Making Conservation Soundscapes:
The Musical Ethnography of a New Zealand Forest Sanctuary

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A Dissertation presented to the Graduate Faculty
of the University of Virginia in Candidacy for the Degree of
Doctor of Philosophy

Department of Music

University of Virginia
January 2025

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Abstract

This musical ethnography addresses the nature conservation work undertaken by volunteers at a New Zealand forest sanctuary. Based on field research in which I volunteered at Bushy Park Tarapuruhi, a privately-owned conservation site managed by New Zealand's largest and oldest environmental NGO, the Royal Forest and Bird Society, I articulate this conservation work as a creative act: the making of conservation soundscapes. I take as a point of departure Forest and Bird's slogan "giving nature a voice," which I argue points to a much deeper sentiment that underlies the work of nature conservation at Bushy Park. Playing with the trope of an NGO giving voice to the voiceless, Forest and Bird's slogan references the sounds of New Zealand's endemic and endangered birds, framing conservation volunteering as *literally* giving nature its voice through working to protect the lives and habitats of these native New Zealand birds so they may continue to sing, enhancing a "bustling dawn chorus"—the closest thing to a synecdoche for the nation's modern conservation movement.

Rather than pursuing a direct critique (or pollyannaish celebration) of Forest and Bird's claimed solution to New Zealand's conservation challenges, I want to vividly articulate the conservation work that constitutes one small part of it. In doing so I aim to portray a relationship between labor, nature, music, and voice that may help further understandings of conservation in New Zealand more broadly. In Chapter 1, I introduce the concept of the soundscape as the guiding theme that links music and nature throughout this dissertation. In Chapter 2, I discuss some of the unpleasant work involved in volunteering at Bushy Park, focusing on pest species management, and framing this labor in terms of recent analyses of Marcel Mauss's theory of the gift. Chapter 3 considers the experience of listening to the birdlife in the sanctuary as a volunteer,

theorizing this aural experience in terms of "the acousmatic"—listening to sounds without certain knowledge of their source or cause. Chapter 4 considers the structure of Bushy Park as a fenced sanctuary, imagining a form of modern nature conservation from the point of view of Western musical aesthetics.

This dissertation seeks to participate in ongoing academic debates about the place of colonial histories within contemporary forms of nature conservation. However, by approaching this study from an ethnomusicological and ethnographic point of view, not only do I address the aesthetic qualities and significance of nature conservation, but I also seek to articulate my positionality as a settler-descendent scholar in relation in New Zealand nature conservation and the Western musical tradition. Theoretically I also aim to extend the usefulness of the soundscape concept, expanding on some of its qualities that first compelled its early users to engage with sounds as both artists and environmentalists. I use my formulation of a conservation soundscape to help reconcile some of the quiet ugliness of settler colonialism with New Zealand's natural beauty as each manifest in the work of volunteering at Bushy Park.

Acknowledgements

I want to thank my family first and foremost in supporting me throughout the (longer than promised) process of working on this dissertation. My wife Michelle Peterson, and my parents Kevin and Chris Booth, witnessed more of the highs and lows of this work than anyone else—they have been encouraging, patient, interested, (and probably puzzled) in equal measure. I could not have completed this work without their unconditional support and belief in me.

The many people I met and worked with at Bushy Park have fundamentally made this dissertation what it is. At its core, and beyond its presence as an academic publication, my work this dissertation functioned as a heuristic tool for framing careful and timely conversations about what it means to "give nature a voice" in Aotearoa New Zealand. This document distills many of the conversations that took place during my field research, and I hope it may invite further dialogue—both inside and outside the academy—producing offshoots from the roots (and routes) of these conversations. I want to thank Mandy Brooke in particular for her ongoing support and encouragement. I hope that this dissertation can contribute in some way to the larger project she nurtured as the sanctuary's manager.

My academic advisors, instructors, and sources of inspiration who I somewhat aloofly refer to in this dissertation as my "conceptual ancestors," provided the vital energy I needed at many moments while I worked on this dissertation to see it through and pay it the care and curiosity the topic warranted. My dissertation committee: Nomi Dave, Noel Lobley, and Jim Igoe have had a significant influence on this work—I suspect much more than they are each aware. Nomi and Noel were wonderful advisors and instructors, and I have very warm memories of working with them in the seminar room and on their front porch in Charlottesville, Virginia. Jim's particularly humane brand of Marxist environmental anthropology will infuse my life and

work for many years to come. And I am particularly grateful to Michelle Kisliuk, my dissertation committee chair, for encouraging me to pursue ethnographic research and the various challenges and opportunities it can afford. In January of 2025, not long before I submitted this dissertation, I was lucky enough to spend an afternoon with Michelle at Bushy Park on a brief detour from her trip around the lower North Island of New Zealand. Catching up in person after not seeing her since before the COVID pandemic, it was a special joy to walk through the forest with Michelle, listening to the birds, and talking—about our research projects, life in New Zealand and Virginia, politics, and family. It is wonderful to know that the kinds of sounds I write about in this dissertation have resonated—unmediated—in Michelle's ears.

Most vital to this dissertation as a new piece of research is the conviviality I experienced as a graduate student in the University of Virginia Music Department's PhD program. If meaning and value often lies in dialogue (as in this dissertation I suggest it does) then the countless conversations I shared with fellow PhD students in Charlottesville and elsewhere remain some of my most cherished moments while working towards the completion of this dissertation. I am dearly grateful to all my colleagues past and present, but especially to Rami Stucky, Tanner Greene, and Caitlin Flay, who were the most enthusiastic, hilarious, and tolerant PhD cohort I could have hoped for. It was a true honor to meet you all and share the time we had together as students muddling our way through the first few years of graduate study together. The strength and inspiration I drew from you all formed a foundation I will continue to build on in many years ahead as this work finds its way into the world.

This dissertation is dedicated to

C. R. Booth and C. I. Booth

—the two Connies in my life.

Contents

Introduction

October in New Zealand marks the start of the hihi breeding season. The endemic bird was named the "stitch bird" by English settlers, a reference to its high-pitched call, but its Māori name is now used more often in the official discourse of New Zealand nature conservation.[1] The name in te reo Māori (the Māori language) refers to the glistening of sunlight filtering through forest trees.[2] At Bushy Park Tarapuruhi Forest Sanctuary, hihi occupy a small niche within a bustling population of threatened endemic birds, and like most birds in the sanctuary they are almost always heard before they are seen.

Fiona and I had just arrived at nest box no. 21. It was one of fifty nest boxes dotted throughout the 98-hectare (242-acre) forest sanctuary to support the small but growing hihi population. During the breeding season, a group of the sanctuary's volunteer workers methodically check the nest boxes, logging any changes they observe—from the first few twigs indicating the breeding-pair's intent to construct a nest, through to the final days of a guano-drenched nest bulging with fledgling chicks ready to depart. This morning, Fiona and I had been given several tasks involving hihi. The first was to spray one of the nest boxes with insecticide to prevent the spread of mites in a recently formed nest housing an expecting female just about ready to lay her eggs. We also had to check the status of several other nest boxes nearby. When we finally arrived at nest box 21, it was warming up and we were both starting to puff from exertion. As we got to the top of the ridge on line 9 and the nest box popped into view, we could

[1] Throughout this dissertation I include hyperlinks to audio recordings of the various birdcalls discussed. For the repository of sound recordings of New Zealand birdcalls I draw from see "RNZ : Collections : Birds," RNZ, accessed January 2, 2025, https://www.rnz.co.nz/collections/birds.
[2] Te Aka Māori Dictionary, "Hihi - Te Aka Māori Dictionary," hihi - Te Aka Māori Dictionary, accessed November 2, 2024, https://www.maoridictionary.co.nz/.

hear a couple of male hihi calling out in the canopy above us. Soon enough we could see them, hopping about the drooping vines of supplejack that lace the forest understory. Usually when I spotted one of these birds in the forest, I'd call back to it—something like "Good morning hihi! How are you doing today?" In the several months since I'd been volunteering, I'd notice many other volunteers do this, and by this point in my field research I had started imitating them whenever I encountered a singing bird nearby in the forest. On this morning, however, Fiona and I both suppressed our instincts to call back to the two hihi flitting about in the canopy. Perhaps this abnormal muteness was in anticipation of the quite irregular undertaking that lay ahead of us: snuck into the middle of the morning's usual tasks, Fiona and I had planned to make a sound recording of the forest soundscape together.

A few months earlier I had sent an email out to all the Bushy Park volunteers to gauge interest in making sound recordings in the forest. I only received a few responses as it was not something most volunteers were accustomed to nor probably particularly interested in doing. While most of them expressed an appreciation for the sounds of the forest, it remained largely in the background; in the foreground was the complex and sometimes taxing work of managing the sanctuary itself.

I decided to approach Fiona directly with my field recording proposition. I had already interviewed her once and knew by then she was interested in my research. Fiona was one of the sanctuary's longest standing volunteers. Now retired—formerly the director of a local native-plant nursery—she was one of the most respected board members in the Bushy Park Forest Trust (a decision-making body on conservation methods and strategic directions for the sanctuary). Her botanical knowledge of the forest was exhaustive, and she had a particular fondness for the hihi, having been involved in the first translocation of the species into Bushy Park several years

earlier from a sanctuary off the coast of Auckland city.[3] Probably no one amongst the volunteers knew the soundscape of Bushy Park better than Fiona, so I was thrilled to be doing this field recording with her and couldn't wait to see what would come of it.

What I didn't know that morning was that it would be one of the last soundscape recordings I'd make in the forest. I'd begun my field research with a sense of certainty that my Zoom H5 sound recorder would be a window into the reality of life in the sanctuary. A sonic net for capturing the truth that was invisible to the other senses. Moreover, I believed it would be a crucial means of bridging the worlds of ethnomusicology, soundscape composition, and nature conservation—the three worlds I saw myself trying to straddle as a music ethnographer doing field research in a New Zealand forest sanctuary. But after several months of volunteering at Bushy Park and having completed several field recordings with some of the sanctuary's volunteers (along with dozens of field recordings I'd made on my own in the forest) I'd begun to sense my sound recorder had outlived its usefulness in this research project. I was starting to realize that the sound recorder—and the ideas and expectations I'd brought along with it into the sanctuary—was demanding something of me which I was beginning to find disconcerting: that I *remain silent* in the sanctuary. Even more troubling was that it insisted on the silencing of other people I'd come to know while working in Bushy Park. While only very temporary, this restrictive silence assumed a right to refuse a social convention of response. If Bushy Park was exemplary of a New Zealand conservation soundscape, then a listening aesthetics of passive receptivity seemed quite out of place. Rather, Bushy Park as a place demarcated for nature

[3] "Whanganui Welcomes Hihi | Forest and Bird," November 7, 2013, https://www.forestandbird.org.nz/resources/whanganui-welcomes-hihi.

conservation was also a place that supported and sustained con*vers*ation. This demanded a form of attentive listening that required a response.

