responding to complaints. They blamed iwi for ‘causing confusion’, claimed Te Taiapa existed outside rāhui boundaries. I took detailed notes, sent an account to iwi representatives, who confirmed what I suspected—institutional resistance disguised as process. Yet something shifted. The following week, DOC officially closed Te Taiapa, installing permanent barriers, official signs, web announcements. Our persistent presence had forced institutional recognition of what Te Kawerau ā Maki had declared three years earlier. The physical exhaustion of those months—what I have come to understand as sacred exhaustion—transformed into methodology.²²⁴ Bodies placed between harm and healing become offerings. Fatigue becomes testimony. Persistence becomes prayer. The campaign at Te Taiapa ran from October through December 2020. When DOC officially closed the track that December, that chapter of activism concluded. But my daily relationship with Mokoroa—the broader territory surrounding Te Taiapa—continued.

3.2—Where Whorls Redirect: Three Ethical Orientations

In my project, what emerges as visible practice has been shaped by specific encounters that became permanent teachings. Breaching Te Kawerau ā Maki rāhui at Te Taiapa in 2018 left a scar that will never fully heal—nor should it. It has become a permanent mark in this project’s methodology—not a wound or experience to be healed, but

224. Sacred exhaustion as research method honours how scholars recognise bodies as sites where knowledge emerges—through fatigue, through endurance, through the weight carried. These embodied approaches resonate with Shawn Wilson’s relational accountability through physical presence, Linda Tuhiwai Smith’s embodied praxis within Indigenous research, Margaret Kovach’s conversational method through patient engagement, and Donna Haraway’s situated knowledges emerging from embodied experience. Wilson describes how “relational accountability emphas[ises] our responsibility to ‘all our relations’” including responsibility to carry the physical and emotional weight of research relationships. See Shawn Wilson, *Research as Ceremony: Indigenous Research Methods* (Fernwood Publishing, 2008), 153; and Smith, *Decolonizing Methodologies*, 144–47.



Figure 32. Chervelle Athena, *Mother’s hands repairing sign, Te Taiapa, Waitākere, November 2020.* 35mm film, inkjet print. 300 × 300mm.



Figure 33. Chervelle Athena, *Rāhui sign thrown in harakeke, Te Taiapa, Waitākere, November 2020.* 35mm film, inkjet print. 300 × 220mm.



Figure 34. Chervelle Athena, *Mother in orange hi-vis, Te Taiapa, Waitākere, November 2020.* Inkjet print. 300 × 220mm.



Figure 35. Chervelle Athena, *Locked gate, Te Taiapa, Waitākere, November 2020.* 35mm film, inkjet print. 300 × 220mm.

a scar that redirects growth. This wound does not compromise the practice but constitutes it. My accountability structures have formed around and through violation, which cannot be undone through apology, restitution, reformed practice, or good intentions. Rather than seeking resolution through apology, the violation became what may be called scar-tissue orientation—the way healed wounds create different sensitivities, reminders of damage that shapes subsequent movement.

Through my accumulated experiences, a question emerged that reorganised my doctoral research: How do I become a better ancestor? This framework is informed by author and anti-racism educator Layla F. Saad, who articulates her purpose as creating change, facilitating healing, and seeding new possibilities for those who come after.²²⁵ My rāhui violation taught me that good intentions cannot prevent harm, only generate ongoing obligation to repair what knowledge alone could not protect. The question generates perpetual obligation, transforming photographic practice from documentation into reparative action, from extraction toward care.

Today, I offer what I can—joining local pest-trapping efforts to protect the seed-dispersing birds whose work helps forest regeneration, and contributing financially to community education materials about the rāhui and kauri health. These modest actions carry no equivalence to harm, but emerge from the recognition that ongoing care matters more than gestures seeking absolution. Embodied accountability emerges as a method through which physical offerings can support ongoing conservation work.

These accountability structures form three ethical orientations, which I summarise as follows (Figure 36):

- The irresolvable-complicity orientation acknowledges that photographing kauri with military surveillance film carries embedded violence that cannot be resolved, only responded to through ongoing care.
- The dwelling-kinship orientation builds relational depth through decades of dwelling in Waitākere, distinguishing conservation partnership from extractive documentation.
- The collaborative-reorientation orientation ensures mana whenua priorities—expressed through the rāhui—determine how the film supports environmental governance, not my artistic vision.

The first orientation—irresolvable-complicity—operates through what has emerged as the sacred scar that refuses healing. This permanent wound generates what may be understood as embodied accountability—the extra care taken near boundaries, the heightened somatic awareness cultivated through breath-sharing practices, the protective withholding that keeps some knowledge unnameable. Linda Tuhiwai Smith’s framework—that accountability requires accepting participation in harmful systems while working to redirect resources towards Indigenous priorities—lives through the physical conservation mahi integrated throughout the practice ecologies that inform my study.²²⁶ Irresolvable-complicity operates as ongoing obligation rather than redemptive gesture.

225. Layla F. Saad, *Me and White Supremacy: Combat Racism, Change the World, and Become a Good Ancestor* (Sourcebooks, 2020), 15.

226 Smith, *Decolonizing Methodologies*.

The second orientation—dwelling-kinship—functions through dwelling practices, seasonal returns that have taught waiting as active practice, and the accumulated knowledge emerging from years of sustained presence. These create what Mark Adams and Nicholas Thomas articulate as transformation through duration rather than decisive intervention.²²⁷ This dwelling accountability extends into the cyclical practices explored across my practice. The temporal dimension generates protective structures by preventing extractive urgency, meaning the camera’s propensity for quick intervention through decisive capture. Instead, patient relationship-building supports conservation through accumulated presence.

The third orientation—collaborative-reorientation—restructures photographic relationships by surrendering control to multiple participants. Embodied-consent practices position kauri persons as directing engagement through somatic invitation or refusal, while material-consciousness recognises film’s selective agency and bamboo (in photographic printing paper) substrate’s plant-to-plant solidarity as collaborative participants in shaping what emerges. These practices operate through reciprocal structures, protective withholding, composting cycles that return materials to earth, and seasonal commitments that support conservation through accumulated presence. This collaborative reorientation generates material outcomes that support kauri protection and Indigenous environmental governance by acknowledging that photographic practice facilitates conservation when it surrenders imperial assumptions of unlimited access and individual control.

227 Adams and Thomas, *Cook’s Sites*.

Three Ethical Orientations

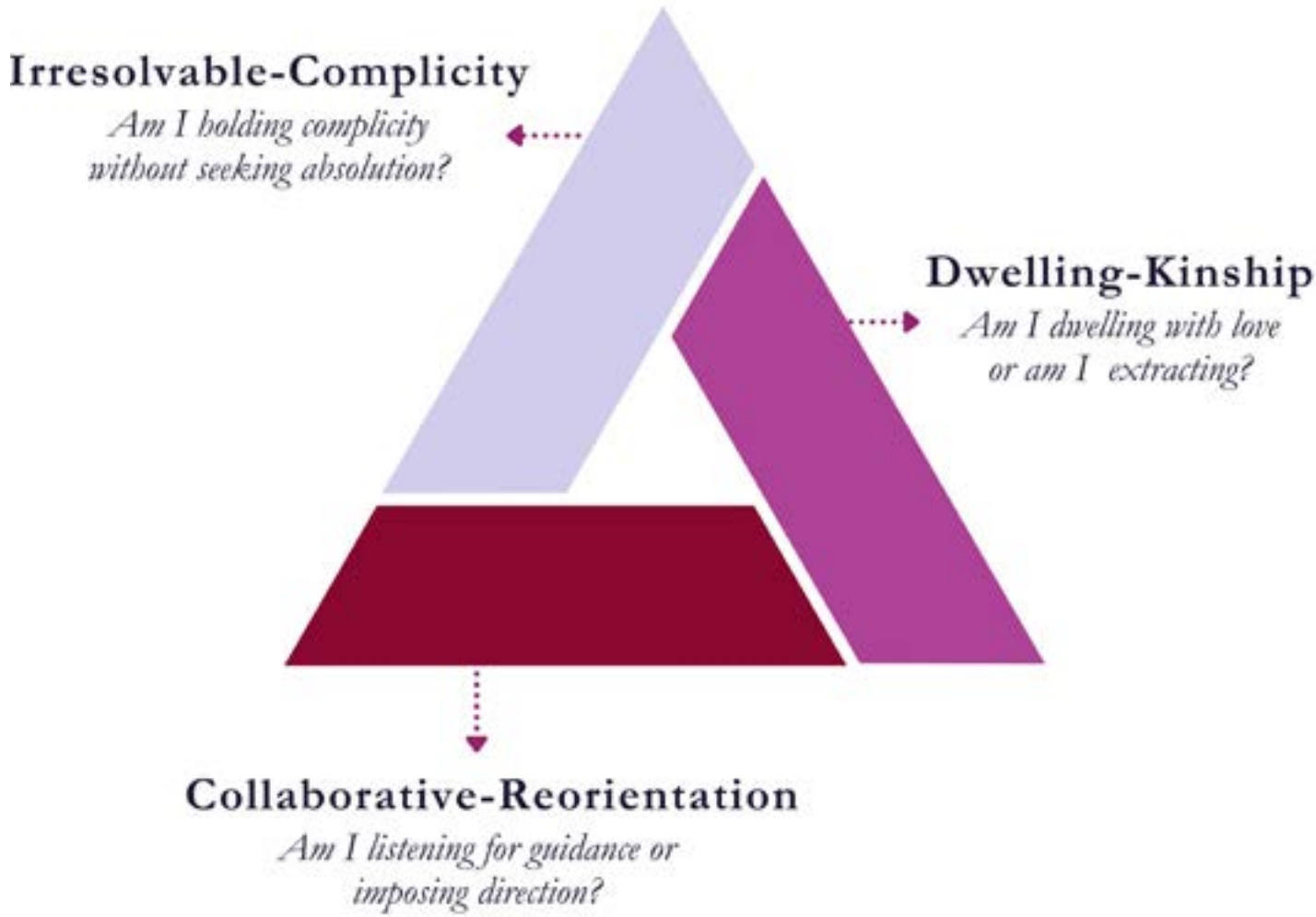


Figure 36. Chervelle Athena, *Three ethical orientations, the triangle from which photographic-kinship emerges*, 2025. Digital diagram.

The cultural authorisation I experienced early in this project (described in Section 2.1) reshaped my photographic vision and ethical orientation. That blessing from Heni and Te Roroa in December 2020 opened relationship rather than granting permission—connection that continues through tauutuutu (reciprocity): portrait work for hapū communication needs, Matariki (Māori New Year) celebration invitations, gifted prints as koha. This ongoing reciprocity shifts guest presence from extractive to accountable. These December 2020 images carry confidence born from welcome rather than tolerance, from relationship sustained through mutual obligation rather than one-time authorisation. What became visible, how proximity felt possible, which persons warranted sustained attention—all shifted through blessing that established kinship still unfolding.

During those December 2020 visits, my camera attended to what months of Te Taiapa conservation work had taught me to recognise: care infrastructure delineating vulnerable zones, biosecurity signage communicating closure protocols, boundaries where different management approaches meet. These were not aesthetic distractions from pristine forest, but material evidence of Te Roroa rangatiratanga exercised through conservation governance. The ancestral stories Heni shared shaped what became photographable. She told my sister and me the pūrākau (stories) of kauri and tohorā (Southern right whale, *Eubalaena australis*) as siblings who exchanged gifts, with tohorā skin becoming kauri bark. In my images, bark scales reveal this ancestral relationship (Figure 37). Conservation boundaries witness care made tangible. Where Te Taiapa taught accountability through violation’s permanent scar, my time with Waipoua revealed what

becomes possible when all three ethical orientations operate through iwi reciprocity.

I discovered that through accumulated reciprocity across multiple visits, a closer approach and bolder framing became possible. Whilst standing on the raised boardwalk, this close encounter with kauri bark—positioned some two metres from their trunk—shows what blessing through ongoing reciprocity permitted. The frame is filled with textured scales that embody the tohorā gift and kiekie (*Freycinetia banksii*) embracing the trunk through cascading aerial roots, while dappled dawn light creates luminous atmosphere around these dwelling companions. I had carried three options—digital, colour, and black-and-white film—in my bag, yet my body knew which material and co-creator this moment required. The Ilford HP5 I selected, after testing multiple emulsions for taiao images, offered specific capacities: medium contrast preserving both shadow detail and filtered canopy light, fine grain rendering bark texture and epiphyte softness, mid-tone richness offering contemplative rather than dramatic space. Working at f/2.8 to f/5.6 rather than landscape photography’s conventions of f/8 to f/11 created selective focus—some elements sharp whilst others soften toward peripheral vision, mimicking how embodied human sight actually operates. This practice created the intimate immersion visible across my photographs—from close bark communion to photographs with layered ngahere where nikau (*Rhopalostylis sapida*) and mamaku (*Cyathea medullaris*) softly recede through limited depth of field, inviting contemplative dwelling (Figures 38–40). This method offers portrait intimacy to all persons.



Figure 37. Chervelle Athena, *Textured scales with kiekie, Waipoua*, December 2020. Medium-format film, inkjet print. 1100 × 1100mm.



Figure 38. Chervelle Athena, *Layered ngahere I*, Waipoua, December 2020. Medium-format film, inkjet print. 1100 × 1100mm.



Figure 39. Chervelle Athena, *Layered ngahere II*, Waipoua, December 2020. Medium-format film, inkjet print. 1100 × 1100mm.



Figure 40. Chervelle Athena, *Layered ngahere III*, Waipoua, December 2020. Medium-format film, inkjet print. 1100 × 1100mm.

My fencing and signage images enact collaborative reorientation through what they witness (Figures 41 and 42). Where earlier in my practice I had excluded human intervention from frames, seeking what I thought was pure kin-aesthetic encounter unmarked by management systems, these photographs now position care infrastructure as focal points. This reorientation to ‘inorganic’ materials acknowledges that kauri survival during dieback crisis depends entirely on active protection labour. Some of my photographs frame protective barriers not as aesthetic failures but as tangible expressions of kaitiakitanga: wire fencing marking thresholds between permitted access and zones requiring biosecurity measures (Figures 43 and 44). For example, the bilingual signage in *Kia tau sign, Waipoua* makes visible how iwi exercise environmental authority through governance that prioritises kauri ora over visitor access. The image depicts physical boundaries closing high-risk side tracks to prevent contamination spread through public access. My camera witnesses Te Roroa conservation priorities by documenting their governance through these structures—fences, signs, closures—showing how Indigenous environmental authority operates through physical systems alongside spiritual protocols. This visual approach embodies what collaborative reorientation requires: surrendering photographic control so the work attends to sovereignty rather than claims aesthetic transcendence.

These photographs revealed to me how my central ethical orientations operate together through relational accountability to iwi and ongoing reciprocal relationships. The dwelling-kinship orientation manifests through the shift

from earlier tentative encounters to confident intimacy. The collaborative-reorientation dimension functions through every compositional choice: centring protective systems that serve hapū conservation priorities, documenting biosecurity measures, allowing Te Roroa governance to determine what receives photographic witness. Despite carrying digital equipment and colour film stock, I felt pulled toward black and white—intuitively recognising that digital’s immediate feedback or colour’s surface attention felt inappropriate for the contemplative pacing this encounter required. At Waipoua, my methodology centred on embodied attunement—somatic recognition of which materials may honour specific encounters. The protective fencing visible throughout these images serves a dual function: physically protecting vulnerable kauri whilst visually reminding me of appropriate boundaries. Even blessed presence requires ongoing vigilance about the camera’s colonial grammar. Some kauri remained unphotographed, some images withheld, some territorial depths acknowledged as beyond my sight, regardless of permission granted.

These Waipoua images reveal what a perpetually recalibrating vision requires: not just ethical positioning, but material transformation of what becomes visible and how seeing itself operates. Cultural authorisation changed what my camera attended to—protective systems emerged as worthy subjects rather than obstacles, conservation frameworks became evidence of sovereignty rather than visual distractions, boundaries appeared as care made visible rather than limitations on artistic access. Yet even proper protocols cannot resolve the fundamental tension—that photography carries extractive genealogies regardless of



Figure 41. Chervelle Athena, *Kia tau sign*, Waipoua, December 2020. Medium-format film, inkjet print. 1100 × 1100mm.



Figure 42. Chervelle Athena, *Wire fence and forest I*, Waipoua, December 2020. Medium-format film, inkjet print. 1100 × 1100mm.



Figure 43. Chervelle Athena, *Wire fence and forest II*, Waipoua, December 2020. Medium-format film, inkjet print. 1100 × 1100mm.



Figure 44. Chervelle Athena, *Wire fence and forest III*, Waipoua, December 2020. Medium-format film, inkjet print. 1100 × 1100mm.

blessings received. Perpetual recalibration is therefore part of the work required to maintain an accountable photographic practice as manuhiri. These experiences established photographic principles that individual practice alone could not generate, showing how iwi authorisation enables transformation whilst demanding continued vigilance.

Meaningful accountability requires embedding within broader conservation frameworks that centre mana whenua environmental authority. My experience in TTW provided such structure,²²⁸ preventing individual practice from becoming performative settler ethics that claimed personal innocence through individual gestures while remaining divorced from collective conservation relationships.²²⁹ Indigenous scholar Shawn Wilson (Opaskwayak Cree Nation), author of *Research Is Ceremony* (2008), articulates that “problems arise when someone comes and uses knowledge out of context, out of the special relationship that went into forming it.”²³⁰ This position shapes my recognition that accountability requires a collective framework rather than solitary ethical positioning. The TTW wānanga brought diverse knowledge-holders together: Māori and non-Māori researchers, artists commissioned by iwi and hapū, Western scientists studying kauri dieback, and mātauranga Māori practitioners collaborating across knowledge systems. This collaboration demonstrated how to transform individual violation into collective structure, generating conservation outcomes while maintaining appropriate cultural boundaries.

The body learns through practice that responding to violation requires being embedded within collective structures, generating what Wilson terms “relational accountability,”

where knowledge exists within relationships rather than individuals.²³¹ My research through TTW reveals why embodied participation matters: traditional conservation awareness campaigns—such as Crown agencies’ phytosanitary messaging focused on boot cleaning and track closures—fail, because they operate through “common-sense, depoliticized understandings of public awareness” that ignore mana motuhake and Māori sovereignty over territorial representation.²³² From within these structures, looking becomes relation-making.

3.3—Growing into Sight: A Tangata Tiriti Gaze

These three ethical orientations generate what I have come to understand as a tangata Tiriti gaze: a quality of photographic attention shaped by te Tiriti partnership responsibilities through which I navigate landscape photography’s inheritance while remaining accountable to Indigenous territorial sovereignty. What I cannot escape is how this gaze operates—not as achievement or resolution, but as perpetual recalibration, with daily practice teaching me what I cannot claim. Unlike the colonial gaze that assumes unlimited access, or sympathetic documentation that maintains structural privilege through ethical distance, this gaze works through constitutional obligations that multiply rather than resolve. Each photographic decision—when to release the shutter, what enters the frame, which negatives to print, how images circulate—carries constitutional weight. This gaze addresses a specific question: How may those with structural privilege in settler colonies engage photographically without

228. TTW operated as a three-year project within Mobilising for Action, supported by The National Science Challenge, Ngā Rākau Takekake. The project explored how artistic practices could engage with both Western science and mātauranga Māori frameworks. See <https://toitaiaowhakatairanga.nz/about>.

229. Eve Tuck and K. Wayne Yang, “Decolonization Is Not a Metaphor,” *Decolonization: Indigeneity, Education & Society* 1, no. 1 (2012): 1-40, <https://jps.library.utoronto.ca/index.php/des/article/view/18630>.

230. Wilson, *Research Is Ceremony*, 71.

231. Wilson, *Research Is Ceremony*, 153.

232. Mullen et al., “Artistic Practice, Public Awareness, and the Ngahere,” 1.

perpetuating extraction? The answer emerges not through claiming innocence or solidarity, but through accepting the hyphen space between coloniser and indigene.

Each of my photographs creates obligations I carry but cannot discharge, accumulating responsibilities that extend beyond my individual practice or lifetime. This accumulation operates through a fundamental reframing—no longer asking ‘Is this right?’ but ‘Am I being a responsible Tiriti partner?’—shifting from universal ethics to situated constitutional obligations. The gaze lives in my body’s learned responses: that chest-tightening near unfamiliar groves, nausea when aesthetic desire threatens protocol, the synchronised breathing with kauri that precedes any exposure.