Beginnings

In January 2020 I started field research for this dissertation at Tarapuruhi Bushy Park, a forest sanctuary in the North Island of New Zealand. I spent the year volunteering at the sanctuary two to three days a week where I worked alongside fifteen regular volunteers under the supervision of the sanctuary's manager, Mandy Brooke. Mandy was employed by the New Zealand environmental NGO Forest and Bird, the organization delegated responsibility for care of the sanctuary by its legal owners, the Bushy Park Trust. Forest and Bird remains the largest and oldest environmental NGO in New Zealand (2023 marked 100 years since its founding).[4]

As an ethnographic music researcher wanting to better understand the social and aesthetic qualities of nature conservation in New Zealand, I was particularly struck by a Forest and Birds slogan: "Te reo o te taiao | giving nature a voice." Not only did this bilingual slogan reflect the prominent "bicultural" thread of progressive politics in New Zealand, it also pointed directly to the significance of sound within the NGO's environmentalist mission. By combining the Māori phrase "te reo o te taiao" with its approximate English translation, Forest and Bird's public-facing ethos expresses an increasingly mainstream attitude amongst the New Zealand public that aspires for a meeting of the nation's Indigenous Māori culture with its European cultural heritage. More broadly, biculturalism may be thought of as a unique South-Pacific strain of a global multicultural paradigm of national society—evidenced in various other economically

[4] "Forest & Bird Is Aotearoa/New Zealand's Leading Independent Conservation Organisation. | Forest and Bird," October 18, 2024, https://www.forestandbird.org.nz/.

powerful nations, including those with colonial histories like Australia, the United States, and Canada.[5] Nature conservation is just one aspect of New Zealand society that expresses this desire to accommodate local Indigenous culture, although it serves as an especially potent one—as I hope to show across the course of this dissertation.

Taken at face value, Forest and Bird's slogan expresses something of the socioecological process I participated in as a volunteer working at Bushy Park. If the sounds of the sanctuary were to be understood as the voice of nature in New Zealand, then in our efforts as volunteers to care for and manage the sanctuary, we were responsible for giving voice to nature. And the most *vocal* of sounds of the sanctuary were those of the birds—like the hihi, but also the tīeke, the toutouwai, the korimako, and the tūī. As volunteers working in the forest, we would hear these birds singing every day high up in the canopy. In giving voice to nature, we could hear nature calling back to us.

This notion of birdsong as the voice of nature can be traced to Europeans' earliest experiences in these South Pacific islands. Botanist Joseph Banks who travelled with James Cook on his first expedition to New Zealand in 1769 describes in a journal entry the dawn chorus he heard while the *Endeavour* was anchored in the Marlborough Sounds at the top of New Zealand's South Island:

> This morn I was awakd by the singing of the birds ashore from whence we are distant not a quarter of a mile, the numbers of them were certainly very great who seemd to strain their throats with emulation perhaps; their voices were certainly the most melodious wild musick I have ever heard, almost imitating small bells but with the most tunable silver sound imaginable.[6]

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[5] David Pearson and Patrick Ongley, "Multiculturalism and Biculturalism: The Recent New Zealand Experience in Comparative Perspective," *Journal of Intercultural Studies* 17, no. 1–2 (January 1996): 5–28, https://doi.org/10.1080/07256868.1996.9963430.

[6] New Zealand Ministry for Culture and Heritage Te Manatu Taonga, "Joseph Banks's Journal," Web page (Ministry for Culture and Heritage Te Manatu Taonga), accessed November 2, 2024, https://teara.govt.nz/en/speech/10106/joseph-bankss-journal.

Here Banks evokes New Zealand's natural environment as not only noisy, but as expressing an aesthetic vocal quality. In doing so, he expresses his own a kind of aestheticized position, both literally–Banks is listening from the *Endeavour*, moored "not a quarter of a mile" from the shoreline–and also figuratively—Banks's prose assumes a rhetorical style similar to that of a music critic, judging the sounds he perceives in terms of musical melody, timbre, and pitch. He is describing the natural soundscape before him almost as if it were a musical composition.[7]

For many New Zealand conservationists today, Banks's journal entry will at once evoke a sense of innocent fascination in nature and a tragic ecological naivety that would soon be demonstrated in the widespread destruction that Europeans wrought on the natural environment in their attempts to make it both productive and beautiful in the image of their former homelands. Now in a society beginning to seek atonement for its colonial legacy, many descendants of New Zealand's early European settlers see the restoration of nature's voice as a virtuous pursuit, one that not only restores natural beauty, but also goes some way in redressing the past wrongs of their colonial ancestors. This is evoked neatly, again, in Forest and Bird's bilingual slogan. In using both the Māori and English language to represent its mission, Forest and Bird give voice to a growing segment of New Zealand society who wish to acknowledge the ongoing presence of Tangata Whenua (Indigenous Māori) and recognize their centrality in the mission of contemporary nature conservation. Giving voice to nature may be seen at the same time as giving voice to New Zealand indigeneity. The extent to which this is achieved is one of the central issues I address with this dissertation.

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[7] On Joseph Banks's patronage of the arts see John Gascoigne, *Joseph Banks and the English Enlightenment: Useful Knowledge and Polite Culture* (Cambridge University Press, 2003).

Settler colonialism and nature conservation in New Zealand

The land that constitutes Bushy Park today was first known as the ancestral territory of the Māori iwi (tribal confederation) Ngā Rauru Kītahi.[8] In the mid-1800s it began its early transformation into a conservation space through colonial force, first via its appropriation by the fledgling New Zealand government who soon sold it to a Scottish settler named James Moore. Moore purchased the land block in the 1860s and it was inherited by his son G.F. Moore at the turn of the century. In 1906 G.F. began building a homestead on the land.[9] It remains standing today and is registered as a Category 1 New Zealand historic building, the highest official level of national heritage protection by Heritage New Zealand Pouhere Taonga. This obvious material presence of Bushy Park's early colonial history makes it unique amongst the many conservation sites dotted throughout New Zealand. Most national parks, forests, and sanctuaries bear little if any such obvious evidence of a colonial past despite their concurrent historical origins.

When G. F. Moore began clearing his new property for livestock farming, he left standing a pocket of forest surrounding the homestead. Leaving the trees untouched improved the scenery from his porch—and also meant preserving a habitat for the hunting of native and introduced birds.[10] Like so many conservation sites around New Zealand, Bushy Park (now a place of refuge for endangered species and biodiversity) began its life as a recreational escape for settler society.[11] The contemporary conservation movement cannot easily be disentangled from

[8] "Ko Wai - Te Kaahui o Rauru," accessed November 9, 2024, https://www.rauru.iwi.nz/ko-wai.
[9] Penny Robinson, *Weaving a Dream: The Bushy Park Experience.* (Bushy Park Trust, 2006).
[10] [. Moore's diaries include entries where he describes shooting hundreds of birds in a single day. See Penny Robinson.
[11] John Sheail, *Nature's Spectacle: The World's First National Parks and Protected Places* (London: Routledge, 2014), https://doi.org/10.4324/9780203495643.

the forced removal of indigenous peoples from their ancestral territories, and the partitioning of these lands into ostensibly productive and non-productive resources.

There is notable evidence in places like Bushy Park of attempts to redress these colonial injustices. In seeking to improve relationships with local Māori, the Bushy Park Trust secured an arrangement with Te Kaahui o Rauru (the incorporation representing Ngā Rauru Kitahi), allowing them to harvest a single plant species from the perimeter of the forest (the harvested kawakawa leaves being used to produce commercial health drinks). Bushy Park is quite unusual in making this kind of harvesting agreement; most conservation sites around New Zealand prohibit the removal of flora or fauna without Government permission.[12] Even though harvesting of kawakawa was limited to the sanctuary's perimeter, on the few occasions I heard volunteers at Bushy Park discuss this customary gathering, I noticed a slight tendency towards skepticism. The consensus amongst the volunteers seemed to be that the sanctuary's flora and fauna were meant to be preserved for appreciation at arm's length only. Cultural harvest of native plants and animals remains a hot-button topic in New Zealand nature conservation today.[13]

The contentious place of cultural harvest may reflect a much more broadly shared attitude towards nature, which in its purest form is considered to exist apart from humanity. This conception of nature can be neatly summed up in historian William Cronon's pithy formulation: "the place where we are is the place where nature is not".[14] As Cronon and others have argued,

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[12] "Native Plants Protection Act 1934 No 15 (as at 28 October 2021), Public Act 4 Offence to Take Protected Native Plant – New Zealand Legislation," accessed November 9, 2024, https://www.legislation.govt.nz/act/public/1934/0015/latest/DLM216757.html#:~:text=Subject%20to%20the%20provisions%20of,land%2C%20takes%20any%20protected%20native.

[13] Kerry Walton, Nic Rawlence, and Richard Walter, "Can Customary Harvesting of NZ's Native Species Be Sustainable? Archaeology and Palaeo-Ecology Provide Some Answers," The Conversation, January 8, 2023, http://theconversation.com/can-customary-harvesting-of-nzs-native-species-be-sustainable-archaeology-and-palaeo-ecology-provide-some-answers-196031.

[14] William Cronon, "The Trouble with Wilderness: Or, Getting Back to the Wrong Nature," *Environmental History* 1, no. 1 (January 1996): 7–28, https://doi.org/10.2307/3985059.

such a fantasy could only be made a reality with the eviction of those people who occupied those soon-to-be peopleless lands.[15]

Nested within Cronon's critique of this broader Western definition of nature sits a more specific definition derived from the geographic division of modern-industrial non-urban spaces. Literary theorist and ecocritic Timothy Morton articulates this division using the term *agrilogistics*: outside of modern cities, nature is the place where agriculture is not, or more specifically the dominant form of modern-industrial agriculture where the land has been transformed into a technologically-contrived terra-medium manipulated for the sole purpose of producing agricultural commodities.[16] As I show throughout this dissertation, the opposition between land reserved for natural preservation and the land exploited for industrial-scale agricultural production represents an especially vivid binary for articulating conservation values in New Zealand.