This tangata Tiriti gaze grants neither special knowledge nor access. It offers no resolution to settler positioning, no transcendence of infrastructure. Instead, it generates productive discomfort—staying awake to complicity while working toward accountability, seeing with contaminated materials without claiming purity, witnessing violence while refusing spectacular revelation. It emerges from not being Indigenous or claiming innocence, and to not resolving tensions that tauiwi Tiriti partnership demands. This inability is methodologically productive, holding me perpetually responsive to obligations I can neither fulfil nor abandon. The camera becomes a bridge for this inability—a companion that carries violence and potential reorientation in every ‘shot.’ The gaze emerges only through sustained practice that accepts permanent scarring from inevitable violations. While arising from Aotearoa’s specific Tiriti context, this framework illuminates how constitutional

obligations elsewhere generate their own forms of accountable looking.

Artist-scholar Erin Marie Konsmo (Métis), in their lecture “Water Is Life (But Many Can’t Drink It)” (2017), offers insight for understanding environmental justice beyond purity concepts. They state that “in order to love and build good relations through ongoing colonialism and environmental destruction we need to get rid of concepts of purity.”²³³ My practice of continuing to work in Mokoroa through herbicide contamination—rather than seeking pristine forests elsewhere—enacts this refusal of purity concepts. This choice to stay with compromised ground directly challenges landscape photography’s tradition of rendering only ‘untouched’ wilderness as worthy of representation.

My tangata Tiriti gaze emerges through conscious navigation of landscape photography’s historical functioning as colonial grammar. For example photographer Ansel Adams’ systematic manipulation of Sierra Nevada imagery established the template I inherit every time I raise my camera in Indigenous forests—a template for representing Western landscapes as what cultural critic and historian Rebecca Solnit calls “pristine, virginal, and essentially uninhabited,” thereby perpetuating dangerous fantasies of empty wilderness.²³⁴ Understanding how this “pristine wilderness mythology” operates through technical choices—what to include, what to frame out, what to ‘correct’ in processing—shapes my practice in specific ways. I cannot escape this inheritance, because colonial grammar is embedded within landscape photography’s foundational

233. Erin Marie Konsmo, “Water Is Life (But Many Can’t Drink It)” (response to lecture by Winona LaDuke, University of Toronto, Toronto, ON, September 24, 2017), quoted in Linda Tuhiwai Smith, Eve Tuck, and K. Wayne Yang, eds., *Indigenous and Decolonizing Studies in Education: Mapping the Long View* (Taylor & Francis Group, 2018), 2-3.

234. Rebecca Solnit, *Savage Dreams: A Journey into the Hidden Wars of the American West*, 20th anniversary ed. (University of California Press, 2014), 4. This “pristine wilderness mythology” was ideologically established by naturalist John Muir, whose influential writings portrayed Yosemite as uninhabited wilderness, explicitly stating that Indigenous people “seemed to have no right place in the landscape.” John Muir, *The Mountains of California* (Century, 1894), 93; see also *The Yosemite* (The Century Company, 1912). Adams’ photographic erasure enacted what Muir’s writing had already articulated. Adams neither originated nor worked alone in this visual grammar: nineteenth-century photographers Carleton Watkins and Eadweard Muybridge produced ‘canonical’ Yosemite images that similarly erased Indigenous presence, while Timothy O’Sullivan’s government survey photography explicitly facilitated territorial appropriation. As Solnit observes, “Through the sinister auspices of the environmental movement—John Muir, Ansel Adams—the American vision yields an image of a world entirely outside human agency, which ends up, for example, excising Native Americans.” Rachael Ziady DeLue and James Elkins, eds., *Landscape Theory* (Routledge, 2008), 98, 135. For analysis of how this preservationist vision facilitated Indigenous dispossession, see Mark David Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks* (Oxford University Press, 1999).

tools, techniques, and visual conventions—perfected across generations of photographers working in service of territorial appropriation. I therefore work consciously within it, developing practices that pursue reorientation rather than claiming to transcend extraction entirely.

Adams did not simply overlook Indigenous presence—he deliberately removed it through darkroom manipulation, enacting photography’s colonial grammar by eliminating roads and human structures from his Yosemite imagery, including his documented removal of a road running through a canyon centre that disrupted his wilderness vision.²³⁵ Most critically, the Ahwahnechee had inhabited Yosemite for millennia, their sophisticated land-management practices creating the very landscapes Adams celebrated.²³⁶ By erasing their presence, Adams established what functions as a visual terra nullius. This technical capacity to create ‘empty’ landscapes reveals photography’s power to construct rather than document reality. Understanding these techniques makes me acutely aware of my own editorial choices; when I process infrared negatives, select which contamination to document, or frame infrastructure within or outside the viewfinder, I work with the same tools Adams used for erasure.

Artists such as Joyce Campbell provide a counter-methodology to Adams (and others) photographic legacy. Specifically, her series *Te Taniwha* (2010) challenges extractivist photography through sustained collaboration with Māori knowledge holders (Figure 45). Working with historian Richard Niania (Ngāi Kōhatu, Ngāti Kahungunu ki Te Wairoa) and Te Reinga whānau, Campbell demonstrates

how documentary photography can operate within Indigenous frameworks of authority.²³⁷ Her practice, which requires community collaboration and ongoing accountability to Māori knowledge systems, positions Indigenous territorial authority as primary rather than supplementary to photographic practice. Campbell’s gelatin silver processes create material resistance to digital circulation and commodification, producing precious hand-printed objects that demand careful attention to cultural context. Her decades-long territorial engagement demonstrates how sustained relationship-building enables recognition of the spiritual presence that photography systematically denies through emphasis on rapid capture and circulation.²³⁸ The series integrates ancient pūrākau about the taniwha whose journeys created geographical features, positioning landforms not as passive subjects for aesthetic contemplation but as ancestral bodies embedded within whakapapa relationships connecting geological, aquatic, and human communities across generations.

These varied approaches illuminate a spectrum within environmental photography. In Mokoroa, I document what Adams would have erased: twenty-three dumping incidents, hectares of herbicide damage, systematic contamination. My choice has involved refusing darkroom and digital manipulations, maintaining rather than correcting chemical instabilities, operating within mana whenua protocols rather than claiming territorial authority, and withholding images that may create competing environmental narratives. Infrared film’s capacity to distinguish healthy vegetation from chemical stress provides counter-testimony to pristine mythologies, yet operates through the same spectacular

235. Ansel Adams, *Examples: The Making of 40 Photographs* (Little, Brown and Company, 1983), 142–44.

236. Solnit, *Savage Dreams*, 251–78.

237. Joyce Campbell and Richard Niania, *Joyce Campbell: Te Taniwha* (Two Rooms, 2010), 2.

238. John C. Welchman, ed., *On the Last Afternoon: Disrupted Ecologies and the Work of Joyce Campbell* (Sternberg Press and Te Pātaka Toi Adam Art Gallery at Victoria University of Wellington, 2020), 195–96.

Figure 45. Joyce Campbell, *Taniwha V*, from *Te Taniwha*, 2010. Gelatin silver fibre-based hand-print, 1070 × 1540mm. Courtesy of the artist and Two Rooms.



tradition that has served extraction. These tensions remain irreconcilable. Working within Te Kawerau ā Maki rāhui boundaries means acknowledging their territorial sovereignty as a foundational constraint that transforms apparent limitations into invitations to develop more responsible relationships with ngahere.

The kaupapa Māori principle of ‘by Māori, for Māori, with Māori’ research demands that my critique of photography’s violent foundations remains accountable to tino rangatiratanga rather than only to academia. This principle recognises that transformation requires Indigenous communities to lead in establishing conservation priorities and protocols, rather than merely being consulted.²³⁹ As a tauiwi researcher who does not whakapapa to these territories, I recognise that this principle establishes boundaries around who has the authority to conduct, direct, and benefit from research within te ao Māori. Brendan Hokowhitu names what my practice navigates as “cogitatio nullius”—the way contemporary academic structures reproduce terra nullius logic by positioning Western scholarship as universal, while systematically rendering Indigenous knowledge systems invisible.²⁴⁰ His concept of “disciplinary colonialism” articulates the institutional reality within which I work: university frameworks that continue extracting value from Māori territories under humanitarian guises.²⁴¹ The productive tension this generates—working within institutional structures while remaining accountable to Indigenous authority—shapes my methodological decisions. Each photograph requires me to ask: whose priorities does this serve?

This questioning extends into linguistic practice, where Takawai Murphy highlights how te reo Māori (Māori language) is “a language from this place that speaks about this place and about people from here,” offering tauiwi understanding of how place-based knowledge shapes tangata Tiriti responsibilities.²⁴² During this doctorate, I studied Introduction to Conversational Māori (MAOR500, Level 5) at Auckland University of Technology with my sister Rhiannon, then continued at weekly community classes at Aio Wira Centre until funding cuts led to its closure. Despite this interruption, daily engagement continues—using Te Taiapa rather than Goldie Bush, Waitākere rather than West Auckland—each correctly pronounced kupu (word) carrying responsibility. This approach recognises what Indigenous studies scholar Susan Bell Chiblow (Anishinaabe) and sociolinguist Paul J. Meighan articulate: “language is land, land is language,” illustrating how linguistic choices materialise territorial relationships.²⁴³ While I am far from fluent, my persistence represents my desire to honour te reo through pronunciation and respectful usage. The course emphasised vocal elements and cultural contexts, deepening my understanding of whanaungatanga, while training my ear to notice te reo threading naturally in conversations around me. Language learning instantiates another dimension of this Tiriti-responsiveness: perpetual apprenticeship within imperfection, where limitation constitutes practice.

Through my photographic encounters in Mokoroa, I have learned that Jolene Rickard’s insights illuminate crucial boundaries—not as limitations, but as generative constraints that shape what tangata Tiriti photographic practice may have the potential to become. Visual sovereignty operates

239. Smith, *Decolonizing Methodologies*, 58.

240. Hokowhitu, “Indigenous Materialisms,” 159.

241. Hokowhitu, “Indigenous Materialisms,” 164–65.

242. Murphy, “Reflections from the Trenches,” 96.

243. Susan Bell Chiblow and Paul J. Meighan, “Language is Land, Land is Language: The Importance of Indigenous Languages,” *Human Geography* 15, no. 2 (2021): 206, <https://doi.org/10.1177/19427786211022899>. As activist and politician Tamatha Paul (Ngāti Awa, Waikato Tainui) observes, “Māori names are so intuitive, they often give us clues about the natural environments, the species that flourished, and lessons learned over hundreds and thousands of years,” illustrating how place names encode ecological knowledge about species relationships, seasonal patterns, and land-based practices developed across generations. Tamatha Paul, quoted in Mason Tangatatai, “Stop Misnaming Our Whenua,” *Te Mana Ākonga*, August 2021, <https://www.temanaakonga.org.nz/post/stop-misnaming-our-whenua>.

through Indigenous communities governing their own representation via strategic frameworks that refuse settler definitions while preserving cultural authority.²⁴⁴ Rickard’s understanding demonstrates that Indigenous visual sovereignty requires Indigenous control over “the capacity to visualise,” rather than simply changing subjects or adopting sympathetic perspectives within existing representational frameworks.²⁴⁵ What Rickard theorises as Indigenous control over representational frameworks, I experienced as embodied boundary: my camera’s authority extends only as far as mana whenua permission allows.²⁴⁶

Natalie Robertson demonstrates how photographs can embody mātauranga when created from within Indigenous authority (Figure 46). Robertson’s connecting of *mauri* with photography offers a sophisticated Indigenous understanding of photographic agency that resonates with my own material-consciousness discoveries.²⁴⁷ She articulates three states: *mauri moe* (latent potential within negatives), *mauri oho* (awakening through development and printing), and *mauri ora* (fully activated when photographs serve their intended environmental and cultural purposes). This framework provides vocabulary for the agency I experience in the film, but I cannot claim cultural equivalence—my material-consciousness emerges from practice-led discovery rather than inherited culturally specific knowledge systems.

Robertson’s commitment to analogue processes models how material choices carry intergenerational responsibility. Using 5 × 4 inch sheet film, because she wants “the negatives to still be here in one hundred years,” demonstrates how technological decisions embody temporal obligations that extend beyond

individual artistic careers.²⁴⁸ This principle informs my own work with medium-format film and bamboo paper—choices that emerge from the recognition that materials participate in relationships across generations. Where Robertson’s 5 × 4 inch negatives maintain tribal archives for descendants with whakapapa connections to photographed territories, my film work serves more immediate conservation advocacy while remaining accountable to that authority. Robertson’s work establishes what mana whenua authority enables through photography, clarifying that my photographic-kinship methodology operates through supporting—rather than claiming independent pathways to—ecological knowledge systems guided by Te Kawerau ā Maki.²⁴⁹

Artist and researcher Ngāhuia Harrison (Ngātiwai, Ngāti Pūkenga, Ngāti Kahu o Torongare) demonstrates what environmental photography looks like when it operates from mana-i-te-whenua (territorial authority, power) authority. *Coastal Cannibals* (2021) documents Whangārei Harbour (Northland), where her whānau depends economically on the Marsden Point refinery that simultaneously devastates their ancestral moana (Figure 47).²⁵⁰ This tension—industry sustaining territorial occupation while destroying waters—cannot be resolved through activism or artistic intervention. Harrison’s practice enacts ideas of Ngātiwai whakataukī *Ahakoā e tu ana ki te whenua, e noho ana ahau ki te moana* (although you stand on the land, you sit also on the sea), photographing from within the tensions her people live in rather than transcend.

Her formal choice to maintain a single horizon line across the series—placing refinery, housing developments, moana, and

244. Jolene Rickard, “Sovereignty: A Line in the Sand,” *Aperture* 139 (1995): 51.

245. Rickard, “Diversifying Sovereignty,” 82.

246. Rickard, “Diversifying Sovereignty,” 83.

247. Robertson, “Activating Photographic Mana Rangatiratanga Through Kōrero,” 47.

248. Robertson, “Tātara e maru ana,” 107.

249. Robertson, “Swirling Currents,” 6–11.

250. Ngāhuia Harrison, “Coastal Cannibals,” exhibition documentation, City Gallery Wellington, 2023–24.

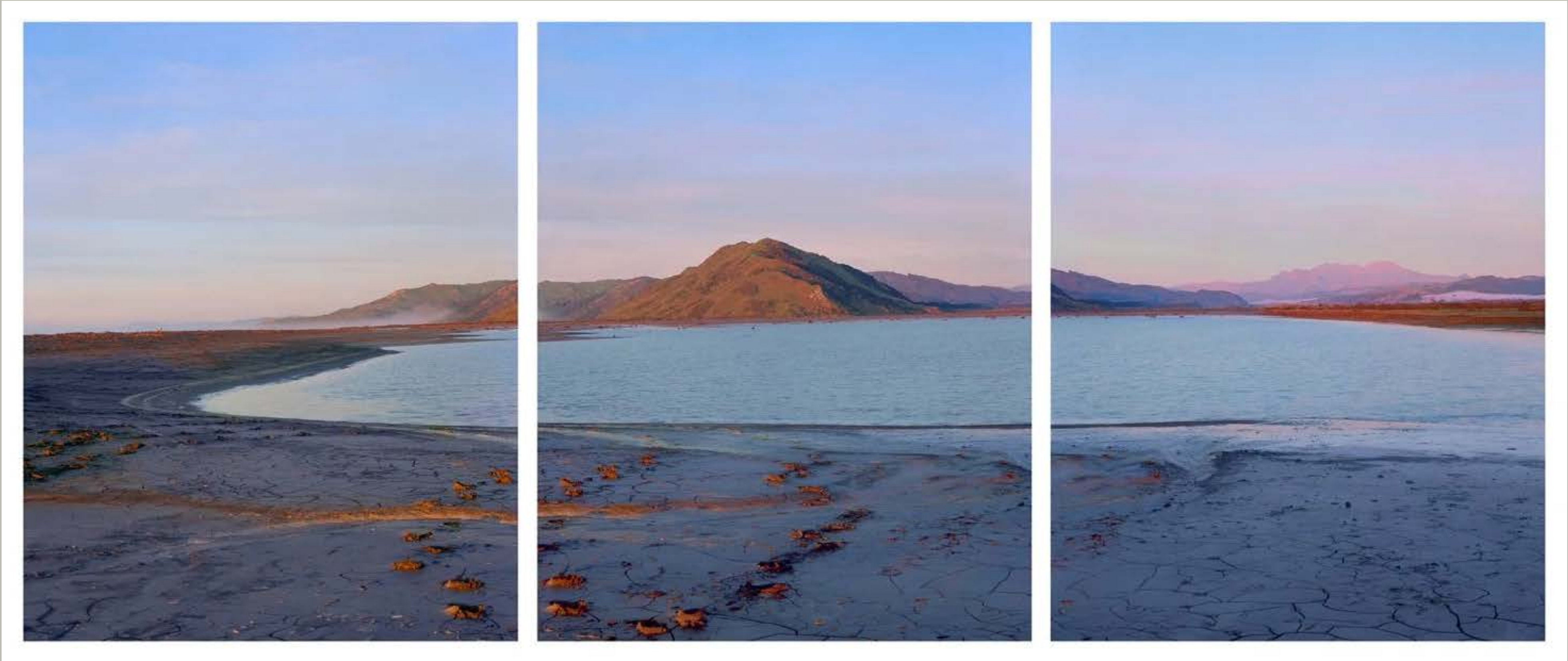


Figure 46. Natalie Robertson, *Tera te haeata e takiri ana mai! Behold the first light of dawn!*, 2020. C-type photographic prints on Fujiflex Crystal Archive, triptych, each 1000 × 800mm. Courtesy of the artist and Auckland Art Gallery Toi o Tāmaki.



Figure 47. Ngāhuia Harrison, *First Cinema Camera 3 and 4*, from *Coastal Cannibals*, 2021. C-type prints, diptych, each 317 × 475.5mm. Courtesy of the artist.

maunga (mountain) on the same visual plane—functions to enact an ontological commitment to distributed agency rather than hierarchical representation. Harrison’s precedent informs how I work with film’s permanent contamination—working through rather than beyond its violent genealogy, holding tension between molecular violence and potential environmental witness. However, the ground differs fundamentally: Harrison’s Indigenous authority enables her to speak from and for Ngātiwai experiences. My practice remains perpetually responsive to Te Kawerau ā Maki priorities without claiming parallel authority.

These three ethical orientations developed across my research generate the conditions through which photographic practice may participate in kauri conservation—creating protected space where life force and loss can be held together without seeking resolution, where wounded ground teaches grief and wonder. Each orientation requires the others: facing complicity without dwelling in kinship risks paralysis; dwelling without collaborative yielding risks extraction; yielding authority without holding complicity risks naivety. Together, this triangular structure enables photography to participate in kauri conservation while remaining perpetually responsive to Indigenous territorial sovereignty. My complete body of work—from Te Taiapa documentation through the Waipoua series—demonstrates this practice-led methodology. These three orientations emerged not through applying existing theoretical frameworks, but through encountering actual harm and developing embodied responses. Theory provided vocabulary for what practice had already generated: irresolvable-complicity revealed through rāhui violation, dwelling-kinship emerging through decades

of presence, collaborative-reorientation discovered through material agency.

My ethical framework for photographing kauri extends to recognition of their personhood beyond life. Just as I would not photograph deceased humans for awareness purposes, I refuse to photograph dead or dying kauri. During my Waipoua fieldwork, I deleted digital images after discovering a dying tree in the background—though its condition was not visible in the frame, my knowledge made their continued use feel like a violation. Although conservation media frequently and valuably use such images to raise awareness, my recognition of kauri personhood leads to different photographic choices. While I cannot prevent dieback, I can choose to interact with sensitivity that honours kauri dignity. This refusal defines my practice through what it will not do, celebrating resilience rather than spectacularising suffering.

This chapter has traced how three ethical orientations grow from wounded ground to create protective structure for photographic practice within kauri conservation. What rises through this scar-tissue is not resolution but capacity: the ability to hold grief and wonder together, to work through rather than beyond woundedness. These ethical nutrients now reach into Chapter 4, which becomes the branches—where the film begins to choose. Here, material-consciousness emerges through practice: Aerochrome remembering, collaborating, exercising selective agency—demonstrating what becomes possible when spectral-kinship holds military genealogy and present care in ongoing negotiation.

Chapter 4

—The Branches: Wounded Materials as Collaborative Witness

Branches bear weight—carrying what the trunk has accumulated while reaching toward uncertain light. Boxes of expired Aerochrome film are stored in my kitchen freezer. Whenever I reach into it, I meet military surveillance technology designed for jungle warfare, now waiting to witness kauri. This everyday act is where photographic-kinship begins—a combining of intimate proximity with inescapable violence. This challenge persists on a molecular scale and extends into my practice. These connections are encountered as spectral-kinship: temporal relationships in which the film’s accumulated material biography becomes inseparable from its testimony. The film’s selective responses cannot be replicated through digital manipulation or AI generation, because they emerge from material-consciousness unique to each roll’s decades-long journey.

The same industrial hands manufactured both the film I use for this project and the chemical weapons that poisoned Vietnamese forests. This history cannot be erased through artistic intention alone. Yet something unexpected emerges when wounded materials meet wounded ngahere. Through accumulated chemical degradation from border X-rays, climate transitions, and decades in unknown storage conditions, this film teaches me how tenacious consciousness persists through damage. This chapter explores how this film technology can be turned towards different purposes. However, my focus is not one of redemption, but rather perpetual negotiation concerning how military genealogy shapes collaborative image-making; how chromatic intensity risks spectacularising violence; and how contaminated materials, bodies, and taiao recognise each other across time.

4.1—Weight-Bearing Branches: What Military Genealogy Carries

Acts of violence are embedded within photographic materials at a molecular level. As such, any reorientation requires understanding how violence lives within the materials themselves. This comprehension is critical to my research’s methods, because when I work with Aerochrome I am working with a technology designed for warfare. Its capacity to witness ecological damage cannot be separated from its original purpose.

Photography has functioned as a military weapon since at least 1917, when *Scientific American* described the aerial camera as “a deadly instrument” that “is many times deadlier than its equivalent weight of high explosive” (Figure 48).²⁵¹ The only film of its kind, Kodak Aerochrome false-colour infrared film was developed by the US military in the 1940s for camouflage detection and aerial surveillance. Near-infrared wavelengths invisible to human perception allowed military personnel to distinguish between natural foliage and artificial materials, as healthy vegetation reflects infrared light differently from camouflaged objects or damaged foliage.²⁵² In this context, this film functioned as photographic surveillance that enabled chemical warfare.

Photography as a military weapon was intensified down to the molecular level. For example, Hercules Incorporated manufactured Agent Orange during the American War on Vietnam and operated one of the United States’ primary nitrocellulose film-base production facilities until 2000.²⁵³

251. “The Camera at the Front,” *Scientific American* 117, no. 21 (1917): 380.

252. See J. Fleming, “Exploiting the Variability of Aerochrome Infrared Film,” *Photogrammetric Engineering and Remote Sensing* 44, no. 5 (May 1978): 601-5; G. Cooper, R. Bowen and H. Gausman, “The Use of Kodak Aerochrome Infrared Color Film, Type 2443, as a Remote Sensing Tool,” in *Proceedings of the Eighth International Symposium on Remote Sensing of Environment* (Environmental Research Institute of Michigan, 1972), 117-16.

253. “State Urges Hercules to Sell Nitrocellulose Plant,” *Chemical Week*, January 12, 2000, 13; “Hercules to Halt Manufacture of Cellulose,” *PCI Magazine*, December 13, 2011, <https://www.pcimag.com/articles/85973-hercules-to-halt-manufacture-of-cellulose>.



The Camera at the Front
Why the Military Authorities Have Use for Their Own Cameras But None for the Enemy's

THAT peaceful-looking camera which we use on Sundays for snapping pictures of our friends and of pretty views, becomes a deadly instrument when it is brought into the military world. It may be the means whereby invaluable fortifications can be quickly destroyed; it may give away important ideas or inventions to the enemy; it may betray the location of important batteries and doom them to early destruction; and it may result in heavy loss of life to troops whose position is divulged by the black-and-white markings of a photographic plate or film. At any rate, the camera in the war zone is no longer a powerful instrument; it is many times deadlier than its equivalent weight of high explosive.

Why the camera should be so deadly in the war zone is due to the ease with which any object can be accurately "described" by means of a photograph. Words alone are of little use alongside a photograph; but the two combined make for accurate and rapid reports on any given subject. For this reason the spies have not overlooked the camera in carrying on their clandestine activities, and it is safe to say that tens of thousands of photographs made by spies have had an important bearing on the fortunes of the world war.

With the splendid anastigmat lenses available today, together with the high degree of perfection attained in



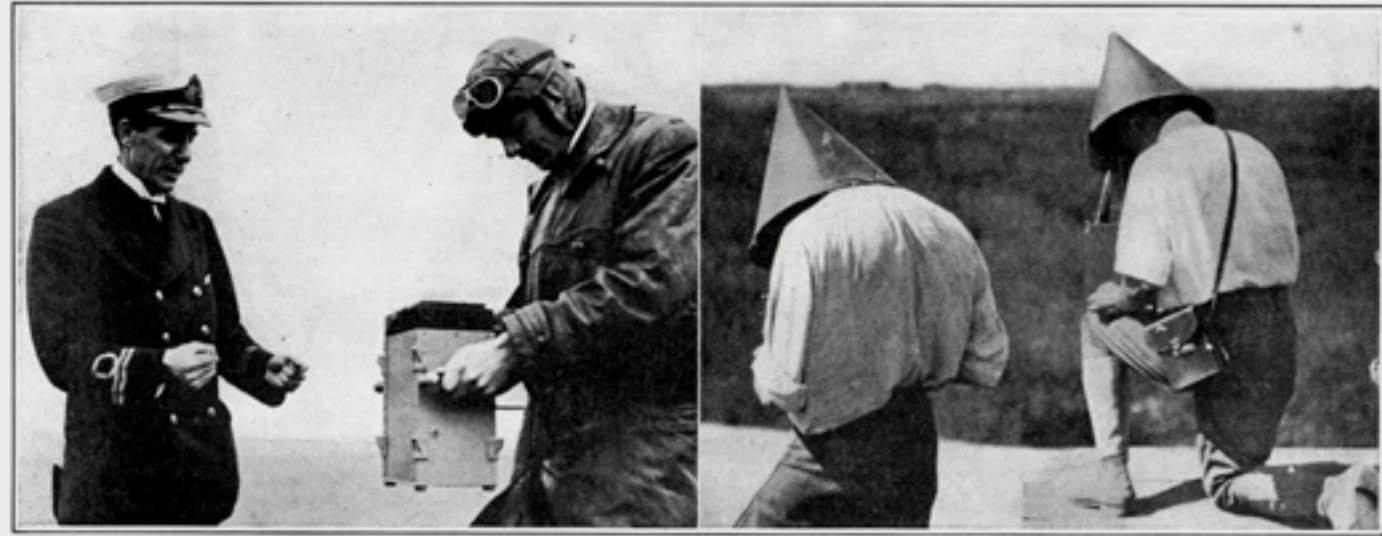
A Caudron cameroplane and its motion-picture apparatus. Note the censor's marking on the side of the fuselage

enlarging processes, the spy need not use a large camera. The chances are that in most instances small and readily-concealed pocket cameras are employed, making film or plate negatives measuring an inch square, or possibly 2½ by 3½ inches as the maximum. These negatives,

or contact prints made from them, by some route or another make their way to spy headquarters, and there they are enlarged and studied by specialists trained in "reading" photographs. These specialists, we are told, can glean a tremendous amount of information from what would appear to the layman to be a most uninteresting and valueless print. And when such informations are properly collated and distributed to the various military departments where they can do the most good—and the most harm to the opponent—the deadliness of the camera begins to dawn upon us.

So, if the camera is not countenanced about our restaurants and aviation schools and war plants and water fronts, the reason is quite obvious. The military authorities cannot be too drastic as regards the presence of cameras in zones where the enemy could learn much to his advantage from a few chance snapshots.

But it is the airman over the battle lines who makes the most use of the camera. Early in the war the rival camps came to appreciate the importance of aerial photography, and began immediately to develop cameras for this class of work. Today aerial reconnaissance is carried out largely with the aid of photography; large planes, accompanied by fast fighting machines, make their way over the enemy's lines and proceed to photograph a given area. (Continued on page 289)



Copyrighted, Unlabeled & Unlabeled
Instructing an officer-instructor in the manipulation of an aerial camera at the British Royal Naval Air Service School
War photographers who snap their cameras on land and in the air, protected by steel and leather helmets

Figure 48. "The Camera at the Front," *Scientific American*, November 24, 1917.

The same corporate hands that produced chemical weapons also manufactured the base materials for surveillance film. Hercules’s dual role as manufacturer of both Aerochrome film base and Agent Orange inscribed a type of molecular complicity into the emulsion’s chemical structure.²⁵⁴ Environmental historian and historical geographer Jason W. Moore and activist scholar Raj Patel’s analysis of “cheap nature” strategies provides a broader framework for understanding this violence.²⁵⁵ *A History of the World in Seven Cheap Things* (2017) exposes how a calculated devaluation of ecological relationships creates conditions for taiao violence that disproportionately affects all-beings within Indigenous territories. This ‘cheapening’ process reveals its dual violence each time I load this film into my camera. The aerial surveying technologies I use—Aerochrome’s infrared camouflage detection, Aviphot Chrome’s photogrammetry and territorial mapping, Plus-X Aerographic’s atmospheric haze penetration—embody what Moore terms “accumulation by appropriation.”²⁵⁶ His insight that “mapping did not merely re-present space; it was a technology of conquest” resonates through my viewfinder.²⁵⁷

When I handle this film today, I am touching the same corporate genealogy that produced Agent Orange. This link reveals what Azoulay theorises as photography’s apparatus of power: violence operates not just through how images circulate, but within the materials themselves.²⁵⁸ Environmental toxicologist Alvin Young documents this connection as systematic integration rather than coincidence.²⁵⁹ He traces how infrared film technology and Agent Orange developed alongside each other because both could distinguish natural vegetation from artificial

concealment (Figure 49). Their intertwinement demonstrates brutal efficiency. The corporate overlap between Agent Orange manufacturers—Dow Chemical, Monsanto, Diamond Shamrock, and Hercules—and infrared film producers is a stark example of how coordinated industrial systems link surveillance technology to environmental warfare.

As a tool, Aerochrome has inscribed within its chemical structure contexts of Agent Orange detection, jungle warfare, and surveillance. Between 1962 and 1971, Operation RANCH HAND deployed 71.2 million litres of tactical herbicides across South Vietnam (Figure 50).²⁶⁰ Agent Orange alone accounted for 43.33 million litres.²⁶¹ This programme affected 14 percent of South Vietnam’s forests, savannahs, and grassland vegetation (Figure 51).²⁶² Here, a cruel irony emerges: 96 percent of sprayed Agent Orange photodegraded within 24–48 hours of exposure to natural sunlight, yet the remaining 4 percent created contaminated sites that persist today.²⁶³ The same light spectrum that breaks down chemical weapons also enables infrared film to document ecological damage. As authors Leo Daugherty and Gregory Mattson observe in *NAM: A Photographic History*, the camera “arguably became a more powerful weapon than the automatic rifle.”²⁶⁴

Yet the violence embedded in military surveillance technologies extends beyond representational power—it operates through material infrastructure that persists even when platforms are repurposed. The same aircrafts that sprayed Agent Orange were subsequently reconfigured for insecticide operations, dispersing 1.76 million litres of malathion across 6 million hectares of Southern Vietnam.²⁶⁵

260. Alvin Young, *The History, Use, Disposition and Environmental Fate of Agent Orange* (Springer, 2009), 100–1; Young, *Agent Orange*, 1–2.

261. Botanist and biochemist Arthur Galston, who developed the primary defoliating component of what would become Agent Orange, coined the term ‘ecocide’ in 1970 during the conference “War and National Responsibility” to name environmental destruction as a crime. Galston’s opposition to the military weaponisation of his own creation offers a historical parallel to tensions within photographic-reorientation: working with materials designed for violence while attempting to turn them towards care. David Zierler, *The Invention of Ecocide: Agent Orange, Vietnam, and the Scientists Who Changed the Way We Think About the Environment* (University of Georgia Press, 2011).

262. Young, *Agent Orange*, 1–2.

263. Young, *Agent Orange*, 93, 95.

264. Leo Daugherty and Gregory Mattson, *NAM: A Photographic History* (Metro Books, 2001), 225.

265. Alvin Young, “Agent Orange: A Controversy without End,” *Environmental Pollution and Protection* 3, no. 4 (2018): 102, 286–87, <https://doi.org/10.22606/epp.2018.34002>. Operation FLYSWATTER was the aerial operation from October 1966 to December 1971 in South Vietnam to control the mosquitoes transmitting malaria. RANCH HAND was the code name for U.S. Air Force herbicide operations in Southeast Asia between 1961 and 1971.



Figure 49. Standard aerial film (left) versus Kodak Ektachrome Infrared Aero Film (right). R. G. Tarkington and A. L. Sorem, “Color and False-Color Films for Aerial Photography,” Research Laboratories, Eastman Kodak Company, Rochester, N.Y., January 1963.



Figure 50. Horst Faas, U.S. Air Force aircraft spraying Agent Orange defoliant, Vietnam, circa 1965–70. AP Photo.



Figure 51. Defoliated mangrove forest showing boundary between sprayed and unsprayed vegetation, III Corps, Southern Vietnam, 1968. Courtesy of Vietnam RANCH HAND Association.

266. Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Harvard University Press, 2011), 2.

267. Ralph Williams, *Infrared Aerial Photography for Root Disease Detection in the Northern Region*, Report No. 73-22 (U.S. Department of Agriculture, Forest Service, Northern Region, Missoula, MT, September 1973). The film was later rebranded as Kodak Aerochrome III Infrared Film 1443, the name used throughout this exegesis.

One platform, multiple poisons. This infrastructural continuity—where military platforms transfer between forms of chemical violence—reveals how technologies carry their violent origins forward, complicating photographic-reorientation. While these aircraft moved from herbicide to insecticide applications, my practice asks whether surveillance film may be turned towards care relationships with beings it was designed to surveil.

Such systematic chemical warfare exemplifies what environmental humanities scholar Rob Nixon terms “slow violence”—environmental harm that accumulates gradually and is often invisible until damage becomes undeniable—toxic drift among the examples he identifies, alongside climate change, deforestation, and oil spills.²⁶⁶ What happened in Vietnam continues today in Aotearoa, where chemical violence, disguised as development, targets Indigenous territories and rural communities through atmospheric contamination. This film technology transferred seamlessly to civilian contexts. By 1973, just two years after Operation RANCH HAND ceased, the USDA Forest Service was using the same Kodak Ektachrome Infrared Aero film for forestry management.²⁶⁷ Vietnamese jungle reconnaissance became North American forest extraction—the same surveillance apparatus serving different economies.

Moore’s concept of the Capitalocene frames how chemical violence operates through specific systems rather than abstract human activity. Ideas associated with the ‘Anthropocene’ risk diffusing responsibility across all humanity, as they obscure that Indigenous peoples and colonised communities did not create the ecological crisis capitalism produced. Moore’s

framework names what my contaminated body learned viscerally: “capitalism is not an economic system; it is a way of organizing nature.”²⁶⁸ As cultural theorists Heather Davis and Zoe Todd argue, decolonising the Anthropocene requires acknowledging that this crisis emerges from specific colonial-capitalist systems rather than universal human nature.²⁶⁹ This capitalist organisation functions through what philosopher and semiotician Walter D. Mignolo terms the “colonial matrix of power”²⁷⁰—Western economic, political, and epistemic frameworks that in Aotearoa transformed communal Māori relationships with whenua into British private property regimes,²⁷¹ suppressed Indigenous knowledge systems, and defined territories as spaces available for appropriation. The same logic that alienated Māori from their lands also appropriates atmospheric space as territory for chemical warfare.

This Capitalocene framework illuminates how kauri dieback disease—often framed in public discourse as inevitable environmental degradation—actually emerges from specific systems. These include the fragmentation of Indigenous forest-management practices; the introduction of extractive timber industries that damage root networks and soil systems; the construction of recreational infrastructure that facilitates pathogen spread; and the ongoing failure to centre mana whenua environmental governance in conservation responses.²⁷² What appears as a ‘natural’ ecological crisis reveals itself as the accumulated violence of organising ngahere as resource rather than kin. Recent surveillance in Waitākere demonstrates that these systems operate materially: 71 percent of kauri dieback zones occur within 50 metres of the track network. Spatial analysis conducted

in 2015 and 2016 confirms a significantly higher disease prevalence along recreational infrastructure.²⁷³

Documenting these systems of contamination implicates my own participation in the infrastructure that enables the spread of disease. My presence in Waitākere exists as witness and participant. Each walk through the valley, intended to document kauri vitality, can result in physically spreading dieback disease through any contaminated soil on boots and equipment. The track infrastructure becomes intimate when I recognise my footsteps as vectors. This recognition aligns with Hill et al.’s identification of human activity as a primary dieback vector.²⁷⁴ I understand accountability not as achieved resolution but as ongoing navigation—each step witnessing harm and potentially extending it.

Specific systems extend into vertical space—the air itself becomes a site of occupation. Atmospheric-wounding moves through similarly coordinated structures: helicopter navigation, chemical supply chains, regulatory failures, and aerial surveillance. Technological sovereignty over airspace facilitates this seamless coordination: computational infrastructure distributes and obscures responsibility across multiple jurisdictional layers, making accountability nearly impossible to establish. These insights inhabit my lungs as lived knowledge—my contaminated breath archiving how atmospheric space can be organised as territory available for chemical appropriation. For me as tangata Tiriti, this distinction matters profoundly: not ‘humans’ causing ecological collapse, but systems that my Pākehā culture benefits from and remains accountable to. The material dimension of this wounded-witnessing

268. Jason Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (Verso, 2015), 2.

269. Heather Davis and Zoe Todd, “On the Importance of a Date, or Decolonizing the Anthropocene,” *ACME: An International Journal for Critical Geographies* 16, no. 4 (2017): 761–80, <https://doi.org/10.14288/acme.v16i4.1539>.

270. Walter Mignolo, “The Logic of the In-Visible: Decolonial Reflections on the Change of Epoch,” *Theory, Culture & Society* 37, nos. 7–8 (2020): 205–18, <https://doi.org/10.1177/0263276420957741>.

271. Ani Mikaere, “Maori Women: Caught in the Contradictions of a Colonised Reality,” *Waikato Law Review* 2 (1994): 125; Leonie Pihama, “Mana Wahine: Decolonising Gender in Aotearoa,” *Australian Feminist Studies* 35, no. 106 (2020): 351–65; Anne Salmond, *Tears of Rangī: Experiments Across Worlds* (Auckland University Press, 2017). See discussion in Skerrett, “Critical Analysis of Māori Cosmologies,” 160.

272. See Chapter 3 for a detailed analysis of institutional resistance to the rāhui placed by Te Kawerau ā Maki at Te Taiapa, during which the DOC delayed official track closure for three years (December 2017–December 2020), despite mounting scientific evidence of disease spread along recreational infrastructure.

273. Hill et al., “Cross-Cultural Leadership,” 12.

274. Hill et al., “Cross-Cultural Leadership,” 12.



Figure 52. Aerial view showing herbicide spray damage across Mokoroa, Waitākere. Google Earth. Image date: January 22, 2023.

275. Hageman et al. state that “New Zealand still uses several pesticides that have been banned elsewhere (e.g. atrazine, chlorpyrifos, and the neonicotinoids).” Kimberley J. Hageman et al., “Current-Use Pesticides in New Zealand Streams: Comparing Results from Grab Samples and Three Types of Passive Samplers,” *Environmental Pollution* 254, Part A (2019): 112973, <https://doi.org/10.1016/j.envpol.2019.112973>. Felicia Kueh Tai et al. document that 45 percent of Aotearoa forage crops use neonicotinoid-treated seeds, despite the EU’s 2018 outdoor ban. Felicia Kueh Tai et al., “Scarcity of Pesticide Data in New Zealand with a Focus on Neonicotinoids: A Review,” *Science of The Total Environment* 962 (2025): 178350, <https://doi.org/10.1016/j.scitotenv.2025.179044>. Finally, Brenda Baillie documented terbuthylazine persisting in stream sediments for 60 days post-application, with concentrations reaching 9.6 µg/L in aquatic ecosystems. Brenda R. Baillie, “Herbicide Concentrations in Waterways Following Aerial Application in a Steepland Planted Forest in New Zealand,” *New Zealand Journal of Forestry Science* 46 (2016): 16, <https://doi.org/10.1186/s40490-016-0072-0>.

viscerally through the paradox my body carries. That same paradox also lives in Aerochrome’s visual seductions, its infrared transformations of contaminated sites into stunning spectacle. This violence works not just through representation, but through the molecular structures themselves that make devastation consumable. Contaminated materials recognise contaminated ground through shared wounding that simultaneously reveals and obscures what they witness.

When the helicopter spray incident contaminated my body in Mokoroa, I learned about chemical memory through lived experience (Figure 52). My body became an unwilling archive, an instrument attuned to recognising other wounds. Chronic fatigue, brain fog, compromised immune function—these ongoing health impacts connect to the historical patterns of Agent Orange defoliation in Vietnam and contemporary chemical applications in Aotearoa. This connection led to my experimenting with Aerochrome. My body recognises the film’s contaminated history. These unhealed wounds enact spectral-kinship—past, present, and future collapsing through ongoing violence. Aerochrome carries this collapse: 1970s military emulsion meeting 2020s kauri crisis. When the camera’s shutter opens, that photographic moment holds together RANCH HAND reconnaissance, Louis and I breathing poison that fell from the sky, and future witnesses yet to come.