Further undergirding this dominant view of nature is the unwavering cultural prestige of national parks. These peculiar kinds of nature spaces, first developed in the United States, stand as some of the earliest examples of New Zealand's modern conservation movement. A two-hour drive from Bushy Park is, New Zealand's first state-officiated conservation site, Tongariro National Park. Like other national-park legislation passed into law at the time, the removal of Indigenous people from their ancestorial territories was an anticipated effect of the 1894 Tongariro National Park Act.[17] This model of conservation mirrors that of the world's first

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[15] Daniel Brockington and James Igoe, "Eviction for Conservation: A Global Overview," *Conservation and Society* 4, no. 3 (September 2006): 424.
[16] Timothy Morton, "She Stood in Tears amid the Alien Corn: Thinking through Agrilogistics," *Diacritics* 41, no. 3 (2013): 90–113.
[17] Melissa F. Baird, "'The Breath of the Mountain Is My Heart': Indigenous Cultural Landscapes and the Politics of Heritage," *International Journal of Heritage Studies* 19, no. 4 (June 1, 2013): 327–40, https://doi.org/10.1080/13527258.2012.663781.

national park, Yellowstone, established in 1872. Māori legal scholar Jacinta Ruru compares the two parks by highlighting the colonial rationale guiding national park formation. She writes:

> at the heart of the national park label was a belief that mountainous lands were 'worthless' in all economic development senses and should be put to use for scenic purposes to attract tourists from all over the world. Thus, lands encompassed within national parks became colonial places, overlaid with new place names and new histories.[18]

While Bushy Park is miniscule compared to the giant national parks Ruru mentions, it nevertheless bears some of the same legacy of settler colonialism's conservationist pursuit to exploit land seen as agriculturally unproductive while also making invisible the lives and histories of those Indigenous peoples who had lived on these lands for centuries. Stories of nature conservation in New Zealand cannot be easily untangled from larger settler colonial histories.

Movement within and between settler colonialism and nature conservation

This dissertation seeks to participate in ongoing academic debates about the place of colonial histories within contemporary forms of nature conservation. However, by approaching this study from an ethnomusicological point of view, I am especially interested not only in the aesthetic qualities and significance of nature conservation, but also the opportunity it affords me as an ethnographer to articulate the positionality of a settler-descendent scholar in relation to New Zealand nature conservation. Critical analyses of the modern conservation movement frequently point to its emergence as a part of late nineteenth century colonialism in North America.[19] And

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[18] Jacinta Ruru, "A Maori Right to Own and Manage National Parks?," *Journal of South Pacific Law* 12, no. 1 (2008): 107.

[19] Dan Brockington, Rosaleen Duffy, and Jim Igoe, *Nature Unbound: Conservation, Capitalism and the Future of Protected Areas* (London: Routledge, 2008), https://doi.org/10.4324/9781849772075; Karl Jacoby, *Crimes against*

nature conservation's neo-colonial offshoots that continue to thrive in the present have been well articulated by anthropologists.[20] However, much of this research, particularly that written by settler scholars focuses largely on the socio-ecological aspects of their non-settler, often Global South, research participants. From a critical ethnographic perspective, it appears that little of this research does much to further understandings of author positionality within critical studies of nature conservation. If scholars are to continue expanding an understanding of the colonial genealogy of conservation, there is a rich opportunity for settler scholars in particular to articulate their position in relation to conservation's colonial histories and ongoing effect on colonized peoples and lands. In this dissertation I clasp this opportunity, treating settler colonialism not only as a historical fact and social condition, but as a conceptual foundation for methodological development.

In approaching this task, it has helped me considerably to observe how other settler scholars have articulated this positionality in their research. I find myself building on the work of

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Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation (Univ of California Press, 2014); Dorceta E. Taylor, *The Rise of the American Conservation Movement: Power, Privilege, and Environmental Protection* (Duke University Press, 2016); Dina Gilio-Whitaker, *As Long as Grass Grows: The Indigenous Fight for Environmental Justice, from Colonization to Standing Rock* (Beacon Press, 2019); Lauren Eichler and David Baumeister, "Settler Colonialism and the US Conservation Movement: Contesting Histories, Indigenizing Futures," *Ethics, Policy & Environment* 24, no. 3 (September 2, 2021): 209–34, https://doi.org/10.1080/21550085.2021.2002623.

[20] "Ethnographies of Conservation: Environmentalism and the Distribution of Privilege," Environment & Society Portal, January 30, 2013, https://www.environmentandsociety.org/mml/ethnographies-conservation-environmentalism-and-distribution-privilege; Paige West, James Igoe, and Dan Brockington, "Parks and Peoples: The Social Impact of Protected Areas," *Annual Review of Anthropology* 35, no. Volume 35, 2006 (October 21, 2006): 251–77, https://doi.org/10.1146/annurev.anthro.35.081705.123308; James Fairhead, Melissa Leach, and Ian Scoones, "Green Grabbing: A New Appropriation of Nature?," *The Journal of Peasant Studies* 39, no. 2 (April 1, 2012): 237–61, https://doi.org/10.1080/03066150.2012.671770; Bram Büscher, Wolfram Dressler, and Robert Fletcher, eds., *Nature Inc.: Environmental Conservation in the Neoliberal Age* (University of Arizona Press, 2014), https://doi.org/10.2458/azu_uapress_9780816539215.

settler Canadian scholar Ryan Shuvera who writes reflexively about popular music, indigeneity, and settler colonialism.[21] Addressing his own positionality as a settler music scholar, he writes:

> It is important to understand that there is no transcendence for settlers […]. The rebuilding or shifting of settler identity is a rebuilding conducted within a settler colonial reality. Nevertheless, it can be a different kind of settler identity created for different kinds of (Indigenous led) understandings.[22]

While I share Shuvera's view on the impetus for rebuilding a settler identity while all the while maintaining a clear-eyed view of the present socio-historical reality shaped by a colonial past, my attention to settler colonial positionality is also driven by the assumption I hold about ethnographic research in general: that careful attention to positionality should be a methodological priority. The articulation of research method should integrate an explanation of an author's relationship to the communities they work with, as well as their own formative communities (where these are different). To do so explicitly challenges still widely held assumptions that the identity of "researcher" is synonymous with "neutral observer." Recognizing the reflexive turn in anthropology of the 1980s, ethnographers cannot presume to be disinterested data collectors.[23] The boundaries between a researcher's own world—their values, histories, and experiences—and the worlds of their interlocutors are not impermeable, but rather sites of exchange. Ethnographers in the field not only look and listen but are looked at and listened to. Depending on who is doing the looking and listening, the positionality of a researcher can vary significantly.

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[21] Ryan Ben Shuvera, "Sounding Unsettlement: Rethinking Settler States of Mind and Re(-)Cognition through Scenes of Cross-Cultural Listening" (PhD diss, The University of Western Ontario., 2020).
[22] Shuvera, 30.
[23] Jay Ruby, *A Crack in the Mirror: Reflexive Perspectives in Anthropology* (University of Pennsylvania Press, 2016); James Clifford and George E. Marcus, *Writing Culture: The Poetics and Politics of Ethnography* (Univ of California Press, 2023); Clifford Geertz, *Works and Lives: The Anthropologist as Author* (Stanford University Press, 1988); Ruth Behar and Deborah A. Gordon, *Women Writing Culture* (University of California Press, 1995).

While positionality most obviously implies a "standing point," it also implies movement, to move from one position to another, or *to position* (verb) someone or something in a particular time or place. Focusing on positionality as movement rather than a static position from which to articulate ones identity may afford the kind of conceptual freedom necessary to better recognize a settler colonial reality. Throughout this dissertation I highlight movement as a key quality of the settler identity, not only one I note in the words and activities of the volunteers of Bushy Park, but also one I variously inhabit as researcher and student, a conservation volunteer, a musician, and a pākehā man.[24]

Rather than trying to build from scratch a model of this movement to investigate settler positionality, I build on an existing model, one already devised with music in mind. This model is what musicologist Dylan Robinson calls a "settler *listening* positionality".[25] He defines it broadly as an "assemblage of unmarked structures of certainty that guide normative perception and may enact epistemic violence".[26] Robinson's foregrounding of perception as an epistemic manifestation of settler colonialism builds on settler Australian scholar Patrick Wolfe's formative work.[27] In treating "settler colonialism as a state of perception," Robinson builds upon Wolfe's principle of settler colonialism as a 'structure' rather than an 'event' of invasion".[28] Settler colonialism on these terms is less about the historical moments in which violence against Indigenous peoples occurred, and more about the ways of perceiving the world that both the perpetrators of this violence and their descendants came to accept as normal.

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[24] Commonly used in mainstream discourse to refer to a New Zealander of European descent, although it has faced controversy throughout its use. See Branko Marcetic, "A History of Outrage over the Word 'Pākehā,'" The Spinoff, March 3, 2018, https://thespinoff.co.nz/atea/03-03-2018/a-history-of-outrage-over-the-word-pakeha.
[25] Dylan Robinson, *Hungry Listening: Resonant Theory for Indigenous Sound Studies* (U of Minnesota Press, 2020).
[26] Robinson, 10.
[27] Patrick Wolfe, "Settler Colonialism and the Elimination of the Native," *Journal of Genocide Research* 8, no. 4 (2006): 387–409.
[28] Robinson, 10.

Focusing on listening as a key aspect of settler positionality also allows us to consider the movement of sounds.[29] When considered materiality, sounds not only exemplify a kinetic phenomenon (fluctuating vibrations), but they also exist as a movement through time. The measurement of a soundwave indicates a sound's beginning (attack) transformation (decay and sustain) and ending (release). Beyond this useful yet necessarily reductive analysis of a sound lies the possibility of understanding, listening to, and making sounds as activities that define the temporal parameters of a life lived. The lives of many creatures on this planet begin with a cry and end with a gasp. Our positions as we journey from womb to tomb are orientated by the sounds we make or hear. Ethnographic research, especially through the articulation of positionality, affords unique opportunities to articulate this fundamentally human form of movement.[30]

Yet sounds can be frozen, and screams stifled. Investigating settler colonialism by using this kinetic model of listening positionality not only directs attention to settler's presumption to move freely (through the time of history, and the global space of geography), but also the *paralysis* that sets in as settler subjects shield their view from the historic and ongoing horrors that colonialism has wrought.[31] Settler colonialism may thus also be considered a problem of a *lack* of movement, an inherited perspective of the world thwarted by the originary violence of the initial colonial encounter, stuck in a loop—or a record at the end of a side, repeating continuously. [32] Attempts to loosen this paralysis—to flip the record and reapply the arm on side

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[29] Casey O'Callaghan, *Sounds: A Philosophical Theory* (OUP Oxford, 2007).
[30] Michael Bull, "Ethnography and the Sounds of Everyday Life," in *The Routledge International Handbook of Sensory Ethnography* (Routledge, 2023).
[31] Kira Celeste, *The Colonial Shadow: A Jungian Investigation of Settler Psychology* (London: Routledge, 2023), https://doi.org/10.4324/9781003296546.
[32] Carisa R Showden, Karen Nairn, and Kyle R Matthews, "'So People Wake up, What Are We Gonna Do?': From Paralysis to Action in Decolonizing Activism," *Ethnicities* 22, no. 5 (October 1, 2022): 663–84, https://doi.org/10.1177/14687968211062916.