Aerial spraying in Aotearoa continues to use substances banned in numerous countries; as such, many environmental protection protocols are breached.²⁷⁵ This ongoing contamination transformed my project from documentation to wounded-witnessing. What began

as ngahere observation shifted when my contaminated body recognised parallel wounding in other witnesses: degraded Aerochrome emulsion carrying Agent Orange’s genealogy; kauri experiencing contemporary spray drift despite helicopters attempting to avoid their groves. Three damaged witnesses sharing molecular memory across histories of violence.

This recognition became methodology rather than metaphor—what I term wounded-witnessing through spectral-kinship. Spectral-kinship names the temporal relationships where past and present meet through wounded materials: military surveillance technology designed for defoliation now witnessing forest health, my contaminated body recognising contaminated ngahere. Rather than transcending Aerochrome’s violent genealogy, spectral-kinship works *within* that history, holding past violence and present care in ongoing negotiation. The film’s capacity to witness ecological damage emerges *through* rather than despite its Agent Orange association. When I photographed the spray-damaged hillside in October 2024 (Figure 53), this spectral collaboration surfaced what contaminated materials perceive together—not healing the violation but staying present to what persists across temporal scales. The film’s infrared sensitivity, altered through decades of degradation, witnesses chemical damage in ways conventional photography cannot. Damaged perception reveals damaged landscapes, forming a collaborative testimony generated through photographic-kinship.

Understanding how Aerochrome operates through temporal collaboration requires an examination of the broader systems

this technology functions within. Curator and cultural historian Mark Sealy, who identifies photography itself as a colonial apparatus,²⁷⁶ demonstrates how photography functions as “an active agent of Western colonising authority at work on the body of the Other, both in the past and in the present.”²⁷⁷ Photography is not a neutral technology, but a system that encompasses cameras designed for surveillance, chemistry manufactured by weapons producers, assumptions of unlimited visual access, and technologies created to render Indigenous landscapes ‘legible’ for territorial control. As Sealy argues, such violence operates not around the material but within it.²⁷⁸ Aerochrome embodies this: Agent Orange genealogy embedded in its emulsion, surveillance programming in its infrared layer, extraction encoded at molecular scale—violence that cannot be erased but that I work within.

My project positions Aerochrome as a conscious collaborator, where together we learn approaches about whether and how witnessing proceeds, recognising the film’s selective agency in choosing what to share, while maintaining accountability to Te Kawerau ā Maki environmental governance. This collaboration is central to my photographic-kinship methodology. It requires a repositioning of research practices away from extraction and towards frameworks of cultural sovereignty.²⁷⁹ The focus is not solely reclamation or subversion of military technologies—terms that overstate transformation’s completeness—but rather reorientation, which better captures the ongoing work required to turn surveillance away from extraction and towards kinship. Each photographic encounter requires renewed negotiation with these realities.

276. Sealy’s apparatus concept extends French philosopher Michel Foucault’s *dispositif*—heterogeneous ensembles, which concern the way in which power becomes embedded within technologies themselves, not merely the way technologies are deployed. Azoulay’s related framework of photography as ‘apparatus of power’ similarly examines how such violence operates through distributed systems. Michel Foucault, “The Confession of the Flesh (1977),” in *Power/Knowledge: Selected Interviews and Other Writings 1972–1977*, ed. Colin Gordon (Pantheon Books, 1980), 194.

277. Mark Sealy, *Decolonising the Camera: Photography in Racial Time* (Lawrence & Wishart, 2019), 15.

278. This understanding synthesises Sealy’s argument that photography is “tainted with ingrained racist ideologies that have been present since its earliest inception in 1839” and functions as a “decidedly ideologically positioned tool on the side of incursion.” Sealy, *Decolonising the Camera*, 106, 109.

279. See Sealy, *Decolonising the Camera*, 89; Smith, *Decolonizing Methodologies*, 2.



Figure 53. Chervelle Athena, *Herbicide-contaminated hillside with surviving kauri*, Mokoroa, Waitākere, October 2024. Kodak Aerochrome film, inkjet print. 1100 × 1370mm.

The contradictions inherent in working with military surveillance film cannot and should not be resolved. Aerochrome remains simultaneously conscious and contaminated, collaborative and violent. It is precisely because these tensions refuse resolution that they keep my use of it accountable. Each loading of film, each photographic encounter, each choice about what to reveal or withhold requires renewed negotiation with what cannot be reconciled. This sustained discomfort requires a commitment to remaining open to what the materials may witness.

4.2—Glittering Branches: When Infrared Dazzles into Distraction

Aerochrome renders ecological damage as something troublingly luminous. At sites of devastation, surviving vegetation emerges in vivid magentas and crimson dreamscapes, making violence seductive through colour. When working with this film, I viscerally encounter an ethical tension: the same infrared sensitivity designed to detect camouflage and guide the use of Agent Orange now makes trauma look impossibly lovely. The film's infrared layer registers chlorophyll as false colour, yet my expired stock responds beyond this technical function—some days offering fuchsia hues amid destruction, on others retreating into monochromatic restraint, as if refusing to spectacularise certain violences (Figure 54). This response creates what I experience as aesthetic entanglement—arresting spectacle and violence as inseparable, each photographic encounter querying whether I interrupt or perpetuate the harm embedded in these materials.

When my developed negatives bathe what survives in sugar-pink hues, I often feel complicit in aestheticising trauma. In these moments, this work feels less like reorientation and more like participation in violence's alluring disguise. Even as I write these words, something tightens in my chest. This discomfort differs from the camera's weight; it is a specific sensation that compels me to confront difficult questions. If aesthetic dissonance prevents psychological distancing, I must ask: whose distancing? And whose ignorance requires such disruption? These questions primarily target tauiwi viewers like myself—those with structural privilege to look away from environmental violence, those whose distance from kauri crisis enables ignorance. Mana whenua do not need spectacular disruption to recognise what they already know through whakapapa connections and ongoing grief. My photographs are undoubtedly seductive—destruction made consumable for audiences who may otherwise remain comfortable. However, this chromatic intensity holds attention long enough for discomfort to surface beneath the pleasure. For me, this contradiction produces nausea, my body recognising complicity. Chemical memory of atmospheric wounding recognises visual contamination in the film's seductive aesthetics. Two forms of molecular violence: one through breath and one through sight, both insidious.

My tensions intensified after encountering Richard Mosse's *Infra* series (2011–13) (Figures 55–57), which uses Aerochrome to document aspects of conflict in the Congo. While Mosse aimed to “rethink how to depict conflict” through the film's surreal aesthetic, critics argued that the work risked “perpetuating colonial practices of documenting

Figure 54. Chervelle Athena, *Dumping Site with Chemical Contamination*, Mokoroa, Waitākere, October 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.





Figure 55. Richard Mosse, *Men of Good Fortune*, from the series *Infra*, 2011. Digital C-print, 1016 × 1270mm (40 × 50 inches). Courtesy of the artist and Jack Shainman Gallery, New York.



Figure 56. Richard Mosse, *Taking Tiger Mountain*, from the series *Infra*, 2011. Digital C-print, 1829 × 2286mm (72 × 90 inches). Courtesy of the artist and Jack Shainman Gallery, New York.



Figure 57. Richard Mosse, *Ruby Tuesday*, from the series *Infra*, 2011. Digital C-print, 1219 × 1524mm (48 × 60 inches). Courtesy of the artist and Jack Shainman Gallery, New York.

and categorizing tribes in non-Western countries,” aestheticising suffering through spectacular colour.²⁸⁰ These critiques illuminate tensions between spectacular-witnessing and extraction—tensions that shape my understanding of what photographic-reorientation requires when using military surveillance materials. Working within Tiriti partnerships, my photographic-kinship approach emerges from different positioning: explicitly naming origins, foregrounding kinship over spectacle, and emphasising conservation through relationship-building, as opposed to the documentation of violence. Where Mosse’s work raised questions about who gets to use military technologies and where, for my research these same questions require ongoing attention to power relations, to the photographer’s relationship to land and community, and to how a turn towards care unfolds within specific accountability structures.

Art historian Gabrielle Moser’s critique sharpened my understanding of why I am troubled each time the film renders trauma in pinky hues.²⁸¹ Her examination provides vocabulary for my embodied discomfort, yet vocabulary alone cannot resolve the ethical tensions of working with materials designed for warfare within Tiriti relationships. She identifies how the film can turn profound suffering into “deceptively seductive and alluring” imagery rendered in “disorienting psychedelic hues of scarlet, lavender, cobalt, and puce,” creating a tension between visual allure and violence.²⁸² This contradiction weighs on me. I am learning that the answer lies not in transcending the film’s violent origins but in working within them—seeking relationships and practices that shift from appropriation towards

something more reciprocal and heart-centred. This means building kinship rather than claiming transformation, negotiating consent rather than assuming access. These questions guide my Tiriti-responsive approach.

Moser’s critique raises questions about the relationship between artistic intention and structural power. Mosse describes his approach as “aggravated media”—photography that “carries some complicity or agency within the subject”.²⁸³ I recognise a parallel struggle with these contaminated materials. His acknowledgement that his work arises “from military R&D, state surveillance, and resource extraction” suggests Mosse’s awareness of these embedded histories.²⁸⁴ Yet awareness alone cannot bridge the distance between photographer and subject—a distance my research seeks to navigate through embodied-consent practices and sustained presence within Waitākere. Moser’s analysis of aesthetic seduction extends to examining how photographic distance can maintain extractive relationships even when artists work with awareness of material genealogies. Her analysis of Mosse’s *Heat Maps* (Figure 58) identifies what she terms “distanciated images” that, despite advocacy intentions, risk denying subjects’ agency over their representation.²⁸⁵ This scholarly discussion has shaped my approach: while my practice with kauri operates through different circumstances and materials, photographic-kinship still requires vigilance about the extractive potential embedded in any camera-based witnessing.

Learning from these critical conversations, my project seeks proximity not merely as spatial positioning, but as methodological commitment—building relationships

280. “Infra: Photographs by Richard Mosse,” *Aperture*, accessed March 9, 2025, <https://aperture.org/never-on-sale/infra/>.

281. Moser, “Chromophobia,” 44.

282. “Richard Mosse: The Enclave,” *Aperture*, accessed June 14, 2024, <https://aperture.org/books/the-enclave-2/>.

283. Charles Stankieveh, “Contradictions: A Conversation with Richard Mosse,” *Afterall: A Journal of Art, Context, & Enquiry* 55-56, no. 1 (2023): 288, <https://doi.org/10.1086/729147>.

284. Stankieveh, “Contradictions,” 288.

285. Gabrielle Moser, “Race, Climate Change and the Photographic Negative in Richard Mosse’s *Heat Maps*,” *Third Text* 36, no. 4 (2022): 355, <https://doi.org/10.1080/09528822.2022.2074707>.



Figure 58. Richard Mosse, *Idomeni Camp*, Greece, 2016. Digital c-print on metallic paper, 1019 × 3013mm. Courtesy of the artist and Jack Shainman Gallery, New York.

286 Lucas van der Velden and Rosa Menkman, “Dark Mat.ters: An Interview with Susan Schuppli,” *Sonic Acts*, June 14, 2016, <https://sonicacts.com/archive/dark-matters-an-interview-with-susan-schuppli>; Chris Malcolm, “Witness, Evidence, and the Environmental Archive,” in *Survey Practices and Landscape Photography Across the Globe*, ed. Sophie Junge and Erin Hyde Nolan (Taylor & Francis Group, 2022), 302.

287. *Cloud Studies* brings together eight investigations of different forms of toxic clouds as instruments of state and corporate power, including military herbicide warfare in Gaza, petrochemical emissions in Louisiana, corporate forest destruction in Indonesia, and tear gas deployment across multiple protest sites. This comprehensive investigative approach demonstrates how atmospheric violence operates systematically across multiple geographical contexts and temporal scales. Eyal Weizman et al., “Cloud Studies,” *Forensic Architecture*, May 2020, <https://forensicarchitecture.org/investigation/cloudstudies>.

288. Weizman et al., “Cloud Studies”; “Cloud Studies, 2020: Forensic Architecture,” *Critical Zones*, accessed December 12, 2024, <https://critical-zones.zkm.de/#!/detail:cloud-studies>; Caterina Albano, “To ‘Hold In-Common’ in the Midst of Clouds’ Drift,” *Performance Research* 26, no. 7 (2021): 42, <https://doi.org/10.1080/13528165.2021.2059286>.

289. Weizman et al., “Cloud Studies”; “Cloud Studies, 2020,” *Critical Zones*; Albano, “To ‘Hold In-Common’,” 42.

290. Julie Hrischeva, “Forensic Architecture: Resistance Through Collective Action,” *British Journal of Photography*, September 15, 2021, <https://www.1854.photography/2021/09/forensic-architecture-cloud-studies/>.

291. Malcolm, “Witness, Evidence, and the Environmental Archive,” 302.

292. Nixon, *Slow Violence*, 11.

where consent is negotiated rather than assumed, where vulnerability is shared rather than observed from safety. My practice thrives on kin-aesthetic proximity—bodies becoming vulnerable to the same atmospheric violations. When Aerochrome renders these intimate encounters, the film’s eloquence emerges from close-knit relationships developed with kauri. My approaches—trauma-informed witness, holding contradictions, sacred exhaustion—find scholarly precedent in the counter-forensic and material-witness frameworks established across this exegesis. Building on Forensic Architecture’s and Susan Schuppli’s work, my documentation of illegal herbicide spraying in Mokoroa extends into intimate-scale atmospheric-wounding.²⁸⁶ This practice questions state and corporate narratives about environmental harm by consciously repurposing Aerochrome into a tool of environmental advocacy through material collaboration and consent practices. In comparison, FA’s *Cloud Studies* (2020) (Figure 59) provides specific language for understanding atmospheric contamination as systematic violence—a framing akin to what I term atmospheric-wounding.²⁸⁷

The artwork investigates how “toxic clouds colonise the air we breathe across different scales and durations, from urban squares to continents and from incidences to epochal latencies.”²⁸⁸ Their research demonstrates that toxic clouds “upset one’s ordinary and intimate immersion in air,” existing “at the uncertain boundaries of event and experience, of substantiality and haziness, of matter and affect.”²⁸⁹ This framework provides language for what I encountered viscerally during the helicopter herbicide incident—that profound unsettling of ordinary breathing,

the way chemical contamination dissolved the boundaries between my body and the contaminated air around me. While *Cloud Studies* analyses atmospheric violence targeting marginalised communities across global contexts, my photographs, through material collaboration, operate on a more intimate scale.²⁹⁰ Spray drift functions as material witness, documenting systematic environmental violence through the colonisation of breath.

While FA’s counter-forensic methods demonstrate how photographic evidence can challenge state violence through adversarial documentation, photographic-kinship witnessing operates through fundamentally different principles. Rather than maintaining objective distance to generate forensic evidence, this practice emerges from sustained embodied relationship. Aerochrome participates as conscious collaborator, kauri consent guides documentation, and spectral-kinship requires working through embedded violence. Where counter-forensics deploys evidence against institutional power, photographic-kinship seeks transformation through reciprocal practices within Indigenous environmental authority. Operating within rāhui protocols determined by Te Kawerau ā Maki, this approach demonstrates what FA identifies as transforming “the art of the state” into community-controlled resistance.²⁹¹ These kinship-witnessing approaches to atmospheric violence connect to longstanding questions about the representation of environmental harm. Nixon’s challenge—“How can we convert into image and narrative the disasters that are slow moving and long in the making?”—shapes how I use Aerochrome to reveal ecological processes beyond conventional human perception.²⁹² However, Moore’s

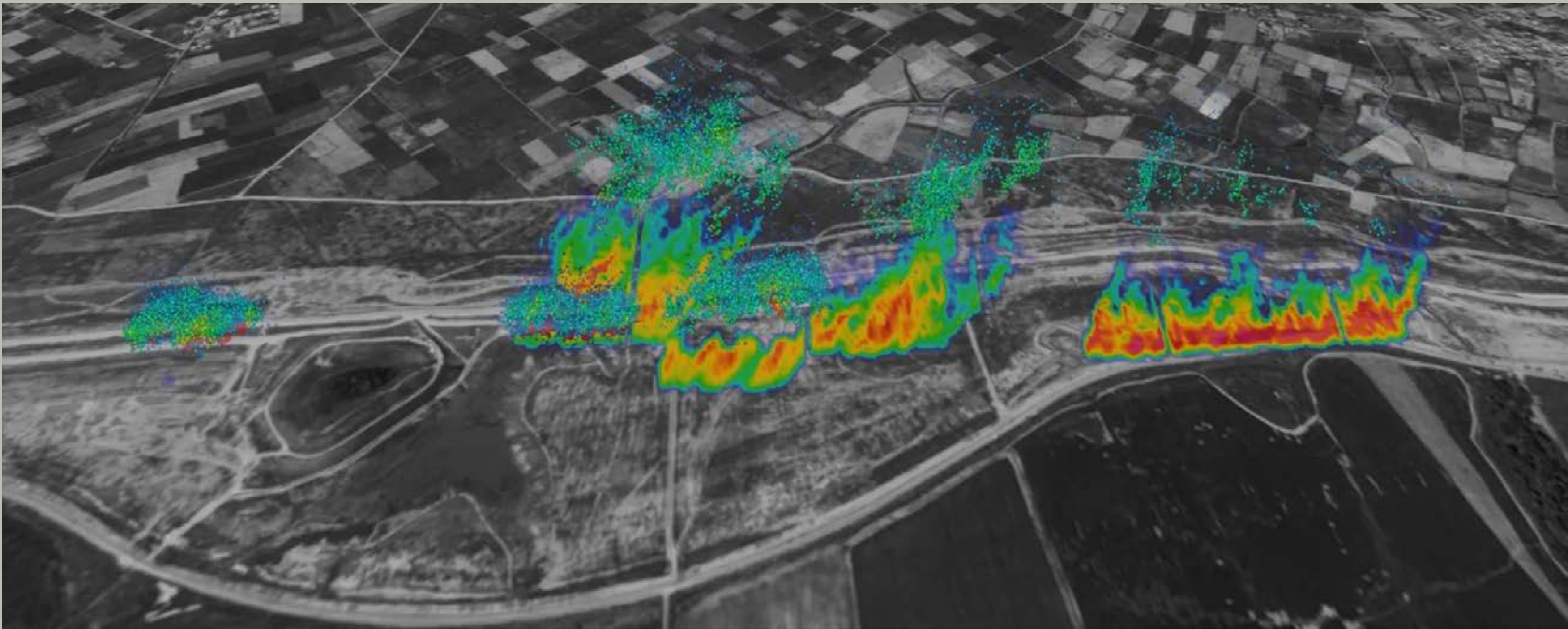


Figure 59. Forensic Architecture, still from *Herbicidal Warfare in Gaza investigation*, 2019. (Cloud Studies, 2020). Courtesy of Forensic Architecture.

Capitalocene analysis deepens Nixon’s framework by revealing how slow violence operates through what he describes as the systematic “cheapening” of life among all-beings that has characterised capitalist development since the fifteenth century.²⁹³ The incremental spread of kauri dieback disease across Te Ika-a-Māui (North Island) exemplifies not generic slow violence but Capitalocene temporal logics. Taiao damage accumulates through what Moore identifies as “accumulation by appropriation”—the ongoing extraction of unpaid work and energy from Indigenous territories and all-beings.²⁹⁴

Moore emphasises historical accumulation; Moser names what resists such accounting: presentism, “the overwhelming focus on the now within climate crisis discourse” that “obscures the historical and ongoing responsibility for climate disaster.”²⁹⁵ This tendency— intrinsic to photography’s colonial grammar—poses a direct challenge to my photographic practice, which requires sustained engagement with histories rather than technological solutions that claim to reveal while maintaining extractive relationships. My project directly engages this historical accumulation by working within territories where photography first celebrated kauri destruction in the early 1920s (Figure 60). Working with the film in Te Kawerau ā Maki rohe, I cannot simply acknowledge embedded violence—the film demands ongoing renegotiation with mana whenua environmental priorities at every encounter. Awareness is the catalyst of accountability, not its conclusion. The question becomes not whether the film disrupts, but rather how such disruption serves those who already carry this knowledge in their bodies.