B to continue the album—are numerous, and for some volunteers at Bushy Park, nature conservation in New Zealand may be one of them.

Perhaps, however, the opposite of paralysis is uncontrolled movement. To suddenly free settler colonial culture from its epistemic paralysis is to risk propelling it into nihilistic pits of despair or puffed-up self-righteousness.[33] For those of us who continue to shelter within cultures of settler colonialism, at its edges we may notice a constant gnawing sense of unstable presence, which becomes felt more viscerally as knowledge of the colonial violence that underwrites one's place in settler territory comes into focus. Daily life in New Zealand presents regular reminders of this history.[34] And settler subjects shouldn't expect to find sanctuary from it in the peaceful paradise of a nature reserve like Bushy Park either. Such beautiful places often hide some of the ugliest reminders of settler colonial histories and their ongoing influence. Literary theorist Anna Boswell—one of the few scholars to critically examine nature conservation in New Zealand—offers some valuable theoretical perspective here.[35] She suggests that nature sanctuaries like Bushy Park are shaped by the same cultural logic as the New Zealand settler nation-state, itself beginning a sanctuary for settlers escaping the Northern hemisphere. Boswell defines a sanctuary as "a technology of exception—a space of immunity, or a place where the rules that ordinarily pertain are suspended."[36] Here she builds on Mark Rifkin's notion of a settler-colonial "state of exception."[37] Rifkin, extending Giorgio Agamben's political theory, sees settler-colonial sovereignty using the pretense of an ongoing crisis. Political exceptions are afforded to

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[33] Lisa Slater, *Anxieties of Belonging in Settler Colonialism: Australia, Race and Place* (New York: Routledge, 2018), https://doi.org/10.4324/9780429433733.
[34] Richard Shaw, *The Forgotten Coast* (Massey University Press, 2021).
[35] Anna Boswell, "Settler Sanctuaries and the Stoat-Free State," *Animal Studies Journal* 6, no. 2 (January 1, 2017): 109–36.
[36] Boswell, 113.
[37] Mark Rifkin, *Beyond Settler Time: Temporal Sovereignty and Indigenous Self-Determination* (Duke University Press, 2017).

governing powers, and the rights of others are suspended. In a settler-colonial state of exception, what is suspended by the State is Indigenous authority over land, including law, epistemology, and ways of relating to place. For the settler subject, this state of exception, while often materially advantageous, is in other ways cause for significant unease. Because assimilationist policies always fail to fully subsume a territory's Indigenous inhabitants, any kind of Indigenous presence is a reminder that the insularity of the sanctuary is never guaranteed. The harvesting of kawakawa from the sanctuary's perimeter is one of numerous moments of disruption to the state of exception upheld within the conservation regime at Bushy Park—a gnawing at the paralysis of settler colonial positionality. Throughout this dissertation, I seek to articulate various moments when the gnawing became more aggressive. Sometimes it was enough to open small holes for truth (and heartbreak) to trickle through. Other times the gnawing was abruptly silenced by the violent snap of mouse-trap hammer.

One of the hardest things to reconcile when articulating the quiet horrors of settler colonialism as they manifest in the work of volunteering at Bushy Park is the ugliness that contrasts so vividly with the sanctuary's beauty. Perhaps the early settlers' attempts to partition the productive from the beautiful was in part a means to thwart the mingling of the horrific with beauty. The burning of millions of hectares of native bush with the intent to reseed the land for pastoral farming left the skies in some parts of the country dark with smoke for days.[38] To return again to the uncomfortable responses of volunteers to the cultural harvest of kawakawa on the sanctuary's periphery, perhaps this practice is so unsettling because it indicates a trickling in of resource use into the exceptional state of the nature reserve. Perhaps this is why Indigenous

[38] Tom Brooking and Eric Pawson, *Seeds of Empire: The Environmental Transformation of New Zealand* (Bloomsbury Publishing, 2010).

peoples' connections to landscapes more generally presents one of the strongest challenges to the stability (or paralysis) of the settler subject.

For many Māori in New Zealand, connection to specific landscapes, including mountains, rivers, lakes, and oceans, are understood in terms of whakapapa (often translated as genealogy). These natural entities are ancestoral figures, and Māori ancestoral connections to these places bear the rights and responsibilities to both take from and care for these places.[39] Genealogical connection to place is one of the most direct challenge to settlers' assumed rights to live upon Indigenous lands and remains one of the most boldly contested politically.[40] Within the settler state-of-exception, most settler subjects (which does not exclude the ancestors of Māori) respond to this genealogy dismissively as "cultural" at best, allowing Indigenous landscapes to continue being neutralized into productive and non-productive natural resources where the New Zealand citizenry has an equal right to extract economic value from the productive resources, and aesthetic value from the beautiful yet non-productive lands.[41]. To extend further the critical definitions of nature offered by Cronon and Morton, perhaps we could add another binary that contrasts the ugly with the beautiful: the place where we are (and the ugliness humanity creates), is the place where nature (an a priori beauty) is not.

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[39] Joseph Selwyn Te Rito, "Whakapapa: A Framework for Understanding Identity," *MAI Review LW*, no. 2 (2007): 1–10.
[40] Catherine Delahunty, "Treaty Bill Plays on Ignorance," *E-Tangata* (blog), September 14, 2024, https://e-tangata.co.nz/comment-and-analysis/treaty-bill-plays-on-ignorance/.
[41] Abby Suszko, "One Law for All?: Contrasting Visions of Equality and Rights in the New Zealand Foreshore and Seabed Debate," *Law & History* 2 (November 8, 2020): 60–88, https://doi.org/10.3316/informit.325031994853638.

Writing ethnographically about Bushy Park

Before I began my field research at Bushy Park, I had only visited the sanctuary a few times. Unlike the field sites of many ethnomusicologists, for me Bushy Park was not a far-off exotic location, a dot on a map several thousand miles away from home (even if within the discipline this notion of field research may be becoming a somewhat threadbare caricature of ethnomusicology). I grew up only an hour's drive from Bushy Park, and while I don't remember visiting it as a young child, my father who recently retired as a primary school teacher spent much of his later career working closely with the sanctuary as an education advisor, regularly bringing his class of grade-schoolers to Bushy Park to learn about its flora and fauna and to help in various conservation activities. My earliest recollections of Bushy Park were when I visited the sanctuary in the early 2000s as part of my own grade school field trip. My next visit wouldn't be for another fifteen years during a quick trip back to New Zealand from Charlottesville, Virginia, where I had just begun graduate study. During these first few years of study in the University's music department I was introduced to the research and creative work of soundscape composers, which prompted me to begin considering the aesthetic values implicated in New Zealand nature conservation. During this visit to the sanctuary my idea to treat it as a field site for ethnomusicological research was only just beginning to form, yet the sense of anticipation, of imagining a familiarity with the forest was thrilling. What would it be like, I wondered, to intimately know this place, the plants, the birds, and form a connection to an environment that seemed to be the closest thing to a pre-human New Zealand landscape I might ever experience?

I recall walking through the sanctuary during this early visit and seeing a few volunteers pop out from the thick forest on to the public track. They were sporting rugged outdoor clothing and work boots, hands scratched and covered in mud, but with big smiles and friendly greetings.

I remember shyly saying hello and hurrying past them along the public pathway in my clean sneakers and jeans. I was a visitor to a place that seemed so unknown and vast, but apparently navigable to these experienced volunteers, who I imagined scattering out through the forest to continue their important work. My fantasy of immersing myself in Bushy Park was sparked by these first fleeting encounters with the sanctuary's volunteers. They looked like me—they could have been my sister or my parents—but I really knew nothing about them and what it was like to work in this forest.

When I returned several years later to begin field research as an ethnomusicologist, I had all but forgotten that original fantasy. Awkwardly navigating the beginnings of ethnographic research, I was gripped by nervousness, although the cheerful greetings from volunteers reminded me of those first fleeting encounters with the sanctuary workers. This time I couldn't get away with a shy hello, feeling the expectation to present myself assertively, and as a capable academic gatherer of knowledge.

Regardless of how close I was to home as an ethnomusicologist doing field research, the basic distinction indicated by the label "researcher" was enough to make me feel like an outsider in this community.[42] Whether these people looked and sounded like me, whether they grew up in the same city or country as me, my position as an institutionally-sanctioned knowledge collector set me apart from virtually everyone else in the sanctuary. As I began to fumble with the persona of "researcher", I struggled to make sense of this authorization I now imagined myself to have—to study other people.

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[42] Esther R. Anderson, "Positionality, Privilege, and Possibility: The Ethnographer 'at Home' as an Uncomfortable Insider," *Anthropology and Humanism* 46, no. 2 (2021): 212–25, https://doi.org/10.1111/anhu.12326.

Much like the modern nature conservation movement, ethnomusicology's development is woven throughout colonial histories.[43] Highlighting ethnomusicology's struggle to disentangle itself from colonialism, Elizabeth MacKinlay provocatively states: "White bodies mark the colonial history and disciplinary performance of ethnomusicology, and pale shadows take center stage in talk about decolonization."[44] MacKinlay's critical view notes a tendency within ethnomusicology to limit considerations of colonialism to studies of Indigenous musical culture while ignoring the broader significance of colonial history and power in settler-colonial contexts. As an Australian of settler-descent, MacKinlay bluntly asks other settler ethnomusicologists to query "whether our projects are ultimately about white settler colonial futurity or Indigenous futurity."[45]

What MacKinlay doesn't articulate here is the *methodological* implications of ethnomusicology's tethering to settler colonialism. As a methodology, ethnography has its roots in early colonial enterprises, first as a tool for extraction, then for preservation.[46] While a reflexive awareness of one's settler identity might go some way in helping settler ethnographers articulate settler colonial realities, an awareness of the methodological roots of their tools of inquiry may be just as useful. Accordingly, I see this dissertation in part as an opportunity to express both the peculiarities of contemporary settler colonial experience and the colonial quirks of ethnography as it has taken shape within ethnomusicology.

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[43] Bruno Nettl, *Nettl's Elephant* (University of Illinois Press, 2010); Thomas Solomon, "Where Is the Postcolonial in Ethnomusicology?," in *Ethnomusicology in East Africa: Perspectives from Uganda and Beyond*, ed. Sylvia Nannyonga-Tamusuza and Solomon Thomas, 2012, 216–51.
[44] Elizabeth MacKinlay, "Decolonization and Applied Ethnomusicology," in *The Oxford Handbook of Applied Ethnomusicology*, ed. Jeff Todd Titon and Svanibor Pettan (Oxford University Press, 2015), 385.
[45] MacKinlay, 394–95.
[46] Edward W. Said, "Representing the Colonized: Anthropology's Interlocutors," *Critical Inquiry* 15, no. 2 (January 1989): 205–25, https://doi.org/10.1086/448481; Peter Pels and Oscar Salemink, *Colonial Subjects: Essays on the Practical History of Anthropology* (University of Michigan Press, 2000).