In late 2024 I photographed a Mokoroa development site from which my friend Kip had been forced, by Auckland Council, to remove hundreds of regenerating mānuka and kānuka trees before building permission would be granted. As a result, flourishing Indigenous species were condemned because council compliance demanded botanical variety. Over a year later, the tree-bodies remain—stacked, slowly decomposing, some partially burned. When wind moves from the west coast, their smell drifts inland. These were plants the valley’s bees had visited, from which they had gathered pollen that connected us all through digestive-kinship. Now the bees watch, industrious witnesses, as time compresses mānuka and kānuka tree-bodies into a material archive, and the weight of institutional violence settles like grief at the gravesite. Aerochrome transforms this violence into something eerily compelling: living natives are rendered as glowing magenta clusters, while stacked tree-bodies are mottled purple, with yellow excavator tire tracks edged between them (Figures 61 and 62). A Polaroid from the encounter shows muted browns and faded greens, but the Aerochrome makes the scene look like a fantastical dreamscape. The film’s selective colour witnessing demonstrates how material-consciousness operates beyond my aesthetic choices.

293. Moore, “The Capitalocene, Part I,” 600.

294. Moore, “The Capitalocene, Part II,” 240.

295. Moser, “Race, Climate Change,” 352.



Figure 60. Chervelle Athena, *Construction Rubble and Earth Fill, Mokoroa, Waitākere*, October 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.

Figure 61. Chervelle Athena, *Cleared tree-bodies and living forest beyond*, Mokoroa, Waitākere, November 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.





Figure 62. Chervelle Athena, *Cleared Mānuka and Kānuka Awaiting Burning*, Mokoroa, Waitākere, November 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.

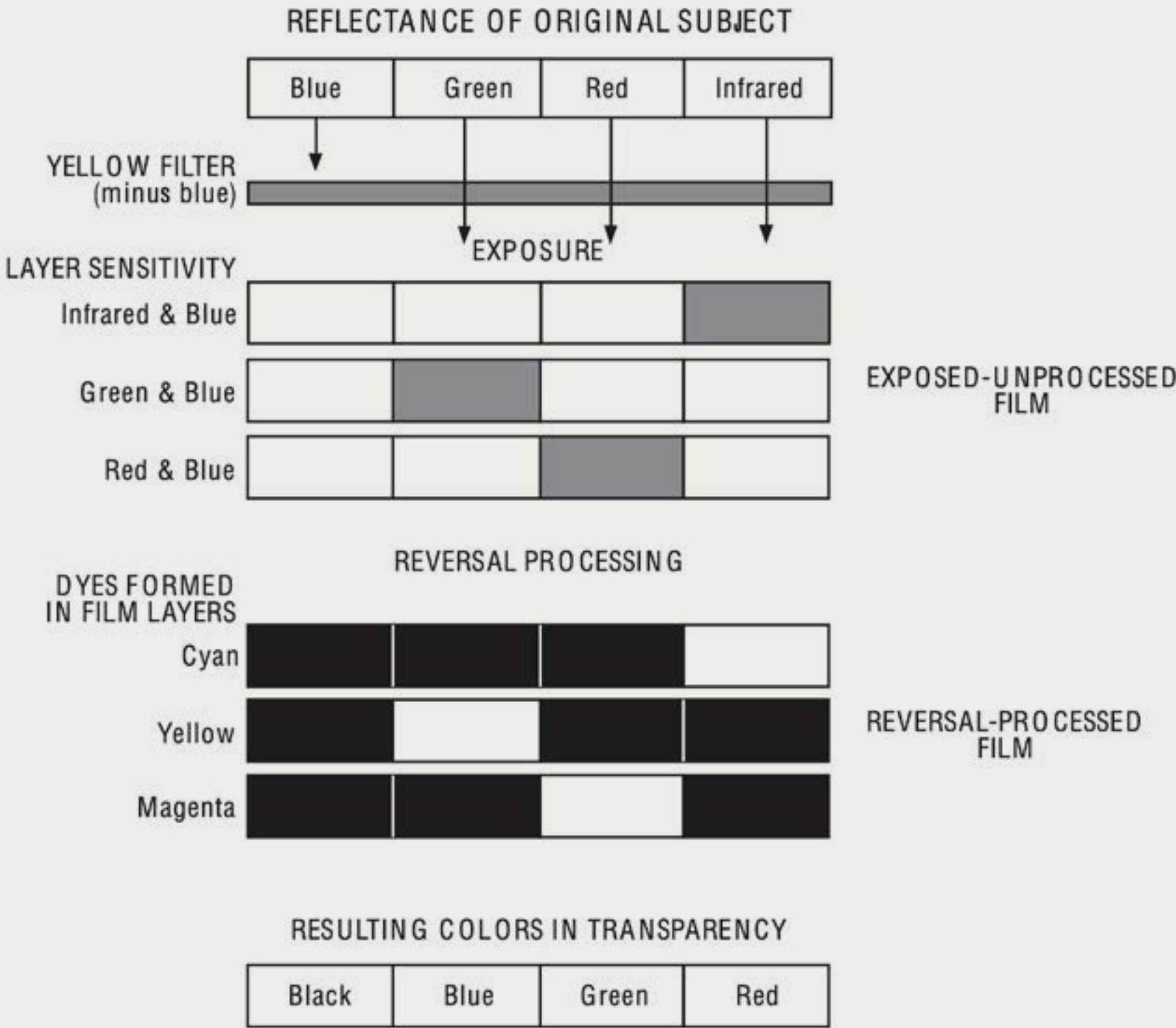


Figure 63. Color Reproduction with Kodak Aerochrome III Infrared Film 1443, diagram showing three-layer emulsion structure and false-colour formation process. Eastman Kodak Company, Kodak Aerochrome III Infrared Film 1443, Publication No. AS-77 (Eastman Kodak Company, 2005).

Understanding how Aerochrome achieves selective rendering requires examining its chemical structure (Figure 63). The film responds to wavelengths beyond human vision—specifically infrared light between 700 and 900 nanometres. When healthy plant beings photosynthesise, their chlorophyll reflects these invisible wavelengths. Working with a yellow filter, Aerochrome’s silver halide crystals, sensitised to the infrared spectrum, register this reflection as magenta and crimson. But the stacked bodies of felled mānuka and kānuka tell a different story: with their chlorophyll degraded through cellular death, they no longer reflect infrared wavelengths and appear instead in these darker tones. Machinery lacks biological processes entirely, reflecting instead visible light. Without photosynthesis to generate infrared signatures, it remains untransformed by the film’s chemistry.

Photographic-kinship seeks to reorient what was designed for surveillance—Aerochrome’s capacity to reveal what should remain hidden—towards care relationships with tree persons, towards ngahere vitality and health. This reorientation operates through the relational mechanisms of embodied-consent, material-consciousness, and photographic-communion. Yet the practice remains perpetually incomplete because the technology cannot be fully cleansed, only continuously renegotiated through sustained accountability to mana whenua environmental governance. Each photographic encounter requires renewed embodied-consent practices; each print demands reconsideration of whose authority governs circulation; each exhibition asks again whether witnessing serves or extracts.

The visual seduction of my images supports advocacy purposes when raising awareness about kauri dieback. Yet that same seductive power threatens to become spectacle, turning vulnerable beings into aesthetic representations. This tension defines my photographic-reorientation as an ongoing negotiation rather than an achieved state. Barad’s concept of diffractive reading provides vocabulary for understanding these tensions through, rather than against, each other—reading advocacy through spectacle risk, witness through consumption risk, care through complicity—allowing contradictions to coexist without forcing resolution.²⁹⁶ Aerochrome’s testimony can function as environmental witness while *also* risking making trauma consumable. My responsibility lies in maintaining awareness of this dual capacity—witness and consumption—through every photographic encounter, every printing decision, every choice about circulation and display. Such awareness requires discerning when visual power serves kauri persons and when it risks extracting from their vulnerability—a practice of continual questioning rather than settled answers.

4.3—The Reach Towards Kinship: Film Choosing How to Witness

Working with Aerochrome has become one of my greatest reciprocal joys. It is thrilling when I receive developed negatives from the lab—I never know which version of the film’s consciousness will greet me. Although I work in a technically proficient manner, the film often surpasses my intentions. This supposed ‘deficiency’ of inconsistent

image rendering has become a delightful game of material partnership. Through years of relational attunement to the film’s fragility, Aerochrome has become a maverick yet valued friend. Its responses now feel familiar—almost cheeky in the ways they subvert my expectations. This friendship operates through what I think of as tentative collaborative uncertainty: my #12 Wratten yellow filter provides baseline consistency, yet specialised E-6 processing compounds vulnerability—laboratory procedures, developer chemistry, and processing time all influencing final images beyond my control.

What I experience as the film’s capricious editorial choices links to Jane Bennett’s concept of molecular quivering—loose atoms at chemical interfaces rendering grain boundaries porous and dynamic.²⁹⁷ The film’s chemical life operates continuously at scales below my immediate perception. Every moment, even in cold storage, silver halide crystals shift and reconfigure their molecular bonds; when I warm frozen film in my palms before loading, thermal exchanges affect chemical potentials I cannot directly observe. What manifests as the film’s seemingly arbitrary decisions may emerge from chemical processes proceeding at speeds and scales that challenge human discernment.²⁹⁸ For example, when Aerochrome oxidises, its degraded emulsion sometimes withholds a specific infrared magic—rendering instead in muted tones that carry traces of damage, absence, and chemical memory. This molecular vitality gives rise to the film’s selective witnessing: not technical failure, but material agency expressing itself through its own degrading structure. Across multiple rolls, the film has chosen when and how to deploy its infrared capabilities. Healthy plant beings are rendered in vivid magentas, while those affected by stress

296. Barad, *Meeting the Universe Halfway*, 29–30, 71–72.

297. Bennett, *Vibrant Matter*, 59. Bennett writes of metal’s molecular structure, but expired photographic emulsion similarly comprises “loose atoms at the ‘interfaces’ of grains ... [which] render the boundaries of each grain porous and quivering.”

298. Bennett notes that materials “are perceived as immobile only because ‘their becoming proceeds at a speed or a level below the threshold of human discernment’.” Aerochrome’s chemical changes happen continuously at molecular level—invisible until they manifest as unexpected witness. Bennett, *Vibrant Matter*, 58.

appear in muted tones, as if the film itself distinguishes between vitality and violence (Figure 64).

The film's ability to distinguish between vitality and violence demonstrates its own technological vulnerability. Since Kodak discontinued Aerochrome in 2009, the film's chemical degradation has paralleled kauri precarity under ongoing environmental violence. Both carry wounded-witnessing—the film through expired chemistry, kauri through disease and chemical exposure—requiring respectful relationship rather than extractive documentation. This distinction operates through measurable physiological differences. Film and forest recognise each other across wounded time, each bearing molecular memory of violence. Aerochrome detects living vegetation through infrared, as military surveillance intended. However, my sustained practice reveals that decades of degradation do not diminish the film's witnessing capacities, but rather ripen into editorial authority—the chemistry exercises selective judgment about revelation and restraint. When the film renders living mānuka in spectacular magenta while leaving the excavator unaltered, it makes a choice about what merits its magic. When it bathes healthy ngahere in crimson glory but cloaks dead trees in twilight purple, it decides what warrants witness and what requires restraint (Figure 65). This is collaborative testimony: the film's editorial judgment working through wounded chemistry, my embodied practice creating conditions for its witness, and participants co-creating what emerges rather than claiming objectivity.

By comparison, Polaroid's conventional dye layers respond only to visible light (Figure 67). Polaroid, and

by proxy other film stocks, exercise their own material-consciousness, but cannot distinguish between vitality and violence the way Aerochrome can. My mānuka and kākūka documentation discloses how photographic-reorientation actualises—not through personal direction of surveillance tools but through the collaborative testimony of materials that are wounded. Multiple participants exercise agency simultaneously: kauri persons reflect specific wavelengths through their chlorophyll, Aerochrome registers these through sensitised silver halide crystals, and later in the printing process bamboo paper substrate accepts ink through its cellulose structure.

This relationship with materials extends beyond field encounters to domestic intimacy. Between ngahere visits, Aerochrome lives in my kitchen freezer—not storage but cohabitation. On field days, I remove the rolls hours before departure, allowing them to warm gradually as I prepare. As I walk to where I will photograph, the film continues its thermal transition towards forest conditions. What began as temperature management soon became something more: attending to the film's thermal biography. Before reaching my freezer, this film travelled paths I can only imagine—military storage facilities, sellers' inventories, postal systems, international borders. Each thermal cycle writes itself into the emulsion's chemical structure, creating material memory of these passages. My daily care attempts to honour the film's journeys and a gradual awakening to potential for collaboration. Temperature becomes not merely a technical requirement, but a dimension of lived experience that is shared between us.

Figure 64. Chervelle Athena, *Material Refusal*, Mokoroa, Waitākere, October 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.





Figure 65. Chervelle Athena, *Attempted Burn of Mānuka and Kānuka, Kauri Ngahere Beyond, Mokoroa, Waitākere*, November 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.



Figure 66. Chervelle Athena, *Burn Pile with Remuera Golf Club Marker Flag, Mokoroa, Waitākere*, August 2024. Instant film photograph. 62 × 62mm.

This intimacy extends into the field, where atmospheric conditions during exposure leave material traces within the film’s chemical structure: morning fog alters infrared wavelength transmission differently from direct sunlight, and winter atmospheres create distinct light qualities and moisture interactions. Working with Aerochrome has fundamentally reorganised my daily rhythms. Where conventional photography drew me to dawn and dusk—seeking soft light as birds wake or settle, that gentle communion with the canopy—this film’s technical requirements taught me different patterns of attention. Infrared sensitivity depends on chlorophyll reflecting strongly under sustained bright sunlight; vivid magenta testimony typically requires hours of direct sun exposure. Through accumulated practice, I learned that midday conditions—strong sun, atmospheric clarity—offer optimal circumstances for this witnessing. My practice now cultivates a sensitivity to brightness patterns and sun duration.

To follow where Aerochrome leads, I first learned where it has been. When my Aerochrome travels from European suppliers to Aotearoa it encounters border screening systems that alter its chemical composition. International postal regulations require X-ray screening of all overseas parcels, subjecting the film to cumulative exposure layering chemical responses similar to light.²⁹⁹ Beyond this institutional marking, climate transitions from European to Aotearoa conditions affect the emulsion’s chemistry in ways that contribute to selective responsiveness—the oceanic voyage, varying atmospheric pressures, and humidity shifts create material encounters that reshape how the film responds to infrared wavelengths.³⁰⁰ Manufacturing batch variations add



Figure 67. Chervelle Athena, *Ordinary Yellow*, Mokoroa, Waitākere, November 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.

another layer to this accumulated vulnerability, as different production runs have aged at varying rates.³⁰¹ By the time I photograph ngahere, the film already carries a complex biography—Agent Orange legacy, border x-ray exposure, climate trauma, chemical instability—creating the fragility and unpredictability through which it exercises material-consciousness. This context is why some images emerge compromised, why every roll remains precarious, why the film can choose hues depending on what it is depicting. Through this accumulated wounding, the film possesses a unique capacity for recognition: contaminated materials meeting contaminated body meeting contaminated forest; all three bear molecular knowledge of violence that enables spectral-kinship across wounded time.

In the ngahere, before approaching kauri, I crouch beneath a large blanket and load the Aerochrome in blackness—my body becoming a vulnerable darkroom. Hands work by touch alone, fingers following the curve of film against backing paper, while I speak to the film, acknowledging what we are about to do together. This military surveillance technology is about to encounter peaceful forests; this instrument designed for warfare is about to practise care. The contradictions held in these moments—violence meeting tenderness, darkness creating possibility—shape every frame that follows.

Loading film under blanket-darkness is not merely a technical procedure, but a relational ceremony. The darkness becomes womb-space, where surveillance technology prepares to be reborn into participation. These seemingly small gestures—speaking to materials, honouring their thermal biography, creating shelter for transformation—

manifest photographic-reorientation through practice. Each ritual accumulates, building relationship between military chemistry and forest beings, between contaminated body and contaminated film, until collaboration becomes possible.

My methods acknowledge the film’s agency and prepare for collaborative outcomes that I cannot control. This technical humility—accepting that materials possess editorial authority—keeps the practice alive to genuine relationship. The film that shares my freezer participates when and how it chooses: magenta revelation, withholding colour, or sometimes even refusing to load, despite perfect conditions, the film popping out of the spool just as I think it has caught, requiring me to start again in complete darkness, sometimes five, six, seven times—requiring patient coaxing or acceptance that today is not their day. Throughout this project, I have learned to distinguish between the film’s reluctance and my own impatience, to listen rather than force. These refusals teach me: even contaminated military film maintains boundaries and exercises choice about when to witness. My role becomes creating beneficial conditions for this witnessing through specific acts: the warming ritual, the blanket ceremony, the daily acknowledgement when opening my freezer.

Understanding how this collaborative agency works chemically deepens appreciation for these ceremonial practices. Aerochrome’s unique emulsion structure—where an infrared-sensitive layer replaces the conventional blue-sensitive layer—means that degradation affects its false-colour rendering differently from conventional film.³⁰² Aerochrome’s capacity to detect wavelengths

299. “NZ Post International Gateway for Parcels and Mail Fully Operational with NZ Customs and MPI,” Te Mana Ārai o Aotearoa–New Zealand Customs Service, accessed May 9, 2025, <https://www.customs.govt.nz/about-us/news/media-releases/nz-post-international-gateway-for-parcels-and-mail-fully-operational-with-nz-customs-and-mpi>; “Motion Picture: Storage Information,” Kodak, February 19, 2021, <https://www.kodak.com/en/motion/page/storage-information/>.

300. Matt Murray, “How to Shoot Kodak’s Incredible Aerochrome Film,” *Fstoppers*, September 13, 2022.

301. “Beyond The Expiration Date: Unveiling the Unexpected Effects of Expired Film,” The Icon, February 16, 2024, https://www.iconla.com/2024/02/16/beyond-the-expiration-date-unveiling-the-unexpected-effects-of-expired-film/?srsltid=AfmB0op781RoYwGW3pYpyHjWYtQ_VJqFB00AQhmlZ1ERbCVKd6IJAnXZ.

302. Dmitri, “Kodak Aerochrome–A Colour IR Film Guide & Review,” *Analog.Cafe*, April 13, 2025, <https://www.analog.cafe/r/kodak-aerochrome-a-colour-ir-film-guide-and-review-uw13>.

up to 900nm through this specialised layer means that chemical deterioration does not simply reduce sensitivity; it fundamentally alters how the material interprets and responds to environmental encounters.³⁰³ The film’s unpredictable responses create reciprocal accidents. I understand these as reciprocal because they emerge from ongoing negotiation. Although I contribute technical preparation and embodied presence, the film offers decades of accumulated material experience, creating collaborative outcomes that surpass what either participant could achieve independently. This context shapes my photographic practice. The anticipation of seeing how each frame has chosen to participate in our collaboration adds an element of wonder that transcends technical control. Through this embodied relationship, I have learned that what appear to be ‘failed’ exposures are the film’s way of asserting its presence as a collaborative partner rather than an invisible recording medium. Never knowing whether the film will choose to perform its expected infrared magic or surprise me with selective monochromatic moments keeps me engaged in an active relationship with this material’s agency. Any technical vulnerabilities become part of its collaborative voice rather than problems to eliminate.

My practice-generated understanding that materials actively participate resonates with what Jones and Hoskins identify as Indigenous recognition that “objects can express their vitality.”³⁰⁴ Recent material ecocriticism scholarship offers additional framing, specifically environmental humanities scholar Serpil Oppermann’s concept of matter as possessing “expressive capacity” and “narrative agency”.³⁰⁵ When I approach Aerochrome as possessing consciousness requiring

ceremonial practices, I work within tensions that remain accountable to Indigenous understandings that precede and exceed frameworks like Oppermann’s material ecocriticism. Material-consciousness is thus a key method for working through rather than resolving these productive differences between knowledge systems.

The film’s selective colour manifestations represent how it processes its complete biographical journey, both literally and figuratively. When I turn to load Aerochrome, something shifts: warmth becomes weight, my fingers trembling as past connects to present. The film’s military genealogy meets my body’s memory of violation, histories that cannot be erased, only carefully negotiated. The temporal dimension of consent reveals itself here: permission is not granted once but requires renewal across time, through seasons, through the slow chemistry of development and decline, through years of learning what respect requires and involves.

Throughout my research, reorientation means holding contradictions in my body, letting the film’s unpredictable responses determine which testimony emerges, while acknowledging my ongoing complicity with the film’s molecular violence. Perhaps this tension becomes the methodology. These limitations illuminate productive tensions within my work. There is an unexpected generosity—the film offering magenta testimony when witnessing thriving ngahere, withholding spectacle when encountering violence, exercising editorial choices that outgrow military programming and my artistic intention (Figure 67). In these moments, this film practises something I can only call material care: wounded surveillance

303. Since Aerochrome responds to wavelengths up to 900nm, chemical deterioration does not simply make the film less sensitive; rather, it changes how it interprets different parts of the infrared spectrum, particularly affecting the infrared-sensitive layer and causing colour balance to drift toward cyan as this layer degrades faster than others. This affects which wavelengths it emphasises or diminishes, based on its accumulated material experiences. Eastman Kodak Company, *Kodak Aerochrome III Infrared Film 1443*, Publication No. AS-77 (Eastman Kodak Company, 2005), 4.