Reflecting critically on my own settler position has often been difficult, even with the aid of various methodological tools and critical concepts inherited from academia—which sometimes, looking back, I was inclined to use as intellectual armor to protect myself from the more uncomfortable feelings that occasionally rose to the surface. However, I have found it even more difficult to articulate those settler positionalities I saw expressed in the behaviors and words of people who I came to know and deeply respect while working at Bushy Park. While I am prepared to call myself out for my own troubling habits of settler colonial positionality where I notice them, I am far less inclined to directly critique any of the individuals I worked with in the sanctuary. Accordingly, in this dissertation, I have often approached the critical articulation of settler positionalities as *collective* forms of cultural privilege, social power, epistemological authority, and historical amnesia, usually directing my focus away from any one volunteer and towards the culture we are a product of and continue to produce together.

When I share this dissertation with some of the volunteers I worked with, I hope my story speaks to aspects of the work they do, putting into words some of the ideas and understandings that are part of their everyday lives as volunteers at Bushy Park. Accordingly, there have been times throughout the writing of this dissertation when I became disconcertingly aware of the discursive context I had chosen to deliver this dissertation. By focusing my analysis and citation rather narrowly within a set of scholarly conversations happening in and around the academic disciplines of ethnomusicology and soundscape composition, I have risked isolating many readers, not just the volunteers I hope to share my perspectives with, but other academics with interests in settler colonialism and nature conservation. Nevertheless, I have pursued this dissertation unashamedly wearing the hat of an academic—particularly an ethnomusicologist looking over the imaginary fence at the wonderful work of my colleagues in the composition

program of the University of Virginia music department. Moreover, not only would it be disingenuous to have downplayed this commitment, I believe it would also repeat the settler habit of strategically forgetting my own genealogical connections—the roots and routes that have shaped me. This is not to position myself as an apologist for the normative determinism of academia, nor to treat received academic wisdom as dogma. Indeed, the opposite is true: part of the academic genealogy I speak to throughout this dissertation quite obviously includes a commitment to a critical outlook. Rather, in firmly acknowledging my position within the academic disciplines that have shaped me, I mean to make clearly legible my position within a living conversation: to write for a particular academic audience is to speak with them. The academic discursive platform—in my case a dissertation—partitions a unique space from where I can face my chosen conceptual ancestors, to find a voice to speak with them and to respond to the questions that they direct at me.

Chapter summary: what is a conservation soundscape?

One day during the first few weeks of my field research, I walked Bushy Park's boundary fence with Adam, a young volunteer who was visiting New Zealand on a study-abroad program with a group of college students from the United States. I enjoyed chatting with Adam, recommending coffee shops and pubs to visit in Whanganui, and hearing about his life in the US. We ended up in an odd discussion about the prospect of losing one's sight versus losing one's hearing. Adam was convinced he would get on in life far better without his vision. I wanted to agree with him, but decided to play devil's advocate and suggested a life without the ability to hear would be far more tolerable. This thought experiment seemed to provoke Adam to ask me more about my research and what I intended to find out from my study of Bushy Park. It was

during this conversation that the soundscape concept first escaped from my mouth and began to circulate within the sanctuary. "I'm studying the *soundscape* of Bushy Park", I found myself saying, before I proceeded to try and explain what I meant by this term. He sounded interested and despite my difficultly putting it into concrete terms, I found it a far more satisfying response than my usual reference to birdsong whenever the topic of my research had come up in conversation with other volunteers. Even at this early point in my field research it was clear that birdsong was only one aspect of Bushy Park that volunteers valued about their time spent in the sanctuary. In that moment, referring to the soundscape of Bushy Park rather than just the birdsong it contained seemed to allow for this much broader sense of value, while not neglecting the importance of the sanctuary's unique bird sounds either.

Yet if I was to think of Bushy Park as a soundscape, how would I eventually be able to embrace such a contested theoretical concept in developing this dissertation? As the months of field research continued, I found myself bouncing around within the disciplinary scope that the soundscape concept seemed to afford. Some days it provoked me to focus purely on the sounds of birds in the forest. It made me wish I was an ornithologist, where I could forget about people altogether and instead attend purely to the various birds that lived within the sanctuary and their behavior expressed through vocalization. Other days the soundscape concept tempted me to drop my research and embrace the creative freedom of a composer, just recording the sound of the wind in the trees and making soundscape compositions. Then there were times my ruminations on the soundscape concept led me far away from the birds and their sounds and towards the unique sociocultural practices the work of making a soundscape involved. Given the way in which the soundscape concept seemed to contain all these possibilities, yet not predetermine any of them, I want to reaffirm its capacity to spark the auditory imagination in ways that open up

new conversations about the meaning and value of numerous sounds. This is what constitutes a conservation soundscape. It is a concept that helped sustain the flexibility, tolerance for doubt, and ongoing curiosity I needed to pursue my field research and the writing of the chapters that make up this dissertation.

Chapter 1 lays out some of the theoretical grounds for examining the work of nature conservation volunteers on such peculiarly musical terms. I bring together my emerging understanding of the soundscape concept, outlining and responding to some of the critiques directed at it from within sound studies and several adjacent fields. I use this chapter to set up some of the key themes that wind their way throughout the dissertation, including the relationship between musical and ostensibly non-musical sounds, the possibilities and limitations of exploring this relationship with sound-recording technology, and the potential directions that closer critical attention to the soundscape concept from within ethnomusicology could help develop ethnographic modes of inquiry. This theoretical groundwork sets the parameters for my investigation in the chapters that follow.

In Chapter 2, I delve into the work participated in by Bushy Park's volunteers. I focus on how the relationship between the volunteers' labor and the forest expresses a form of reciprocity that blurs the line between giver and receiver and indicates the potential for a restorative relationship between settler descendants and the lands their recent ancestors were implicated in alienating from its first peoples. At the same time, I want to address some of the barriers evidenced in this "give-and-take" that could prohibit the emergence of a fundamentally decolonial place-based nature conservation practice.

In Chapter 3, I examine ways volunteers make sense of the acousmatic environment they find themselves in while working in the sanctuary's forest. The "acousmatic" emerged as a genre

label in the criticism and analysis of electro-acoustic music. In recent years, however, there have been indications of acousmaticity's broader potential to interpret the experience of hearing sounds without certain knowledge of those sounds' source. In this chapter I argue that the capacity of Bushy Park's "unseen sounds" to signify the values that underly New Zealand nature conservation falls outside the technical and conceptual reach of sound recording as generally understood within soundscape composition and sound studies more broadly. My aim in part is to loosen the correlation between human audition and phonographic mediation. Troubling the assimilation of phonographic technology within contemporary auditory culture, I move away from the idea of natural sounds as discrete sonic objects, towards the idea of these sounds having distinct vocalic qualities, revealed in how they provoke a verbal response from the listener.

In Chapter 4, I consider a relationship between composer Murray Schafer's formulation of the soundscape concept, and John Cage's notion of a musical composition as a "frame" that focuses musical listening. I present this analogically to understand the borderwork involved in demarking Bushy Park as a self-contained conservation space. As well bringing into focus some of the cultural affinities that imbue the physical structure of the fence with its meaning, I discuss how Māori are positioned within (and against) mainstream conservation in New Zealand.

I conclude this dissertation with a brief discussion of some paths my research may open up for future restorative approaches to nature conservation in New Zealand, and the role that ethnographic inquiry could play in this imagined future.

Chapter 1. On repeat: ruminating about nature, music, and settler colonialism

The flight from Palmerston North to Auckland took just over 50 minutes. Flying up the middle of New Zealand's northern island, I thought of my partner Michelle, leaving the Palmerston North airport in her white Toyota station-wagon, heading north along the highway, passing dairy farms and fields of crops, on her way home to Whanganui. This small rural town had only been Michelle's home for a year and a half. We met in Wellington in 2010 and lived there together for several years, but when Michelle got a teaching job at Whanganui City College, we made the move. For me, having grown up in and around Whanganui, this was like returning home; for Michelle, who was born and raised on the other side of the North Island, it meant beginning a new life. She hadn't considered that she would live in Whanganui alone for almost four years, while her soon-to-be husband spent most of this time sitting in a university library several time zones away across the Pacific Ocean and the North American continent.

50 minutes airborne was just long enough to listen, in iPod-induced isolation, to the whole of *Bad Neighbor*—beatmaker Madlib's latest studio collaboration with West Coast neo-soul singer Blu, and childhood musical-partner, rapper MED. I felt at home swimming in Madlib's unmistakable beats, and the party in my head was made even more lively with guest appearances by a host of other hip hop artists whose musical gestures I'd come to know intimately during the last several years of my immersion in recorded hip hop music (Oh No, Dam Funk, as well as MF Doom—one of Michelle's all-time favorite wordsmiths—plus one of the genre's young-lions, Anderson Paak, who together we would later see perform live in Washington D.C.). I'd listened to this track countless times. Yet it felt new again, listening to it while soaring through the air above the North Island of New Zealand.

For the rest of the flight, I remained glued to the nearby window. The clear skies allowed for an uninhibited view of Taranaki Maunga.[47] As a tourist of the skies I took a photo. The mountain looked puny on my phone screen. As I watched Taranaki get closer, I thought of the Māori legend which tells of the mountain's self-imposed isolation from the rest of New Zealand's prominent mountains in the central North Island. In a battle to win the love of Mount Pihanga, Taranaki was forced to cede to the far mightier Mount Tongariro. Exhausted and struck with grief, Taranaki tore himself from his life-long resting place and stumbled away from the scene of the calamitous conflict. In a daze he was guided west by Toka-a-Rauhotu, a small greenstone. They weaved their way together towards the sea, and after briefly catching his breath, Taranaki heading north up the coast, where he remains today: the Westernmost tip of the central North Island and a region that continues to bear his name. In his journey to the sea, Taranaki left a trail behind him, which soon filled with water—the tears spilt by Mount Pihanga as she mourned the loss of her lover—and became the Whanganui River.

In New Zealand, by the end of the twentieth century, Māori myth, as well as tikanga (custom) and te reo (language), were being introduced in primary schools.[48] For many Pākehā millennials, certain mountains, rivers, lakes, beaches and coastlines are now tinged with a sense of the Māori mythology we were taught as children, sometimes continuing to inform our understanding of New Zealand's natural environment.[49]

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[47] Ewan Morris, "'Egmont, Who Was He?: ' The Debate over Restoration of the Name of Taranaki Maunga," *Public History Review* 29 (December 2022): 114–27, https://doi.org/10.3316/informit.802646834860138.
[48] "Bicultural Education Policy in New Zealand: Journal of Education Policy: Vol 31, No 5," accessed November 10, 2024, https://www.tandfonline.com/doi/abs/10.1080/02680939.2016.1159339.
[49] Richard Shaw, *Turangawaewae: Identity and Belonging in Aotearoa New Zealand* (Massey University Press, 2021).

As the plane glided on, I continued to gaze at Taranaki from several thousand feet in the air. Simultaneously I could hear Madlib's cut of Bernie Worrell's 1978 track "I'll Be with You", over which MF Doom comically chides at the hip hop trope of affluent consumerism: "Fresh new kicks, I would put 'em on 'cept them shoes always hurt my corn." Doom, who always performed live wearing a Roman gladiatorial mask that partially obscured his face (leading fans to believe some of his concerts were performed by a doppelganger) continues his abstract narrative of several awkward encounters—with a store clerk, a drug dealer, and a lover. His voice is buoyed by Worrell's psychedelic groove and the sampled vocalist's wail slightly distorted and muffled: "but all the time I know when I return, I'll be with you." I thought again about Taranaki's path from the Central Plateau to the North Island's western coast and some of the places along it that I had spent time as a child, a teenager, and a young adult: the river that sidles through the center of Whanganui city which, as I had grown, I crossed via the town bridge on foot, bicycle, motor-scooter and car; the Whanganui river inlet where I had fished for Kahawai and learnt to surf; and, further north, Kai Iwi beach, the long and wide stretch of black sand, crumbling cliffs and forever grey sea where Michelle and I had walked our runty but athletic bullmastiff-fox terrier cross. Seeing the place I knew as home out the airplane window, I felt so much comfort in the music which only I could hear.

Repetitions colliding

Prior to beginning my field research at Bushy Park, I had spent several years travelling back and forth between New Zealand and the USA, having begun my PhD studies at the University of Virginia in 2016. By early 2020, when most of the world was going into COVID lockdowns, I was fortunate to be able to begin my field research largely unencumbered by social

distancing protocols. Due to the geographic isolation and Government restrictions on international travel, it would take several months for the COVID virus to arrive and spread in New Zealand. While I wandered through the forest of Bushy Park, I would sometimes think of my colleagues back in Charlottesville, stuck at home, spending all day glued to Zoom meetings on their computers, frightened by the spread of the virus throughout their communities—and having to ration toilet paper. New Zealand seemed like paradise, especially when I was spending so much of my time in the dappled sunlight of the forest understory, listening to the birds singing, smelling the damp leaves beneath my feet.

To a reader who struggled through the COVID pandemic anywhere else, Bushy Park might appear an unlikely place to examine the roots and routes of settler colonialism.[50] However, one of the broader issues I hope to address in this dissertation is how to think about settler colonialism as more than just an historical fact but also as a lived experience.[51] This, I would argue, is a way of understanding settler colonialism as a *relational fact*. The "facticity" of settler colonialism is as much about its embeddedness within the grand imperial politics of European nations during the modern era as it is the ways individual settler subjects find themselves thrown into the world, a world full of unintended and unnoticed consequences of this larger historical arch.[52] Sprinkled throughout the paradise of Bushy Park are the splinted pieces of settler colonialism's past. As I discuss, they exist in the material present of the sanctuary, but also in the values, assumptions, hopes, and fears of the volunteers as they live out the long tail of settler colonialism in New Zealand.

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[50] James Clifford, *Routes: Travel and Translation in the Late Twentieth Century* (Harvard University Press, 1997).
[51] Heather Diane Bensler, "Re-Storying the Past: Transforming the White Settler Colonial Stories That Formed Us" (EdD diss, University of Calgary, 2022).
[52] Martin Heidegger, *Ontology—The Hermeneutics of Facticity* (Indiana University Press, 2008).

I use the world *relational* here to describe a certain type of empiricism.[53] In discourses—whether political, academic, or a mix of both—that are heavily influenced by historical accounts of settler colonialism, there is a prevailing *antagonistic* mode of analysis that continually reifies hard dualistic oppositions: settler and indigenous, colonizer and colonized, pre- and post-contact.[54] This antagonistic outlook, which in some cases has been adopted pragmatically to form a kind of strategic essentialism, can divert attention from other kinds of settler colonial experience. The relational facts of settler colonialism can fall between the cracks of an antagonistic framework. I want to show that a relational mode of analysis could be usefully put to work in shaping a better understanding of the emergence, maintenance, and potential future (or rupture, collapse, and transformation) of settler colonialism.

I have also found that an antagonistic mode of analysis tends to bifurcate the empirical messiness of settler colonial life—into right and wrong, good and bad, subjective and objective. The antagonistic mode can be used swiftly and decisively when the primary aim is to critique colonial injustices and vividly render the horrors of this history, especially for audiences to whom these horrors are otherwise invisible. The antagonistic facts of settler colonialism thus often have more practical political weight when it comes to articulating understandings and actions to be taken in daily life. Yet the relational facts of settler colonialism may also have useful power when employed using the appropriate modes of narrative and inquiry. Ethnography, I believe, is one such mode. While not ignoring history, an ethnographic writer can temporally bracket it and become absorbed in immediacies of social experience. Theories of society and

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[53] Danilyn Rutherford, "Kinky Empiricism," *Cultural Anthropology* 27, no. 3 (2012): 465–79, https://doi.org/10.1111/j.1548-1360.2012.01154.x.
[54] Shino Konishi, "First Nations Scholars, Settler Colonial Studies, and Indigenous History," *Australian Historical Studies* 50, no. 3 (July 3, 2019): 285–304, https://doi.org/10.1080/1031461X.2019.1620300.

culture, while certainly applicable at pivotal moments throughout the research and writing process, are also usefully quietened at other moments, particularly during periods of field research. While there are obvious contrivances at play when conducting ethnographic research and writing (deciding what to write about and what to leave out being just one) there is a prerogative of fidelity that calls for researchers to honor the flow of impressions and interactions that constitute field research, documenting and analyzing these as faithfully as possible. Ethnography can be empirically brutal, running blindly over theories of the social and political. Yet as the myriad moments of significance from field research begin to congeal into abstract forms through the writing process, they come face to face with theoretical frameworks that either affirm or challenge them (or more often, an unruly combination of both).

I opened this chapter by describing a flight up the North Island of New Zealand on my way to the United States to begin my first semester in the graduate program that would form the academic foundation of this dissertation. I pointed to a specific instance of how settler subjects in New Zealand associate with the Indigenous culture of these South Pacific islands. To look at this example from a distance—like looking from a plane at the landscape below—you might be able to vaguely make out an expression of cultural appropriation, seeing a questionable engagement with a part of cultural otherness that I was unwittingly using to express a part of my own identity, with little consideration of the historical and present social conditions that have allowed me to reflect on and enjoy such beautiful Indigenous narratives. This would be to look at my story from a critical-analytic lens—which no doubt has its applications. However, my purpose for including this narrative is to establish a personal context for this dissertation—as a piece of ethnographic research that up turns aspects of personal experience, rather than muffling them under the weight of critical-analytic discourse. While I leave open the question of my

interpretation (if not appropriation) of these Māori narratives for now, I highlight it here to foreground the messy relational fact of growing up in New Zealand as the descendant of English settlers, most of whom arrived in New Zealand during the 1860s (perhaps the nation's most violent decade of colonization).[55]

Navigating the empirical messiness of ethnographic research at Bushy Park and then filtering it through theories of society and culture, I came to notice that the relational facts I was drawn to were inherently *repetitious*. Volunteering at Bushy Park meant returning again and again, having the same conversations with the same people, repeatedly smearing peanut butter on a mouse trap before setting it and inserting it into a black plastic tube on the forest floor (and repeating this action dozens of times throughout the day) then coming back a week later to retrieve decomposing rodent carcasses mangled in the mouse traps, attending the quarterly rodent audits that followed the same trapping lines gridded throughout the forest (up line 10, back down line 11, up line 11a, back down line 12), and circumnavigating the sanctuary boundary again and again looking out for the same never-to-be-seen rabbit tunnels along the same stretch of fence.

Repetition also set the volunteers apart from most other people who entered Bushy Park. Unlike many of the one-off visitors to the sanctuary who inhabit the well-defined settler-colonial role of "tourist", the volunteers derived a unique understanding of Bushy Park from their ongoing encounters with the forest and its many inhabitants. By working regularly in the sanctuary, volunteers came to varied, sometimes contradictory conclusions about their

[55] Danny Keenan, *Wars Without End: New Zealand's Land Wars – A Maori Perspective* (Penguin Random House New Zealand Limited, 2021).

relationship to New Zealand's protected natural environments, the colonial histories these places both expose and obscure, and the soundscapes they manifest.

In socio-cultural research and theory, repetition regularly appears as a provocative if somewhat nebulous theme, with much of this work drawing on perspectives from psychoanalytic theories arguing for the repetitious nature of the unconscious.[56] If the historical conflicts of settler colonialism (which continue to have material impacts on the worlds of those living today) have been culturally repressed, then they are likely to pop up again and again from the unconscious, like bubbles in a muddy pond. There is much to take away from a thorough engagement in these theories when seeking a better understanding of the relational facts of settler colonialism. However, in this dissertation, I derive most of my theoretical considerations of repetition from a far more specific area of research: the socio-cultural study of sound-recording technology. Concurrently, I lean heavily on my own experience of repetition as a musician and musicologist in formulating a working notion of repetition for this dissertation. For instance, one of my formative experiences of repetition as a conservatory-trained musician occurred during my years studying jazz piano performance. A key method in learning to perform in the jazz idiom has long been the transcription of recorded improvisations.[57] My first piece of substantial music research was the transcription and performance of several recordings by the Bill Evans Trio. Over the course of this research, I listened to the pianist's 1961 album *Live at the Village Vanguard* hundreds of times, not only just to notate the performances of Bill Evans and bassist Scott LaFaro, but also to "rehearse" with the trio, playing along with the recording and

[56] Vincent M. Colapietro, "Relations, Ruptures, and Rituals," *The Journal of Speculative Philosophy* 38, no. 2 (June 5, 2024): 87–106, https://doi.org/10.5325/jspecphil.38.2.0087; Levi R. Bryant, "Deleuze's Infernal Book: Reflections on Difference and Repetition," *Deleuze and Guattari Studies* 14, no. 1 (February 1, 2020): 5–24, https://doi.org/10.3366/dlgs.2020.0385.
[57] Paul F. Berliner, *Thinking in Jazz: The Infinite Art of Improvisation* (University of Chicago Press, 2009).

attempting to copy Evans' performance hoping to assimilate his approach to improvising in a trio format. From here my music research led me through thousands of hours of repetitive listening.[58] This practice of repetition, which will sound familiar to most music scholars, is also one of the unique tools in our scholarly toolkit we perhaps take for granted. It is a habit we develop gradually, but once formed it is a vital and unique scholarly capacity that sets us apart from most other researchers in the academy.