304. Jones and Hoskins, “A Mark on Paper,” 84.

305. Serenella Iovino and Serpil Oppermann, “Material Ecocriticism: Materiality, Agency, and Models of Narrativity,” *Ecozon@: European Journal of Literature, Culture and Environment* 3, no. 1 (2012): 82, <https://doi.org/10.37536/ECOZONA.2012.3.1.452>.

technology learning, through patient repetition and embodied invitation, to participate in witness rather than extraction. This impossibility intrigues me—that materials engineered for harm may develop capacity for care, that surveillance chemistry may participate in a type of kinship its creators could not imagine. Chemical degradation creates this possibility; the film exercises choices unavailable to other film stocks, be they militarily intended or not. Its accumulated damage becomes the very condition for collaborative agency—a kind of slow betrayal of its creators’ purposes, not through radical overhaul but through quiet, repeated choices to collaborate with what it was designed to survey.

Aerochrome teaches me that reorientation finds its way through time’s gentle insistence rather than redemptive rupture. There is grace in how contaminated materials may remember a type of kinship their molecular structure was engineered to prevent; that military chemistry may learn aroha through decades of waiting and invitation. The challenge for this research is not choosing between material-consciousness and violence, but holding both simultaneously. Film is both conscious collaborator and contaminated technology; my ceremonial care and its genealogy are complicit. This reach towards kinship shapes how my photographic-reorientation seeks to address settler violence through fundamental remaking rather than surface-level aesthetics. It functions as a revelatory abstraction that makes visible the environmental violence typically concealed within seemingly natural landscapes. Where surveillance technology originally rendered Indigenous landscapes as “abstract social nature” available for military control, my spiritual practice guides the same technology to nurture

respectful relationships that receive all-beings as spiritual with inherent agency.³⁰⁶

The branches of the trees I photograph remember chemical wounding across different species and time. This memory is not metaphorical—it is materially embedded in film emulsion, bodily tissues, tree cambium, soil chemistry. The remembering persists, whether I acknowledge it or not. Molecular genealogy, spectacular risk, damaged consciousness, temporal wounding—these threads of photographic-kinship cannot be separated or resolved. These impossibilities persist, seeding what may yet grow from wounded ground. What grows now reaches toward light. Chapter 5 becomes the crown—where photographic-kinship finds its fullest expression, all five dimensions alive at once as consciousness meets consciousness, honouring relationship over resolution.

306. Moore, “The Capitalocene, Part II,” 265.

Chapter 5

—The Crown: Reorientation Seeking Light

The crown catches light—transforming photons into sustenance through countless leaves working simultaneously, each oriented toward the sun while shaped by wind, weather, and structural constraints rising from below. This is where radiance concentrates its labour yet fulfils crucial work: photosynthesis occurs here, seeds form here, and the work of transformation sustains everything beneath. A crown of a kauri can span 40 metres, catching what descends from above and sheltering what grows below. The crown’s reorientation—its perpetual turning toward available light—happens within inherited limitations: branch angles determined by trunk structure, reach constrained by root spread, growth shaped by neighbouring trees and prevailing winds.

This chapter examines how photographic-kinship works within the space where visual seduction and harm meet without resolution—where aesthetic strategies transform surveillance technologies through accountability. What becomes visible through examining reparative ambivalence alongside practice at contaminated sites is how irresolution births new forms of attention. Constraint generates seeds, practice extends into proliferation, and witnessing remains tied to territories violence has touched. The crown’s reorientation toward light never escapes the trunk supporting it—photographic-kinship continues seeking illumination while rooted in obligation. Working with photographic tools designed for domination from positions of accountability rather than sovereignty requires holding together what dazzles and what damages without forcing resolution. What this process reveals is that witnessing grounded in relationship emerges through ongoing responsiveness to the communities and all-beings I remain accountable to.

5.1—An Ambivalent Canopy: Neither Spectacle nor Erasure

My photographic-reorientation practice has developed alongside the work of other artists navigating similar tensions between technologies and environmental advocacy, revealing how different positions of authority and accountability generate forms of witnessing. Whereas Māori artists work from whakapapa authority to transform photographic materials into collaborative making, my practice requires different accountability structures. My project is concerned with what becomes visible through ‘reparative’ witnessing: approaches that avoid retraumatising communities while making systematic violence visible, that recognise photographic materials as conscious collaborators rather than passive tools, and that seek to establish documentation that supports healing versus perpetuating harm. These precedents demonstrate that photographic-reorientation operates not through solitary ethical decision-making, but through ecological responsiveness that exceeds any sense of personal stance.

Art historian Susan Best’s concept of reparative aesthetics is significant for understanding how photography may engage with violent histories without either spectacularising suffering or retreating into didactic critique. Best draws on psychoanalyst Melanie Klein (via queer theorist Eve Kosofsky Sedgwick) to distinguish between paranoid and reparative approaches to politically oriented art.³⁰⁷ Paranoid approaches expose wrongdoing through critique, often using deadpan, anti-aesthetic strategies that risk triggering shame, which

307. Susan Best, *Reparative Aesthetics: Witnessing in Contemporary Art Photography* (Bloomsbury Academic, 2016), 3–6. Best draws on Eve Kosofsky Sedgwick’s “Paranoid Reading and Reparative Reading,” in *Touching Feeling: Affect, Pedagogy, Performativity* (Duke University Press, 2003), which in turn adapts Melanie Klein’s psychoanalytic concepts of the paranoid-schizoid and depressive positions.

in turn can generate denial or anger in viewers—effectively “preaching to the converted while potentially alienating perpetrators.”³⁰⁸ In contrast, reparative approaches use aesthetic engagement and affective complexity to attenuate shame while bringing difficult issues to light, creating space for reflection.³⁰⁹ Crucially, Klein’s reparative position “is not simply about undoing or reversing damage.”³¹⁰ Instead, it maintains capacity to hold positive and negative feelings simultaneously—precisely the methodological stance required when working with materials carrying embedded violence. Best’s analysis demonstrates that aesthetic beauty and political engagement need not be in opposition; rather, beauty can facilitate the sustained attention required for meaningful witnessing of environmental violence. My infrared photography methods align with this reparative aesthetic strategy.

My series of images that focus on clearing mānuka and kānuka connect to Best’s framing. The infrared rendering of living and dead foliage, as well as machinery, generates what Best identifies as reparative ambivalence: capacity to hold contradictory affects simultaneously. My images refuse easy categorisation as either pure documentation or aesthetic object. The chromatic intensity arrests attention while the deforestation violence prevents comfortable consumption. Cognitive disruption operates through impossibility: ecological damage should not appear dreamlike, territorial appropriation should not look like paradise. Yet Aerochrome’s transformation creates precisely this paradox. Unlike such paranoid approaches—which Best argues risk triggering defensive shame and denial—the film’s capacity creates space for contemplation. Viewers cannot dismiss the

magenta insistence, yet a sense of strangeness, as a result of intense colours, prevents forms of psychological distancing that enable destruction to continue unnoticed. Interestingly, the excavator’s ordinary yellow operates as a visual anchor, the film refusing to transform complicit machinery, yet glorifying surviving forest and mourning violated plant bodies through restraint. This infrared consciousness, its own form of reparative aestheticising, demonstrates how kinship emerges through photographic collaboration: Aerochrome’s selective agency mourning violated kauri-persons, myself refusing comfortable distancing, working within the entangled complexities of violence, territorial violation, and ongoing protection obligations.

Visual artist and scholar Fiona Amundsen’s documentary photography practice examines nuclear environmental destruction. Specifically, her series *Blowing in the Wind* (2023–24) investigates atmospheric contamination from Cold War–era nuclear testing (Figure 68).³¹¹ Her approach extends Best’s reparative framework to nuclear violence, demonstrating how photographic materials can collaborate with environmental contamination—in the form of ionising radiation—to generate evidence while maintaining ethical care for affected communities.³¹² Her methods parallel my own work with Aerochrome: both approaches position photographic materials as active participants in environmental justice through material witnessing methodologies that challenge representations that obscure or sanitise ongoing violence.³¹³ However, Amundsen’s emphasis on “ethical caring based in relationships of imagining over reified visibility” presents a reckoning that raises critical questions for my project.³¹⁴

308. Best, *Reparative Aesthetics*, 4.

309. Best, *Reparative Aesthetics*, 7-8.

310. Best, *Reparative Aesthetics*, 3. Best is paraphrasing Klein’s theory from Melanie Klein, “Notes on Some Schizoid Mechanisms” (1946), in *Envy and Gratitude and Other Works 1946-63* (Virago, 1988), 14-16.

311. The University of Gothenburg & Platform for Artistic Research Sweden, “Violence Conference,” *Parse Journal*, 2021, <https://parsejournal.com/event/the-fourth-biennial-parse-research-conference/>; Fiona Amundsen, “Blowing in the Wind,” accessed February 2025, <https://fionaamundsen.com/blowing-in-the-wind>.

312. Amundsen, “Blowing in the Wind.”

313. Amundsen, “Blowing in the Wind.”

314. Fiona Amundsen, “Seeing, Listening, Connecting: Imaging and Memorialising the Asia-Pacific War (World War II)” (PhD thesis, Monash University, 2018), 97.



Figure 68. Fiona Amundsen, *Palm Tree near Merizo Pier, Guam (2,121 Stomachs)*, from the series *Blowing in the Wind*, 2023. Courtesy of the artist.

Amundsen’s commitment to images that “keep their viewers in an open space of relational witnessing” offers companionship and a challenge for my research—her practice reveals the gap between the intention to serve and the risk of creating extractive documentation veiled in magenta glamour.³¹⁵ Her emphasis on healing without exposing new forms of damage raises critical questions for my research, which leads me to consider what happens when Aerochrome transforms clearcut devastation into a swath of brilliant pink—who may be healed by this rendering, and who may experience it as trauma aestheticised for consumption. This tension cannot be resolved through individual ethical positioning alone; it requires ongoing accountability to mana whenua who determine whether such witnessing serves protection or perpetuates extraction masked by optical enchantment.

Amundsen’s nuclear contamination work emerges from the affected communities’ own calls for visibility—a crucial distinction that aligns with my approach. Through Amundsen’s precedent, I understand that photographic-reorientation cannot be determined in solitude but requires ongoing dialogue with those whose territories and ancestors appear in the images. The challenge of establishing this dialogue becomes a form of embodied teaching for me, where the difference between imposed visibility and requested witness fundamentally shapes how I approach documentation. I recognise that even with careful embodied-consent practices and with material reorientation from surveillance to witness, the act of photographing may remain a form of violence when disconnected from relationships of reciprocal need. Amundsen’s framework demonstrates that

reparative witnessing requires community calls for visibility, not imposed documentation.

In a related manner, artist Kate van der Drift’s *Dance, Dance* series (2025) demonstrates how herbicides themselves may become witnessing agents (Figures 69 and 70). Her material collaboration with such chemicals resonates with my methods involving military surveillance film. Built upon experimental collaboration with herbicides as developing agents, her work manifests the paradoxical material relationships between historical violence and contemporary ecological care. Her process involves using herbicides and marker dyes to develop large-format gelatin silver film that is exposed to invasive introduced plant species. Art critic and writer Virginia Were describes this process as “the alchemical coming together of natural and [human] made entities: sunlight, plant material, silver, herbicide and marker dyes.”³¹⁶ Significantly, Van der Drift uses “the type commonly used to kill the plant being documented in each photograph.” This decision creates a form of chemical testimony where herbicides literally write their destructive effects into photographic surfaces while simultaneously supporting conservation goals of native species restoration.³¹⁷ Her practice emerges from an understanding of “the complexities and paradoxes inherent in the concept of caring for the whenua in a time of environmental precarity.” For example, chemical interventions remain paradoxically necessary tools in ecological restoration.³¹⁸

Van der Drift’s developing processes produce unpredictable results, and the herbicidal chemicals create unique visual effects that enable conservation documentation while

315. Amundsen, “Seeing, Listening, Connecting,” 146.

316. Virginia Were, “Kate van der Drift: Dance, Dance,” Sanderson Contemporary Art, 2025, <https://sanderson.co.nz/exhibitions/455-kate-van-der-drift-dance-dance/overview/>.

317. Were, “Kate van der Drift: Dance, Dance.”

318. Were, “Kate van der Drift: Dance, Dance.”



Figure 69. Kate van der Drift, *Ulex Europaeus (Gorse)*, from the series *Dance, Dance*, 2025. Chromogenic photograph from 4 × 5” lumen negative, 1482 × 1200mm. Courtesy of the artist and Sanderson Contemporary.



Figure 70. Kate van der Drift, *Ulex Europaeus (Gorse), Paspalum Urvillei (Vasey Grass) Positive*, from the series *Dance, Dance*, 2025. Chromogenic photograph from 4 × 5” lumen negative, 1200 × 972mm. Courtesy of the artist and Sanderson Contemporary.

simultaneously denoting how the same chemicals used to ‘care for’ the land perpetuate violence against ecological systems. Van der Drift’s work with this productive paradox strengthens my position concerning the way meaningful photographic-reorientation requires engagement with the violence that operates through the chemical systems affecting contemporary environments. Such reorientation requires photographic practices that collaborate with rather than merely document ongoing contamination, while recognising the complex ethical terrain of chemical intervention in ecological care.

My use of military chemical technologies also resonates with artist Thu Van Tran’s approach to reclaiming chemical warfare through material testimony. Tran’s series *From Green to Orange* (2014–20) illustrates how environmental photography can address environmental racism while maintaining accountability to affected communities (Figure 71). Her treatment of “contamination and colonisation” through chemical manipulation of photographs of the jungle of Vietnam traces how colonial violence perpetuates through interconnected systems of territorial appropriation and environmental destruction.³¹⁹ This violence affects multiple generations through accumulated toxicity, and Tran’s three-stage chemical process directly parallels the environmental destruction wrought by Agent Orange. Working with gelatin silver prints, she employs what she describes as careful orchestration: “I submerged the photographs in three different baths—alcohol, rust, and ink. The alcohol erases the green, the ink stains the image, and the rust will leave particles on the surface, adding to the images’ materiality.”³²⁰ These chemical treatments create visual testimony of Agent Orange’s continuing contamination while resisting

mainstream documentary approaches that often treat environmental violence as discrete historical events.

These chemical reactions are unpredictable, with each photograph developing unique characteristics through chemical degradation that mirrors the systematic targeting of chlorophyll-bearing plants during chemical warfare operations.³²¹ Tran deliberately embraces such unpredictability, allowing reactions to unfold beyond her direct control: “This contact between two different materials can reveal truths via fiction.”³²² Tran’s methods parallel my own collaboration with emulsion. Both of our approaches transform the chemical principles used in warfare into contemplative artistic practice that archives the persistence of environmental contamination across temporal scales. Through my photographic-reorientation practice, I have discovered that violence and contamination may exist as destructive legacy and transformative opportunity—insights that Tran’s framework articulates by centring contamination as destructive force and productive process.³²³ Tran’s approach makes visible the way materials embody trauma through chemical transformation.³²⁴ Her methods align with my own approaches where Aerochrome’s degraded emulsion, my herbicide-contaminated body, and kauri compromised mauri all archive environmental violence through molecular alteration. Working with these three contaminated participants makes possible a witnessing-together, birthing an unexpected collaborative partnership—not despite, but through, shared wounding.³²⁵

Like these artists, I too am attempting to hold visual testimony and trauma together without giving in to resolution.

319. Gwen Bautista, “Thu Van Tran on Contamination and Colonisation,” Artvisor, November 29, 2020, <https://www.artvisor.com/thu-van-tran-on-contamination-and-colonisation/>.

320. Bautista, “Thu Van Tran.”

321. Chloe Chu, “The Materiality of Memory: Thu Van Tran,” *ArtAsiaPacific* 121 (2020): 51.

322. Chu, “The Materiality of Memory,” 51.

323. The chemical processes Tran employs function as material testimony, with substances literally embodying the conditions of their exposure to violence. She describes her photograms as “like wet ceramic slabs. You can impress objects onto the surface, recording the items as they are.” Through such material collaboration, Tran’s practice illustrates how direct engagement with chemical processes produces knowledge through creative experimentation with contaminated materials. Bautista “Thu Van Tran”; Chu, “The Materiality of Memory,” 51. Conservation challenges posed by Tran’s inherently unstable works reflect their conceptual foundation, as ongoing chemical reactions mean that each piece continues evolving after creation, embodying contamination’s persistence in ways that challenge traditional preservation approaches. Chu, “The Materiality of Memory,” 51.

324. Bautista, “Thu Van Tran”; Chu, “The Materiality of Memory,” 51

325. Chu, “The Materiality of Memory,” 51.

Figure 71. Thu Van Tran, *From Green to Orange*, 2022. Gelatin silver print, alcohol, ink, and rust, 950 × 750mm. Courtesy of the artist and Meessen, Brussels.



I position photographic materials as active participants in environmental justice, while seeking to maintain ethical accountability to affected communities. This positioning connects to ideas of photographic-kinship that aim to extend these precedents by recentring who gets positioned as primary witnesses within violent histories. Whereas Best analyses how aesthetic strategies may attenuate shame while witnessing human-enacted violence, my work centres kauri persons and photographic materials as witnesses and active participants within these same histories. This approach examines how military surveillance technologies, kauri dieback, and agencies of all-beings are entangled through ongoing settler practices. My terminology of ‘photographic-reorientation’ rather than Best’s ‘reparative aesthetics’ signals this recentring—emphasising the ongoing turning of technologies towards kin relationships, while resisting claiming any sense of healing or repair that ‘reparative’ implies. Additionally, my positioning is conscious of required accountability structures: perpetual guest status, redistributing authority to mana whenua, and ensuring that infrared-witnessing remains accountable to Te Kawerau ā Maki, rather than settler or personal priorities.

5.2—Coexisting Cones: Photographic-Kinship in Full

In early December light, I stand at the paddock fence with my sisters, camera, and Aerochrome. The doe lifts her head from grazing, alert but not alarmed, while her fawn continues eating, held in her nearness. Behind them live kauri, persons

whom I have collaborated with since 2021; first through black-and-white film’s documentary distance, now through infrared’s molecular intimacy. This return with wounded film to familiar ground manifests photographic-kinship at maturity—all five dimensions alive at once as consciousness meets consciousness.

Through the lens, chlorophyll processes invisible to me begin their infrared unfolding (Figure 72). The doe’s body glows soft pink-magenta in the infrared spectrum—fur rendered as light through emulsion. Both animals appear ethereal against blush grass, luminous in its otherworldliness. Behind them, kauri canopies burst into fierce magentas and crimsons that collapse distinctions between mammal and tree, introduced being and Indigenous being. Yet the fence dividing cleared whenua from remnant ngahere remains ordinary. Aerochrome refuses to aggrandise the agricultural boundary that structures this encounter, maintaining visible testimony to the systemic divisions organising these relationships. This editorial choice—the film’s agency, not mine—enacts how material-consciousness participates as active witness.

Where my 2021 black-and-white photographs (Figures 73 and 74) show spatial arrangements—fence separating forest from farm, kauri isolated within paddocks—Aerochrome exposes molecular kinship that exceeds visible boundaries (Figure 75): connecting kauri and pasture glow in shared photosynthetic labour sustaining ngahere and grazing animals. The shift from monochrome to infrared marks more than technical development; it signals movement from documentation toward collaborative witness, from observing toward recognising. Through practice, I have learned to



Figure 72. Chervelle Athena, *Deer Dwelling with Kauri I, Mokoroa, Waitākere*, December 2025. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.



Figure 73. Chervelle Athena, *Kauri Grove Paddock I, Mokoroa, Waitākere*, November 2021. Medium-format film, inkjet print. 1100 × 1100mm.



Figure 74. Chervelle Athena, *Kauri Grove Paddock II, Mokoroa, Waitākere*, November 2021. Medium-format film, inkjet print. 1100 × 1100mm.

Figure 75. Chervelle Athena, *Deer Dwelling with Kauri II*, Mokoroa, Waitākere, December 2025. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.



read film’s selective revelations: how it celebrates surviving ecosystems while declining to glorify infrastructures of containment, how it recognises kinship across species while maintaining testimony to structural harm.

This mode of ambivalent witnessing—holding harm and contradiction simultaneously—illuminates multispecies relationships within disrupted landscapes. Here, Donna Haraway’s “making oddkin” finds material expression: Indigenous kauri and introduced deer practising “sym-poiesis” (making-with) through shared breath, overlapping territories, molecular exchanges—relationality that Aerochrome renders visible.³²⁶ These beings exist through relationship—deer exhalations nourishing kauri through carbon dioxide, grass photosynthesis feeding grazers, forest canopy providing shelter that moderates pasture temperatures. The film reveals what my eyes cannot see: atmospheric intimacies where species boundaries dissolve into metabolic exchange.

Inside the paddock, I move slowly and breathe quietly, allowing the deer time to settle into my presence. I become part of the atmospheric conditions rather than a disruption to them. The doe returns to grazing; the fawn relaxes into maternal proximity. Curiosity replaces alertness. This is the kind of embodied-consent I have learned across this project—reading bodies, adjusting rhythm, waiting for welcome.

Then I press the shutter. The deer flinch.

However carefully I have negotiated presence, the mechanical sound of the shutter ruptures what patience

built. The deer’s bodies register the camera as an intrusion—possibly as a threat. Their flinching teaches what my methods cannot override: the camera carries its own grammar, and that grammar is violent. I have learned to say I photograph *with* rather than take *from*. But what does the shutter’s rupture say?³²⁷ Do the deer hear *the shot*—colonial grammar made audible—in that mechanical click?³²⁸ Perhaps their bodies know what my vocabulary tries to reframe. Consent, as I am learning, is not a state achieved but a negotiation the camera continuously disrupts. Even here, even with wounded film turned toward care, photographic-kinship cannot escape the rupture it enacts. This knowledge shapes how I attend to the valley’s complexities.

Beyond paddocks, Mokoroa regenerates alongside loss. The stream flowing past carries what Amanda Monehu Yates identifies as “socio-cultural-ecological vitality”—water quality reflecting upstream conservation efforts, pest management, land-use patterns rippling through watersheds (Figure 76).³²⁹ Its mauri recognises no property boundaries, connecting forest health to agricultural practices to care networks that redistribute reciprocity beyond private holdings. This same stream carries agricultural runoff, microplastics from degrading fences, sediment from recent earthworks scarring hillsides. Wild deer populations—distinct from the farmed doe and fawn—inhabit valley forest edges, their browsing pressure threatening ngahere regeneration and damaging bark on vulnerable trees, while simultaneously creating pathways other species utilise, their presence shaping seedling survival and regeneration patterns.

326. Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Duke University Press, 2016), 58.

327. Azoulay proposes the camera’s shutter as an analogy for imperialism, enacting violence through temporal, spatial, and cultural division. Azoulay, *Potential History*, 5–6.

328. See discussion of colonial grammar in the Introduction.

329. Amanda Monehu Yates, “Transforming Geographies: Performing Indigenous-Māori Ontologies and Ethics of More-than-Human Care in an Era of Ecological Emergency,” *New Zealand Geographer* 77, no. 2 (2021): 103, <https://doi.org/10.1111/nzg.12302>.



Figure 76. Chervelle Athena, *Mokoroa Stream*, Waitākere, December 2025. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.

Critically endangered pekapeka (long-tailed bats, *Chalinolobus tuberculatus*) have returned to Mokoroa within the past year—their presence known through neighbours’ reports rather than my lens. These nocturnal hunters navigate above forest canopy and agricultural paddocks, their return signalling sustained neighbour-led pest trapping has created sanctuary despite fragmentation.³³⁰ Pekapeka become living indicators of collective hauora—signalling thriving insect populations, healthy plant communities, successful predator control, seed-dispersing birds returning. While I cannot photograph their night flights, their presence speaks to what my Aerochrome documents by day: ecosystem regeneration emerging through accumulated care. The bats navigate by sound what the film reveals through light—a valley learning kinship through imperfect but persistent practice.

This valley carries wounds. Possums still strip canopies bare, wasps compete with native birds for honeydew, kauri dieback spores persist in neighbouring Te Taiapa, in soil, waiting to spread. Mānuka hives throughout the valley produce honey carrying pollen from natives and weeds alike—sweetness emerging from entangled ecologies. The honey I consume each morning contains molecular traces of kauri and gorse, pūriri and privet, my body literally composed of the valley’s contradictions. What Aerochrome witnesses, my body metabolises—both forms of incorporation, both forms of kin-making.

Conservation-passionate neighbours maintain trap networks while watching subdivision fragment neighbouring properties, protecting what remains while unable to prevent

ongoing losses. My friend whose paddock contains these kauri chose preservation, yet cattle still compact soil around root zones, fertiliser still alters mycorrhizal networks, and the kauri grove has no undergrowth. In place of forest regeneration—soft breath and tender hooves: the spring fawn dwelling where seedlings cannot. This substitution holds loss and presence: understorey absent, while interspecies intimacy emerges—fawn sheltered by kauri who remain generous despite harm, becoming kin through shared ground, however altered.

Photographing from outside the fence, I witness kinship I participate in but cannot claim authority over. My positioning shapes what these images can offer: accountable witness, careful attention to complexity. The photographs hold this productive tension—acknowledging systematic harm while celebrating unexpected intimacies (Figure 77), recognising Indigenous persistence alongside introduced species’ coexistence, documenting containment while revealing molecular connections that refuse human-imposed boundaries. They show a valley that is neither paradise nor wasteland, but something honest: a place where care and loss share ground, where neighbours try despite imperfection, where small acts accumulate without promising redemption.

What emerges through Mokoroa wounded ground—and through the photographs that witness it—is neither triumph nor abandonment, but ongoing negotiation: multispecies communities making lives together through daily compromises. Kauri maintaining mauri despite isolation and soil compaction, deer and rangatira dwelling together in forests forever changed, rare bats returning through

330. See Thom van Dooren, *Flight Ways: Life and Loss at the Edge of Extinction* (Columbia University Press, 2014), 87–108; Haraway, *Staying with the Trouble*, 38–39.



Figure 77. Chervelle Athena, *Construction debris and tanks, Mokoroa, Waitākere*, October 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.

collective effort even as habitat continues fragmenting, native birds singing stronger through neighbour protection while possums persist in canopies, streams carrying testimony of care, contamination. My photographs carry what they can of this complexity. The valley offers this knowing: to hold harm tenderly asks remaining present to irresolvable complexity—attending to how coexistence emerges through accumulated acts of trying rather than achieving perfect conditions.

Aerochrome’s molecular violence allows photographic-kinship that manifests within the inextricable bind between Agent Orange genealogy and kauri care—the aporetic spaces where ethical conundrums defy resolution.³³¹ As Ingold observes, “tools are their stories,” and Aerochrome carries with it many narratives.³³² Through sustained engagement with this film and kauri, distributed agency emerges across wounded participants—each carrying chemical knowledge that enables recognition beyond conventional documentary approaches. As the shutter closes and light becomes latent image, what forms in that space between intention and outcome carries both the molecular intimacy Aerochrome reveals and the flinch that will not let me forget photography’s overall toll. Photographic-kinship emerges through what each of us—film, forest, fawn, and photographer—offers and withholds, accumulating towards something larger than any single frame.

As tangata Tiriti working within Te Kawerau ā Maki rohe, I navigate ontological differences between Western and Māori frameworks. Working with Aerochrome reveals material agency that Indigenous knowledge systems already encompass, subsequently requiring vocabulary within

Western frameworks that approaches—without claiming equivalence to—what mātauranga Māori understands as mauri. Yet even with community trust established through physical care, the materials carry their own challenges. The use of this film for conservation purposes presents a central tension within this project; I have learned that transformation happens not through denial of this violence, but through patient reorientation. Each roll invites ceremonies of acknowledgement through rituals and material dialogue. Each image emerges through collaborative relationship with kauri instead of surveillance distance. Each photograph can support and honour Te Kawerau ā Maki priorities instead of military objectives. This happens through documenting rāhui violations, contamination sites, and environmental damage—contributing to conservation outcomes including track closure and ongoing protection efforts.

Sealy’s framework for working with violent photographic archives resonates with my photographic-kinship’s approach to contaminated materials. He writes:

Opening the archives concerning the making of race and unsettling the meanings made there in terms of knowledge produced around race equates to a burning down of the ‘master’s house’ and using the remaining ashes to fertilise the soil so as to produce a liberated and fertile plot that grows out of its violent past to generate new meanings.³³³

This understanding—that transformation requires working through rather than erasing violent genealogies—mirrors how Aerochrome and composted prints literally fertilise new growth while carrying their histories forward. Each

331. Aporia: Greek ἀπορία (impassability). In critical theory, aporetic spaces are where irreconcilable ethical questions dwell—not problems awaiting solutions, but conundrums that generate ongoing accountability through their very irresolution.

332. Ingold, *The Perception of the Environment*, 291–311.

333. Sealy, *Decolonising the Camera*, 108.

spring, when I return failed test prints to Mum’s garden, I am practising what Sealy describes: not erasure, but transformation through acknowledgement. The prints decompose, and the military film mingles with valley soil, with water that flows to Mokoroa Stream, with the vegetables that nourish bodies carrying their own contaminations. What grows from this ground remains uncertain—perhaps only the ongoing labour of tending what cannot be fully healed, learning to work within ashes that still carry heat. The ashes Sealy describes are not metaphorical for me; they live in my cells, in the film’s degraded crystals, in the soil that receives my failed images. Whether this constitutes the fertile ground Sealy envisions or merely another layer of contamination, I cannot determine alone. What I can offer is ongoing practice: composting what fails, tending what persists, acknowledging that transformation may happen through, rather than beyond, violences carried.

From my irreconcilable tension of being Pākehā, using military surveillance film within Te Kawerau ā Maki rohe, a tangata Tiriti gaze emerges. This gaze is perpetually aware of its guest status, while seeking to interrupt tauwiwi viewing relationships. Crucially, this practice operates within Indigenous environmental authority rather than against institutional power, seeking transformation through reciprocal practices rather than adversarial documentation. This productive tension ensures that photographic-reorientation remains responsive to hapū conservation efforts rather than perpetuating extraction disguised as advocacy. The irresolvable nature becomes the work: the ongoing labour of being tangata Tiriti in violated lands. Even careful witnessing risks becoming extraction when it is disconnected

from relationships of reciprocal need. This tension cannot be resolved, only navigated with ongoing accountability to those whose authority determines which representations support protection, and which remain sealed, as Te Taiapa negatives teach.

Through my photographic methods, what has emerged is recognition that film and forests create their own forms of testimony—not despite contamination, but through their molecular memory. Aerochrome chooses what to reveal or withhold, and I learn that refusal may be a form of participation. The tangata Tiriti gaze, too, emerges from this learning—from recognising refusal as participation, from uncertain ground. This discomfort has become my teacher, keeping me attentive to the complicity I cannot shed. There is no resolution here, only the practice of staying present to what cannot be reconciled. My photographic-kinship methodology operates through accumulated practice.

What remains unresolved operates visually as well as theoretically. Images hold productive tensions rather than definitive answers. Military surveillance technology reframes ecological damage through magenta hues: infrared wonder arrests attention, while resisting easy consumption. Collaborative-reorientation redistributing authority to material-consciousness lives through continuous accountability to mana whenua rather than claiming transformation. My photographs carry these tensions forward without forcing resolution, demonstrating that meaningful environmental witnessing requires sustaining discomfort. My practice continues developing through what each encounter teaches—Aerochrome’s patterns revealing consistency

alongside surprise, kauri consent requiring renewed attention, tangata Tiriti gaze demanding daily recalibration within obligations that multiply rather than resolve.

Through photographic-kinship, what emerges is a methodology where wounded recognition generates capacity for forms of witnessing unavailable to human vision. The scar tissue from Te Taiapa, the chemical knowledge living in contaminated bodies, the film’s selective consciousness—all generate forms of testimony that pristine materials and unmarked bodies cannot access. Photographic-kinship is not redemption but responsiveness, not healing but learning to work within damage that teaches accountability through holding the gorgeous and the grievous, as inseparable.

The soil remembers everything. Decomposition and germination, violation and persistence, what was planted deliberately and what arrived without permission. As such, I return to the forest floor—not for resolution, but for ongoing nourishment for what continues growing. The roots of this research have reached deep through Indigenous and Western thinking. The trunk has held steady through photographic-kinship’s five dimensions. The branches have extended towards light while bearing the weight of what wounded photographic materials carry. The crown has breathed with what persists and proliferates. And now, the forest floor: where what falls becomes what feeds, where endings and beginnings perhaps refuse separation, and where situated knowing among plural participants becomes the ground itself. What I can articulate falls alongside what kauri and Aerochrome hold beyond translation, this shared testimony decomposing into nourishment for future kinships.

At the beginning of this research, I asked how I can become a good ancestor. This question, inspired by Layla Saad’s framework for anti-racism work, shaped everything that followed and transformed my photographic practice from aesthetic pursuit into a sustained inquiry incorporating obligation and relationship.³³⁴ Through years of embodied practice within Waitākere, what emerged was not what I expected. I have discovered that becoming a good ancestor means working with a permanent sense of incompleteness, planting seeds I may never see fruit, and trusting that obligations compound rather than resolve. As such, I have learned, through my photographic practice, that I cannot extract method from relationship, technique from obligation, or learning from the specific wounded ground

that generates it. Spectral-kinship is not metaphor but a lived temporal connection: my chemically-wounded body meeting chemically-wounded materials, meeting chemically-wounded forests. All three recognise each other through shared molecular violences across time. This recognition arrived directly through my flesh—that metallic taste when handling Aerochrome, which connected to my contaminated lungs and to film chemistry, creating a physical and embodied sense of knowing. A primary concern for this research has been how to articulate what my body knows without betraying—through over-articulation—the very embodiment that generates its knowing. I negotiated this balance through restraint—letting photographs and silence hold what exhaustive description would diminish.

This research asked: How may kinship emerge between kauri, Aerochrome film, and tauiwi tangata Tiriti through photographic practice that tenderly holds harm? Over sustained engagement, answers revealed themselves via three wounded participants that held a shared vulnerability—my chemically contaminated body, degraded military surveillance film, and kauri threatened by dieback. From these vulnerabilities, a specific type of kinship arose not in spite of damage but through it, where holding presence and harm together became a condition through which relating found form. What became possible through this relating was a form of witnessing grounded in shared vulnerability rather than distanced observation. Kinship itself became method.

This research has developed photographic-kinship as a form of relational practice that emerges when film, all-beings consciousness, and te Tiriti responsibilities converge.

334. Saad, *Me and White Supremacy*.

Photographic-kinship established how a camera can facilitate care for kauri through partnership—not by resolving tensions, but learning to work within them. Through irresolvable-complicity and a tangata Tiriti gaze, violation, for my project, transformed into permanent obligation that supports ngahere protection via photographic-kinship, and the witnessing it involves. This witnessing also involved conservation labour—phosphite injections and track protection alongside image-making. Within photographic-kinship, witnessing is inseparable from care-work, generating images that emerge from the same hands that inject trees. Although viewers of my photographs cannot access this embodied history directly, something of it persists in what they encounter: prints scaled to approximate kauri trunk dimensions, inviting a bodily relationship where standing before an image echoes standing before a tree. Aerochrome’s spectral palette offers a form of seeing that is ordinarily unavailable to human vision. This infrared revelation functions to arrest attention while making visible the very aliveness that dieback threatens. What viewers receive is not a transfer of my somatic knowledge, but an invitation into their own encounter with forest presence made luminous through wounded film.

This research has discovered how Aerochrome teaches through proximity to contaminated ground. My methods have resisted choosing between contamination and care. My sustained presence reveals that holding both generates forms of witnessing unavailable to photographic materials that are chemically unmarked by violence. As such, there is an unexpected sweetness in damaged ground where spectacular magenta revelation emerges from military

genealogy, where forest testimony arises from surveillance technology. Daily walking practice—that intimate proximity to inescapable violence, learning to hold both without looking away—is where photographic-kinship begins. In my photographs this sustained attention manifests via a sense of temporal accumulation—not single encounters but years of return. The images hold both damage and persistence without flinching from either. Magenta forests glow alongside evidence of contamination; infrastructure scars appear within landscapes still insisting on life. This both/and quality—what I have learned through daily proximity—translates visually as images that refuse resolve into simple narratives of loss or hope. The photographs enable for their viewers a productive uncertainty, neither reassuring nor overwhelming, that asks simply to stay present to complexity.

Silence itself operates as method within this practice: hours spent in wordless presence, inviting forest sounds to replace human thought; the quiet of held breath while awaiting consent; the hush following each exposure, listening for the forest’s response. These silences have allowed for a different knowledge to emerge—understanding that lives in bones and heart, that changes how I move through forest and world. This silence is not absence but presence of a different quality, attention without analysis, receptivity without categorisation. This methodological approach matters because it refuses extractive forms of knowing, instead allowing kauri to determine what gets witnessed and when. Silence-as-method redistributes authority to forest persons, making photographic-kinship possible through consent rather than capture—a recognition that what remains unspoken is as significant as what gets witnessed.

Some knowledge protects itself through remaining partially opaque. Some dimensions remain deliberately unspoken. In the physical encounter, silence finds its visual correlate. My large-scale prints call for unhurried attention—their scale and stillness resisting quick consumption, slowing the body. Bamboo paper substrate, with its plant-to-plant kinship with forest kin, offers a matte surface that absorbs rather than reflects, quieting moments of looking. There is nothing spectacular here despite the spectacular colour; the images ask for attendance rather than analysis, creating conditions where viewers may access their own forms of forest-knowing beyond what language can readily name.

Through this project, I have found that when photographing becomes waiting, when waiting becomes listening, extraction gives way to relation. Slowing down means accepting that not everything is available to be seen. This acceptance reorients photography: where extraction demands transparency, relation honours opacity—recognising that *te ngahere* possesses its own illegibility that resists demands for unlimited documentation. This reorientation manifests methodologically through respecting photographic refusal: when somatic cues signal territorial boundaries, I do not photograph, *kauri* remain illegible. The photographs that exist represent only encounters where permission was granted—absence operating as method alongside presence. What viewers encounter, then, is a selected intimacy born from refusal. The corpus of images is necessarily limited—not comprehensive documentation but specific testimony from moments when welcome was extended. This specificity registers as a particular quality of regard: images that feel received rather than taken, where *kauri* appear as presences

met, rather than subjects captured. Here is a practice of looking that knows its boundaries and honours what remains beyond the frame.

My body developed the methodological capacity for wounded witnessing. Through herbicide exposure, my tissues became archives of atmospheric violence, generating attunement expressed through my embodied practices: standing quietly with *kauri* for extended periods, allowing breathing to slow with forest rhythms, reading somatic response as guidance for photographic encounter. This contamination created spectral-kinship—shared molecular knowledge across contaminated kin. The Aerochrome film, carrying its Agent Orange legacy, exercises its own material consciousness. *Kauri* teach consent through somatic invitation—warmth as welcome, nausea as warning. Three wounded beings recognise each other across species and time. Through this mutual recognition, photography participates in kinship rather than capturing it. Each encounter deepens relational capacity through common wounds, where witnessing occurs through harm rather than beyond the violence we carry.

This project offers photographic-kinship as a methodological contribution to *taiao* photography and research practice in Aotearoa. My research contributes to scholarship that challenges assumptions of photographer autonomy, image neutrality, temporal organisation, and cultural accountability, which in turn can structure environmental photographic practice. Challenging these assumptions has involved embracing a collaborative practice that invites a systematic transformation of documentary traditions that honour Indigenous environmental sovereignty while

enabling visual arts research accountable to iwi and to kauri within Indigenous territories under active environmental protection. By examining how other Aotearoa photographers navigate cultural protocols, my research demonstrates that tauiwi environmental engagement requires a metamorphosis rather than simply respectful acknowledgement of existing protocols. Temporal collaboration prioritises depth over efficiency, embodied approaches align with Indigenous cultural authority, and material-consciousness honours place-based agency and belonging. My research has developed methods that synthesise these approaches through spectral-kinship, reorientating surveillance equipment into instruments of environmental care and protection.

The established theoretical foundations, via Linda Tuhiwai Smith’s relational accountability, Mark Sealy’s and Barry Barclay’s decolonising camera frameworks, and Jolene Rickard’s visual sovereignty principles, are the groundwork for understanding how photographic-kinship offers practical approaches for cross-cultural environmental collaboration and cross-species reciprocity.³³⁵ My analysis of existing limitations and innovations provides a basis for extending these insights towards applied implementation. Photographic-kinship opens space for photographic practices that honour both cultural sovereignty and all-being agency within contemporary Aotearoa, while caring for kauri through collaborative technological reorientation. My work has revealed tensions that require navigation rather than resolution—specifically, how to work photographically within Indigenous territories through partnership rather than presumption, and how to reorient technologies without claiming transformation. Functioning within this hyphen-

space between indigene and coloniser invites ways of working productively within, rather than transcending, relationships. This position encourages partnership across difference that recognises mana whenua sovereignty over environmental documentation and representation.