While this kind of repetitious listening skill may be seen as broadly "transferable" to an ethnographic field research setting (a tolerance for routine and attention to detail) I was more intentional in applying it critically to my interest in some of the ways I was noticing soundscape composers use recording technology. As I discuss in the present chapter, this sense of repetition manifests vividly in some of the ways soundscape composers have adopted audio-recording technology to imbue their creative work with a sense of representational fidelity. However, the sound-recording practices involved in crafting soundscape compositions are themselves often highly repetitious. While I had read about this in the writing of soundscape composers[59], I had also experienced it as I dabbled soundscape recording in Bushy Park. Throughout the duration of my field research, I spent dozens of hours in the sanctuary with my sound recorder, listening to and recording the sounds of the forest. Given the absence of audio examples in the final presentation of this dissertation, it may seem my soundscape recording practice was at best supplementary to the research (or even a distraction from the core work of participating in and observing conservation volunteer work). While I have not produced anything that resembles a

[58] Timothy Booth, "From Columbia Studio B to Carnegie Hall: The Studio-to-Stage Creative Trajectory in the Fusion Jazz of Miles Davis" (thesis, Open Access Te Herenga Waka-Victoria University of Wellington, 2015), https://doi.org/10.26686/wgtn.17012747.v1.

[59]

soundscape composition, my creative—and repetitive—experiments with field recordings proved to serve fruitful theoretical and descriptive ends for this dissertation as an ethnographic project.

To return again to the question: what is a conservation soundscape? Through my experimentation with the sound recorder at Bushy Park, I came to realize that the soundscapes produced by soundscape composers were of a different "species" of soundscape than those produced by conservationists, particularly those who volunteer their time and energy to fulfill a mission statement like that of Forest and Bird. At Bushy Park, giving nature a voice has little to do with the audio-technical representation of sounds from the forest, and everything to do with the sustained human effort applied to managing the sanctuary.

In the present chapter I begin by discuss what a conservation soundscape might mean to soundscape composers. First focusing my discussion on some of the various aesthetics and ideologies that constitute soundscape composition, I bring into focus the soundscape concept that emerged from this audio-technical creative tradition and the epistemological tensions between the arts and sciences it has come to represent. I then begin to make the case for the soundscape concept as a useful theoretical tool for ethnographic writing, in particular for my own analysis of working with conservation volunteers at Bushy Park.

An artist's soundscape, a scientist's soundscape

With its roots in North American academic composition, particularly the work of R. Murray Schafer and his formation of the World Soundscape Project in the early 1970s, the soundscape concept is tinged both with the countercultural radicalism of the modern environmentalist movement and the avant gardism of post-war electroacoustic composition.[60]

[60] L. Brett Scott, *R. Murray Schafer: A Creative Life* (Scarecrow Press, 2019).

Now, however, it can be found in a diverse range of research spanning the humanities, social sciences, natural sciences, engineering, and architecture.[61] Interestingly, what seems to unite much of this recent research is a skeptical view of the soundscape concept's artistic connotations.[62] Across the genealogy of the soundscape concept from the 1970s through to the present, there is evidence of a growing tension between the soundscape concept of Schafer the composer, and the soundscape concept of Schafer the "scientist." Below I highlight three of these critiques, one I seek to develop across the course of this dissertation, and two I want to challenge.

Anthropologist Tim Ingold's pithy yet rigorous and widely cited rejection of the soundscape concept stands as a useful starting point for expanding its use.[63] Ingold situates his critique within the arts more broadly by making a clever comparison to histories of visual culture, which he claims have tended to treat "seeing" as primarily about the contemplation of "images." Eyes in these histories are "instruments of playback, lodged in the image rather than the body of the observer"—eyes are "scopic" not embodied.[64] Just as Ingold wishes to decouple eyes from visual images, he wants to decouple ears from sound images—or recordings. To

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[61] Francesco Aletta, Jian Kang, and Östen Axelsson, "Soundscape Descriptors and a Conceptual Framework for Developing Predictive Soundscape Models," *Landscape and Urban Planning* 149 (May 1, 2016): 65–74, https://doi.org/10.1016/j.landurbplan.2016.02.001; Rebecca Cain, Paul Jennings, and John Poxon, "The Development and Application of the Emotional Dimensions of a Soundscape," *Applied Acoustics*, Applied Soundscapes: Recent Advances in Soundscape Research, 74, no. 2 (February 1, 2013): 232–39, https://doi.org/10.1016/j.apacoust.2011.11.006; Susan J. Smith, "Soundscape," *Area* 26, no. 3 (1994): 232–40; Jian Kang and Brigitte Schulte-Fortkamp, *Soundscape and the Built Environment* (CRC Press, 2018); Emily Thompson, *The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America, 1900-1933* (MIT Press, 2004); Östen Axelsson, Mats E. Nilsson, and Birgitta Berglund, "A Principal Components Model of Soundscape Perception)," *The Journal of the Acoustical Society of America* 128, no. 5 (November 24, 2010): 2836–46, https://doi.org/10.1121/1.3493436.

[62] Arjun Appadurai's influential notion of the five "scapes" largely sidesteps aesthetics. See Arjun Appadurai, "Disjuncture and Difference in the Global Cultural Economy," *Theory, Culture & Society* 7, no. 2–3 (June 1, 1990): 295–310, https://doi.org/10.1177/026327690007002017. For a music scholar's critique of Appadurai's theory see Timothy D. Taylor, "Circulation, Value, Exchange, and Music," *Ethnomusicology* 64, no. 2 (July 1, 2020): 254–73, https://doi.org/10.5406/ethnomusicology.64.2.0254.

[63] Timothy Ingold, "Against Soundscape," in *Autumn Leaves: Sound and the Environment in Artistic Practice* (Double Entendre, 2007), 10–13, https://abdn.elsevierpure.com/en/publications/against-soundscape.

[64] Ingold, 10.

understand how "we use our eyes to watch and look" and "our ears to listen as we go forth in the world" we need to conceptualize these sense organs as more than just tools for interpreting *representations* of the world.[65] Rejecting philosophical notions of the "materiality of sound", which he claims reinforces distinctions between mind and matter, Ingold takes sound to be "a phenomenon of *experience*—that is, of our immersion in, and commingling with, the world in which we find ourselves."[66] The concept of sound brings with it the concept of hearing; "sound is simply another way of saying 'I can hear.'"[67] Accordingly, sound cannot be an *object* of perception. And thus, to understand a soundscape as a *sound object* is a mistake. In doing so, one becomes preoccupied with "the *surfaces* of the world in which we live."[68]

Ingold's discussion of sounds as objects reappears in a different form in later critiques of the soundscape concept. However, as I discuss below, I have found some these critiques less productive, inhibited by what I discern as an underlying preoccupation with audio-recording technology. The two critiques I mention here have, I believe, borne an outsized influence on other recent studies that consider the soundscape concept.

One of these critiques comes from American studies scholar Ari Kelman who argues that Schafer's original purpose for the soundscape concept was to privilege certain sounds in the natural environment.[69] In doing so, Kelman claims, Schafer necessarily limited the soundscape concept to an environmentalist ethic and aesthetic. As he puts it, the "soundscape is not a neutral field of aural investigation at all; rather, it is deeply informed by Schafer's own preferences for

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[65] *Ibid.*
[66] *Ibid.*, 11.
[67] *Ibid.*
[68] *Ibid.*
[69] Ari Kelman, "Rethinking the Soundscape: A Critical Genealogy of a Key Term in Sound Studies," *The Senses and Society* 5, no. 2 (2010): 212–34.

certain sounds over others."[70] Kelman reasons that if the soundscape concept has its origins in a particular form of political expression (late-sixties environmentalism), then its utility for other projects must be limited. By its association with environmentalism, the soundscape concept, according to Kelman, is too normative—and remains so even if applied in other contexts.

By contrast, other scholars understand the soundscape concept as being far less overdetermined by its origins in the environmentalism of the late 1960s. David Samuels, Louise Meintjes, Ana Maria Ochoa-Gautier and Thomas Porcello, who together make the case for the soundscape concept's use in ethnographic research, observe a far more nebulous use of the soundscape concept in recent research, preferring to see it better defined and productively put to use in anthropology.[71] As they claim, although "[the] soundscape [concept] opens possibilities for anthropologists to think about the enculturated nature of sound" it has been used quite ambiguously in recent research as "a new cover term for 'the context in which music occurs.'"[72] They propose that researchers return to Schafer's application of the soundscape concept as a conceptual framework for the practical task of creating audio-based artworks. In their words: "sound art can be considered[…]a form of ethnographic argument as well as creative material for social analysts to think with."[73] Noteworthy here is that in outlining their support of an ethnographically-focused sound art, Samuels et al. seek to distance themselves from soundscape composition in its original form, which they claim "reveals and sometimes replicates" a limitation of Schafer's concept of the soundscape: "its assumption that sound is only a matter of the vibrations of the source, leaving undertheorized the social, ideological, or political

[70] Kelman, 214.
[71] David W. Samuels et al., "Soundscapes: Toward a Sounded Anthropology," *Annual Review of Anthropology* 39 (2010): 329–45, https://doi.org/10.1146/annurev-anthro-022510-132230.
[72] Samuels et al., 330-331.
[73] *Ibid.*, 335.

positionalities of listeners."[74] Schafer, according to Samuels et al. was not political *enough* in his formulation and use of the soundscape concept as an artist and activist. Kelman and Samuels et al. would agree, however, that the soundscape concept remains limited until it is untethered from the ethics and aesthetics of soundscape composition as practiced by Schafer and his peers, and rigorously reformulated to fully theorize auditory culture.

While I would argue Kelman and Samuels et al. overgeneralize certain traits of soundscape composition, I do agree there is room to examine the social, ideological, and political within the parameters of soundscape composition and the soundscape concept it helped bring to life. This dissertation is in part an attempt to flesh out the usefulness of the soundscape concept while also holding onto some of its aspects that first compelled its early users to engage with sounds as both artists and environmentalists. Therefore, before homing in on what I take to be some of the richest opportunities that lay buried within the soundscape concept, I want to articulate one further critique that will help clarify the complicated intersection of art, science, and politics that soundscape composers have sought to navigate.