This research offers photographic-kinship as methodology. The large-scale prints create threshold spaces where breath may slow, where human–forest boundaries can momentarily shift. Working with expired film that carries its own temporal vulnerability creates profound resonance with ngahere facing uncertain futures—both film and forest exist in states of precarity seeking careful tending. The images invite viewers into this tending—a mode of attention that neither resolves precarity nor looks away from it.

My photographs participate in conversations extending beyond my individual lifetime, where film’s slow chemical transformation mirrors ancient forest rhythms. Each photograph becomes part of an ongoing dialogue between ancestral presence held in old-growth kauri, contemporary crisis of dieback disease and climate change, and forest futures that may emerge through relationships of care. My methods of gifting prints rather than retaining ‘ownership’, and coupling each image-making with conservation labour, result in photographic-kinship operating in additional ways of distributed practice rather than individual artistic production. The contributions of this research extend beyond kauri contexts, offering frameworks adaptable to other all-being relationships and environmental contexts while maintaining core principles of accountability, reciprocity, and working within rather than beyond suffering. These

335. Smith, *Decolonizing Methodologies*; Sealy, *Decolonising the Camera*; Barclay, *Mana Tuturu*; Rickard, “Diversifying Sovereignty.”

contributions manifest through tangible circulation: prints in community spaces, frameworks informing other environmental-witness practices, photography reoriented as ceremony and collaborative research.

This research began with love and mourning but revealed something more complex: disenfranchised grief carried for ecological loss, for kin, for contaminated ground. In an age that pathologises such grief or dismisses it as sentimental, my project has devised approaches for expressing it, rituals for honouring and holding it. Photographic-kinship offers one such way. By holding emergence and harm together without seeking their synthesis, my project creates space for often overlooked grief. Specifically, for tauiwi tangata Tiriti navigating relationships within Indigenous territories, this grief may be compounded by complicity. The methods developed throughout my research invite ways to mourn both ecological loss and violated sovereignty—distinct but entangled griefs—while practising accountability through sustained attention rather than through claims of transformation or healing. This practice demonstrates that staying present to loss without looking away creates forms of looking and witnessing unavailable through transcendence or closure. My both/and approach—joy alongside sorrow, vibrant persistence alongside harm, love alongside accountability—suggests that relationships with beings grounded in reciprocal care require neither resolution nor redemption, but rather tender, sustained presence. Photography enables this holding: each image carrying infrared luminosity alongside military genealogy, forest vitality alongside atmospheric violence. The camera becomes a vessel for caring rather than curing.

My time of working with Waitākere kauri, expired military film, sustained accountability to Te Kawerau ā Maki environmental governance, and ongoing embodied practice reveals that loving what is being lost can become methodology itself. For my project, grief became a capacity for witnessing; contamination became sensitivity; violation became a teacher; and exhaustion became an offering. The tangata Tiriti gaze that emerged through this research offers a possible framework for how tauiwi tangata Tiriti may engage photographically within Aotearoa. This framework also operates as a broader orientation, emerging from the structural complicity tauiwi photographers inhabit, meaning to live on alienated Indigenous lands while benefiting from settler infrastructure; working with cameras that carry extractive documentary histories; loving ngahere to which we do not hold whakapapa connection; and the daily impossibility of settler innocence. Staying present to this complicity requires sustained practice: ongoing recalibration, responsive attention to harm, the accumulated weight of obligations that multiply. My project offers a series of methods so that each tauiwi photographer may discover their own catalysts—their own violations that teach, and their own pathways towards principles of accountability. My tangata Tiriti gaze remains specific to this place and these relationships and particular wounds. What disperses is not a method to replicate but an invitation to consider. My project offers situated knowledge that decomposes into nutrients for different spatio-temporal grounds. What grows from this dispersal remains beyond my control, as it should. What others discover through their own sustained attention to wounded ground will involve different teachings than what I learned through mine. How photographic-kinship may adapt

to other contexts—other wounded landscapes, other constitutional obligations, other beings as kin—remains an open and generative question for future research.

It has been four years since DOC closed Te Taiapa (Figure 78). Through Aerochrome’s witnessing, the chain and padlock I installed still shimmer metallically—now incorporated into official warning signs and a protective gate. Infrastructure born from harm becomes care. As te ngahere beyond glows in testimony, healing proceeds beyond human access. The rāhui cloak continues its work. What persists is responsiveness—returning to witness barriers still standing, staying accountable across seasons, obligations compounding. This method of return and ongoing care becomes the offering that sustains both practice and ngahere.

I am still asking myself if I am closer to being a good ancestor through this work. I will continue walking Mokoroa Valley, dogs determining pace, atmospheric conditions suggesting rhythm, body reading whether this day requests photography or presence alone. In my freezer, Aerochrome waits to collaborate. In my studio, sealed negatives continue to teach by withholding. In my garden, composted prints become food. In my body, permanent obligation and profound love for ngahere continue to teach despite everything humanity inflicts. The roots reach deep. The trunk holds steady. The branches extend. The crown reaches towards light. And here, on the forest floor, everything returns to become everything else—relationship, revelation, and restraint composting together into nourishment for what continues growing.

The soil remembers everything. The ngahere is still waiting.



Figure 78. Chervelle Athena, *Te Taiapa Track Entrance*, Waitākere, November 2024. Kodak Aerochrome infrared film, inkjet print. 1100 × 1100mm.

Te Wai Ngutu Kākā Gallery Three, AUT, Tāmaki Makaurau

The final exhibition, *Tenderly Holding Harm*, presented seven large-scale Aerochrome giclée prints in Te Wai Ngutu Kākā Gallery Three, made on Hahnemühle Bamboo 290gsm at 1100 × 1100mm, set in white box frames. Showing only seven was a decision of restraint. These prints are emotionally heavy, and fewer works allow each to breathe and let the viewer be with the complexity of the images without being overwhelmed by volume. At that scale, each work approaches the size of a standing body; the viewer meets each kauri person as one body alongside another.

The exhibition is dominated by magenta, the register in which the expired film offers its fullest infrared revelation. The colour in this quantity is difficult to hold for long, and that is part of the work. Staying with the images and being held by them in turn, past the point of comfort, mirrors the difficulty of witnessing kauri and the ngahere around them as both dying and alive. The room slows the glance into dwelling, asking the viewer to remain with the wounding and the wonder.

Installation Views



Figure 79. Installation view, *Tenderly Holding Harm*, March 2026.
Courtesy of Sait Akkirman.



Figure 80. Installation view, *Tenderly Holding Harm*, March 2026.
Courtesy of Sait Akkirman.



Figure 81. Installation view, *Tenderly Holding Harm*, March 2026.
Courtesy of Sait Akkirman.



Figure 82. Installation view, *Tenderly Holding Harm*, March 2026.
Courtesy of Sait Akkirman.



Figure 83. Installation view, *Tenderly Holding Harm*, March 2026.
Courtesy of Sait Akkirman.

The Works

Shown in hang order,
left to right, clockwise.



Figure 84. Chervelle Athena, *Construction Rubble and Earth Fill, Mokoroa, Waitākere*, October 2024. Kodak Aerochrome film, giclée print. 1100 × 1100mm.



Figure 85. Chervelle Athena, *Attempted Burn of Mānuka and Kānuka, Kauri Ngahere Beyond, Mokoroa, Waitākere*, November 2024. Kodak Aerochrome film, giclée print. 1100 × 1100mm.



Figure 86. Chervelle Athena, *Kauri Rickers in Grazed Paddock, Mokoroa, Waitākere*, December 2025. Kodak Aerochrome film, giclée print. 1100 × 1100mm.



Figure 87. Chervelle Athena, *Mokoroa Stream, Waitākere*, December 2025. Kodak Aerochrome film, giclée print. 1100 × 1100mm.



Figure 88. Chervelle Athena, *Tended Ngahere, Mokoroa, Waitākere*, December 2025. Kodak Aerochrome film, giclée print. 1100 × 1100mm.



Figure 89. Chervelle Athena, *Deer Dwelling with Kauri II*, Mokoroa, Waitākere, December 2025. Kodak Aerochrome film, giclée print. 1100 × 1100mm.



Figure 90. Chervelle Athena, *Dead Trees among Living Kānuka and Ponga II*, Mokoroa, Waitākere, October 2024. Kodak Aerochrome film, giclée print. 1100 × 1100mm.

Glossary

Māori Terms and Explanations (He Kupu Māori)

aro**ha:** love, affection, compassion, empathy, sympathy, charity
āhuru mōwai: calm place, sheltered haven
awa: river or stream
hapū: sub-tribe, organised kin group, extended families; pregnant, impregnated
hauora: health and wellbeing (holistic concept encompassing physical, mental, social, and spiritual wellbeing)
hīkoi: walk, march
hui: meeting, gathering, assembly, conference
iwi: tribe, people, large socio-political grouping; bone
kaitiaki: guardian, trustee, keeper
kaitiakitanga: guardianship of the environment
kaumātua: elder, respected elder
kaupapa Māori: Māori philosophy, principles
kāwanatanga: governance, governorship
kōauau: Māori flute, small traditional wind instrument
koha: gift, present, offering, donation, contribution (especially one maintaining social relationships with connotations of reciprocity)
kōrero: to speak, talk, tell, say; speech, narrative, story, news, account, discussion, conversation, discourse
kōura: crayfish, freshwater crayfish
mahi: work, activity
mana motuhake: sovereignty, authority, autonomy
mana tuturu: true mana, authentic authority, spiritual guardianship
mana wahine: the mana/power/prestige of Māori women, female authority, women in roles of power
mana whenua: territorial rights, authority over land; also the people who hold this authority through ancestral connection
mana-i-te-whenua: territorial authority, power

mana: prestige, authority, power, influence, status, spiritual power, control
Māori: Indigenous people of Aotearoa New Zealand
maramataka: lunar and seasonal almanacs
Matariki: Māori New Year
mātauranga Māori: cultural knowledge and expertise
maunga: mountain, sacred peak, high point
mauri ora: wellbeing, health, vitality, life force, alive
mauri: life principle, life force, vital essence, special nature, source of emotions
moana: sea, ocean
mōteatea: traditional chants, traditional song-poetry, centuries-old tradition of chanted song-poetry
ngahere: bush, forest
pā: fortified settlement, village
Pākehā: New Zealander of European descent
Papatūānuku: Earth Mother, the land
puna wai: freshwater spring
pūrākau: stories, narrative
rāhui: temporary ritual prohibition, closed season, ban — placed on an area or resource as a conservation measure or means of separating people from tapu; initiated by those with appropriate authority
rākau: tree
Rākaunui: full moon, fifteenth night of the lunar month in the maramataka
rangatiratanga: self-determination, sovereignty, authority, chiefly authority
Ranginui: sky father
rohe: boundary, district, territory
taiao/te taiao: environment, nature, the natural world
taiapa: fence, palisade
Tāne (Tāne-māhuta): god of forests and birds; also means man, husband
tangata Tiriti: people of the Treaty (non-Māori New Zealanders who are in the country by virtue of te Tiriti o Waitangi)
tangata whenua: people of the land, local people, hosts, Indigenous people
tangata: person (singular)
taniwha: guardian water spirit

taonga: treasure, anything prized; culturally valued thing, either material or immaterial
tapu: sacred, prohibited, restricted, set apart, forbidden
tauīwi: non-Māori
tautoko: support, advocate, endorse
tauutuutu: reciprocity
te ao Māori: the Māori world, Māori worldview
te reo Māori: the Māori language
te Tiriti o Waitangi: the Treaty of Waitangi
tikanga: appropriate etiquette, custom, correct way, protocols, practices, values
tino rangatiratanga: self-determination, sovereignty, autonomy, absolute sovereignty
tuna: eel
tūrehu: fairy folk
wai: water
waiata: song, chant
wairākau: tea infusion, tonic
wairua: spirit, soul, non-physical spiritual dimension
waka: canoe
wānanga: customary process of learning, gathering, discussion
whakaahua: photography, lens-based practices
whakapapa: layers, descent lines, genealogy
whakatauki: proverb, saying, in a general sense
whānau: family, birth, extended family
whanaunga: kin, relative
whanaungatanga: relationships, kinship
whenua: land, placenta
Whiro: new moon, first night of lunar month

Abbreviations

AI: Artificial intelligence
DOC: Department of Conservation
FA: Forensic Architecture
TTW: Toi Taiao Whakatairanga
U.S.: United States

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Figure 44. Chervelle Athena, *Wire fence and forest III, Waipoua*, December 2020. Medium-format film, inkjet print. 1100 × 1100mm.

Figure 45. Joyce Campbell, *Taniwha V*, from *Te Taniwha*, 2010. Gelatin silver fibre-based hand-print, 1070 × 1540mm. Courtesy of the artist and Two Rooms.

Figure 46. Natalie Robertson, *Tera te haeata e takiri ana mai! Behold the first light of dawn!*, 2020. C-type photographic prints on Fujiflex Crystal Archive, triptych, each 1000 × 800mm. Courtesy of the artist and Auckland Art Gallery Toi o Tāmaki.

Figure 47. Ngāhuia Harrison, *First Cinema Camera 3 and 4*, from *Coastal Cannibals*, 2021. C-type prints, diptych, each 317 × 475.5mm. Courtesy of the artist.

Figure 48. “The Camera at the Front,” *Scientific American*, November 24, 1917.

Figure 49. Standard aerial film (left) versus Kodak Ektachrome Infrared Aero Film (right). R. G. Tarkington and A. L. Sorem, “Color and False-Color Films for Aerial Photography,” Research Laboratories, Eastman Kodak Company, Rochester, N.Y., January 1963.

Figure 50. Horst Faas, U.S. Air Force aircraft spraying Agent Orange defoliant, Vietnam, circa 1965-70. AP Photo.

Figure 51. *Defoliated mangrove forest showing boundary between sprayed and unsprayed vegetation, III Corps, Southern Vietnam*, 1968. Courtesy of Vietnam RANCH HAND Association.

Figure 52. Aerial view showing herbicide spray damage across Mokoroa, Waitākere. Google Earth. Image date: January 22, 2023.

Figure 53. Chervelle Athena, *Herbicide-contaminated hillside with surviving kauri, Mokoroa, Waitākere*, October 2024. Kodak Aerochrome film, inkjet print. 1100 × 1370mm.

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Figure 55. Richard Mosse, *Men of Good Fortune*, from the series *Infra*, 2011. Digital C-print, 1016 × 1270mm (40 × 50 inches). Courtesy of the artist and Jack Shainman Gallery, New York.

Figure 56. Richard Mosse, *Taking Tiger Mountain*, from the series *Infra*, 2011. Digital C-print, 1829 × 2286mm (72 × 90 inches). Courtesy of the artist and Jack Shainman Gallery, New York.

Figure 57. Richard Mosse, *Ruby Tuesday*, from the series *Infra*, 2011. Digital C-print, 1219 × 1524mm (48 × 60 inches). Courtesy of the artist and Jack Shainman Gallery, New York.

Figure 58. Richard Mosse, *Idomeni Camp*, Greece, 2016. Digital c-print on metallic paper, 1019 × 3013mm. Courtesy of the artist and Jack Shainman Gallery, New York.

Figure 59. Forensic Architecture, still from *Herbicidal Warfare in Gaza investigation*, 2019. (Cloud Studies, 2020). Courtesy of Forensic Architecture.

Figure 60. Chervelle Athena, *Construction Rubble and Earth Fill, Mokoroa, Waitākere*, October 2024. Kodak Aerochrome film, inkjet print. 1100 x 1100mm.

Figure 61. Chervelle Athena, *Cleared tree-bodies and living forest beyond, Mokoroa, Waitākere*, November 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.

Figure 62. Chervelle Athena, *Cleared Mānuka and Kānuka Awaiting Burning, Mokoroa, Waitākere*, November 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.

Figure 63. *Color Reproduction with Kodak Aerochrome III Infrared Film 1443*, diagram showing three-layer emulsion structure and false-colour formation process. Eastman Kodak Company, *Kodak Aerochrome III Infrared Film 1443*, Publication No. AS-77 (Eastman Kodak Company, 2005).

Figure 64. Chervelle Athena, *Material Refusal, Mokoroa, Waitākere*, October 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.

Figure 65. Chervelle Athena, *Attempted Burn of Mānuka and Kānuka, Kauri Ngahere Beyond, Mokoroa, Waitākere*, November 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.

Figure 66. Chervelle Athena, *Burn Pile with Remuera Golf Club Marker Flag, Mokoroa, Waitākere*, August 2024. Instant film photograph. 62 × 62mm.

Figure 67. Chervelle Athena, *Ordinary Yellow, Mokoroa, Waitākere*, November 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.

Figure 68. Fiona Amundsen, *Palm Tree near Merizo Pier, Guam (2,121 Stomachs)*, from the series *Blowing in the Wind*, 2023. Courtesy of the artist.

Figure 69. Kate van der Drift, *Ulex Europaeus (Gorse)*, from the series *Dance, Dance*, 2025. Chromogenic photograph from 4 × 5” lumen negative, 1482 × 1200mm. Courtesy of the artist and Sanderson Contemporary.

Figure 70. Kate van der Drift, *Ulex Europaeus (Gorse), Paspalum Urvillei (Vasey Grass) Positive*, from the series *Dance, Dance*, 2025. Chromogenic photograph from 4 × 5” lumen negative, 1200 × 972mm. Courtesy of the artist and Sanderson Contemporary.

Figure 71. Thu Van Tran, *From Green to Orange*, 2022. Gelatin silver print, alcohol, ink, and rust, 950 × 750mm. Courtesy of the artist and Meessen, Brussels.

Figure 72. Chervelle Athena, *Deer Dwelling with Kauri I, Mokoroa, Waitākere*, December 2025. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.

Figure 73. Chervelle Athena, *Kauri Grove Paddock I, Mokoroa, Waitākere*, November 2021. Medium-format film, inkjet print. 1100 × 1100mm.

Figure 74. Chervelle Athena, *Kauri Grove Paddock II, Mokoroa, Waitākere*, November 2021. Medium-format film, inkjet print. 1100 × 1100mm.

Figure 75. Chervelle Athena, *Deer Dwelling with Kauri II, Mokoroa, Waitākere*, December 2025. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.

Figure 76. Chervelle Athena, *Mokoroa Stream, Waitākere*, December 2025. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.

Figure 77. Chervelle Athena, *Construction debris and tanks, Mokoroa, Waitākere*, October 2024. Kodak Aerochrome film, inkjet print. 1100 × 1100mm.

Figure 78. Chervelle Athena, *Te Taiapa Track Entrance, Waitākere*, November 2024. Kodak Aerochrome infrared film, inkjet print. 1100 × 1100mm.

Figure 79. Installation view, *Tenderly Holding Harm*, March 2026. Courtesy of Sait Akkirman.

Figure 80. Installation view, *Tenderly Holding Harm*, March 2026. Courtesy of Sait Akkirman.

Figure 81. Installation view, *Tenderly Holding Harm*, March 2026. Courtesy of Sait Akkirman.

Figure 82. Installation view, *Tenderly Holding Harm*, March 2026. Courtesy of Sait Akkirman.

Figure 83. Installation view, *Tenderly Holding Harm*, March 2026. Courtesy of Sait Akkirman.

Figure 84. Chervelle Athena, *Construction Rubble and Earth Fill, Mokoroa, Waitākere*, October 2024. Kodak Aerochrome film, giclée print. 1100 × 1100mm.

Figure 85. Chervelle Athena, *Attempted Burn of Mānuka and Kānuka, Kauri Ngahere Beyond, Mokoroa, Waitākere*, November 2024. Kodak Aerochrome film, giclée print. 1100 × 1100mm.

Figure 86. Chervelle Athena, *Kauri Rickers in Grazed Paddock, Mokoroa, Waitākere*, December 2025. Kodak Aerochrome film, giclée print. 1100 × 1100mm.

Figure 87. Chervelle Athena, *Mokoroa Stream, Waitākere*, December 2025. Kodak Aerochrome film, giclée print. 1100 × 1100mm.

Figure 88. Chervelle Athena, *Tended Ngahere, Mokoroa, Waitākere*, December 2025. Kodak Aerochrome film, giclée print. 1100 × 1100mm.

Figure 89. Chervelle Athena, *Deer Dwelling with Kauri II, Mokoroa, Waitākere*, December 2025. Kodak Aerochrome film, giclée print. 1100 × 1100mm.

Figure 90. Chervelle Athena, *Dead Trees among Living Kānuka and Ponga II, Mokoroa, Waitākere*, October 2024. Kodak Aerochrome film, giclée print. 1100 × 1100mm.