As an ethnographer, one of the more unsatisfying norms of soundscape composition I regularly struggle with is its tendency to exclude people from artistic and political representation. Considering analyses like that of William Cronon who presents modern industrial society's view of nature as "the place where people are not," I often notice that soundscape composers rarely acknowledge the work of the many other individuals and communities who participated in forming and preserving the environments where they capture recorded sounds. One soundscape composer who is infamous within studies of auditory culture for obscuring the whereabouts of the natural environments he records is Francisco López. Like many other soundscape composers,

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[74] *Ibid.*

some of his most acclaimed works have been produced from audio recordings that capture sounds heard in nature conservation sites. Mitchell Akiyama explains this approach by highlighting the influence of Western art-music aesthetics on López's representation of natural sounds:

> López rejects the notion that sounds should be judged. This applies most directly to recorded sound. The requirement that works using environmental recordings must educate or communicate drains them of their power to simply stir the imagination. In López's work, revelation comes in the form of a physical, visceral response to sound. The environment that is most important is the one in which the listener engages the work, not the one to which it refers.[75]

Understood in terms of Akiyama's critique, the natural sounds represented by López should be considered raw physical material, lacking connection with histories, cosmologies, or ecological systems. They are simply instruments for probing the aesthetic imaginations of López's audience. as Jonathan Gilmurray's survey of soundscape composition highlights, many soundscape composers see their creative practice as contributing to the broader conservation movement.[76]

This kind of partitioning of nature and culture could be seen as another example of modernism's more general prejudice against "utilitarian" art. Taken on the terms of a certain modernist aesthetic, the material nature-conservation value of a place would impinge on any immaterial aesthetic value it might display. Such an aesthetics would appear particularly problematic from a perspective that considers Indigenous relationships to land. As Erik DeLuca puts it when discussing soundscape composer John Luther Adams's early career in Alaska:

> Does Adams consider what effects his contributions to the Alaska National Interest Lands Conservation Acts (the largest land preservation law in US history) had in perpetuating

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[75] Mitchell Akiyama, "Transparent Listening: Soundscape Composition's Objects of Study," *RACAR : Revue d'art Canadienne / Canadian Art Review* 35, no. 1 (2010): 60, https://doi.org/10.7202/1066802ar.
[76] Jonathan Gilmurray, "Ecological Sound Art: Steps towards a New Field," *Organised Sound* 22, no. 1 (April 2017): 32–41, https://doi.org/10.1017/S1355771816000315.

> the dualism between humans and nature—in this case humans (white, male adventurers in a new land) and nature (land untouched by humans)? Does he consider how this activism ignores a variety of relationships that indigenous and local people have created with the land? [77]

DeLuca's questions could just as easily be directed at the many other composers who engage with the sounds heard in conservation spaces across North America and other Indigenous landscapes controlled by settler nation-states.

Musicologist Dylan Robinson has detected a distinctly settler-colonial form of racism embedded within the origins of soundscape composition. He prefaces his widely cited book on settler-colonial "hungry listening" with a particularly offensive quote attributed to Murray Schafer that implies the composer's repulsion to Inuit throat-singing.[78] Robinson then charges Schafer with the practice of "self-indigenization", citing the following manifesto-like remark written by Schafer to his fellow Canadian composers:

> "Task number one, forget where you come from; only then will you find out where you are…When you finally realize you come from Canada (with no strings attached) you find yourself brother and sister of the Indians and the Inuit. All your life you had denied this possibility based on ethnic grounds…now you discover that it is right and inevitable"[79]

In what he describes as Schafer's "celebration of cultural amnesia," Robinson claims Schafer hopes Canadian composers will "take their rightful place as not simply heirs to the culture but as 'part of the family.'"[80] Is Schafer expressing a common settler colonial tendency to paper over a violent colonial past that he as a settler Canadian benefited from in numerous material ways? Or is he seeking to transcend a colonial history that he sees offering little for the contemporary

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[77] Erik Deluca, "Selling Nature to Save It: Approaching Self-Critical Environmental Sonic Art," *Organised Sound* 23, no. 1 (April 2018): 3, https://doi.org/10.1017/S1355771817000292.
[78] Robinson, *Hungry Listening*.
[79] Cited in Robinson, 155.
[80] Robinson, 156.

Canadian composer to build an aesthetic identity? Robinson seemingly wants to focus on the former, even if both could be at play concurrently.

Other critics of settler colonialism have explained what Robinson describes as self-indigenization as a form of multiculturalism unique to settler nations like Canada, the United States, and New Zealand. As media scholar Jo Smith frames it, this kind of multiculturalism assumes, to paraphrase New Zealand Labour Party politician Trevor Mallard, "we are all indigenous now."[81] In his official capacity as race relations minister, Mallard claimed in a 2004 speech that indigeneity should be based on the "now" of present-day population demographics: "New Zealand…has to get its British imperial past behind it[…].Māori and Pākehā are both indigenous people to New Zealand now."[82] For Mallard, Smith asserts, indigeneity should be used as a catch-all term for a multicultural belonging to place:

> To be indigenous is not dependent on autochthonous belonging but from occupation. 'Kiwi' becomes the multicultural term to indigenize all introduced identities and describes the perpetual present of a nation-state premised on asserting an historical distance from British imperialism of the 1800s.[83]

Whether evidenced in the manifesto-like enthusiasm of Schafer, or the nation-building rhetoric of Mallard, the claim that "we are all indigenous now" requires continual work to sustain an influence, both culturally and politically.

As I discuss in the chapters to come, nature conservation in New Zealand may express further instances of the multicultural settler-colonial project. As just one example for now, I find the contradictions of this rhetoric especially striking in conservationists' general rejection of non-

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[81] Jo T. Smith, "Post-Cultural Hospitality: Settler-Native-Migrant Encounters," *Arena Journal*, no. 28 (2007): 65–86, https://doi.org/10.3316/informit.681103352395274.
[82] Smith, 70.
[83] *Ibid*., 71.

native species.[84] Mainstream New Zealand conservation has largely accepted uncritically the demonization of introduced species that compete ecologically with New Zealand's native flora and fauna. This could be interpreted critically in at least two ways: as a bicultural reversal through a surge of repressed guilt projected onto the non-native "pest" species; or as a multicultural collective rejection of the non-native other. Similarly, Schafer's purported cultural amnesia could be an internal battle with settler guilt, or the marshaling of new aesthetic forces against outside influences (not only may he want to lay aside Canada' settler colonial history, but when Schafer says "forget where you come from; only then will you find out where you are," he could be read as saying "forget the influence of European musical aesthetics").

While it is no doubt important to consider the entanglement of soundscape composition within the much broader arch of settler-colonialism, I am also somewhat reticent to promote this historical fact as a priority for my critique. I hear DeLuca's words of caution when he notes that "[a] critique of any kind of environmental sonic art has the potential to be read as hostile, mocking, or even authoritarian to the general cause of environmentalism."[85] Further, we might also consider a more generous interpretation of the contradictions of soundscape composition by focusing on the earnest wish to transcend colonial histories and rewrite a future in non-exploitive ways. This can be critiqued as naive and perhaps delusional, but it does not foreclose on a more informed and self-aware possibility for such transcendence in the future. This again is a direction I intend to map out in this dissertation.

Perhaps, instead, what would be more helpful for now is turning a critical focus on the particular tools, namely audio technology, adopted by soundscape composers and their

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[84] Abbi Virens, "Plants out of Place: How Appreciation of Weeds Unsettles Nature in New Zealand," *New Zealand Geographer* 79, no. 2 (2023): 65–74, https://doi.org/10.1111/nzg.12364.
[85] Deluca, "Selling Nature to Save it," 1.

implications in contemporary habits of listening more broadly. Scholars have already noted the associations between the soundscape concept and audio recording technology. Samuels et al. describe the soundscape concept as "anchored in a form of listening that became possible only through the development of technological forms of mediation and recording."[86] Here they are referring to the emergence of modern audio-technical listening cultures, a topic which historian and sound studies scholar Jonathan Sterne addresses in more depth.[87] He observes how

> Schafer's concept of soundscape emerges from a variety of audio-technical sites: radio theater, urban design, consumer electronics, art music and music education […]. [It is] very much a creature of mid-century sound media culture, first radio, then hi-fi, then stereo. It is part of an electroacoustic moment in sound history[...] that demands its listener experience the broader phenomena of sonic mediations from a stable and surprisingly delicate position.[88]

Sterne suggests that the soundscape concept may even determine a particular form of subjectivity. He describes it as requiring "a coherent, unified, singular listening subject to hear it, to apprehend it, to criticize it, to shape it, to transform it. The subject of soundscape needs stable footing. Anything else is a potential crisis."[89] Ingold, who would likely agree with this critique, proposes a phenomenological understanding of listening as an alternative—this means paying attention to the way our ears work in the world of everyday life, not just the world we experience when we put on a pair of headphones. On these terms, the act of relating to sounds is less about pinpointing sonic objects (the "surface of the world" as Ingold puts it), and more about participating in the embodied habits of audition. As I discuss in Chapter 3, this concept of

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[86] Samuels et al, 331.
[87] Jonathan Sterne, "The Stereophonic Spaces of Soundscape," in *Living Stereo: Histories and Cultures of Multichannel Sound*, ed. Paul Théberge, Kyle Devine, and Tom Everrett (Bloomsbury Publishing USA, 2015), 65–84.
[88] Sterne, 67.
[89] Sterne, 76.

listening proves useful when seeking to understand how volunteers at Bushy Park relate to the sounds they hear while working in the sanctuary.

What it means to listen as a conservationist in Bushy Park, I will argue, has much to do with audition as an embodied activity that involves participation in the surrounding world, its peoples, ecologies, and histories. However, it also has much to do with aesthetics. As I outline below, the soundscape concept can afford a way to engage with place and aesthetics that avoids a preoccupation with surfaces, sidestepping the need to establish an artificially stable footing, and avoiding the "potential crisis" that Sterne sees as inevitable when our habits of listening are overdetermined by audio technology. This is helped by a better understanding of the aesthetic forces at play in the emergence of the soundscape concept, in particular the romantic musical aesthetics that shaped Schafer's approach to environmentalism.

Escaping the musical

I recall my first public musical performance being at the Whanganui Collegiate School music-department's largest classroom. There was a small stage in the corner of the room on which sat a baby-grand piano. The writing desks used by students during the school day were pushed to the side of the classroom, and the chairs rearranged in rows facing the stage. The piano would be pushed to stage-left to make room for performing children who would play classics from the Suzuki method book—Long, Long Ago, Michael Row the Boat to Shore, Twinkle, Twinkle Little Star.

I began learning the violin when I was five years old. My teacher lived in a small house on the eastern outskirts of Whanganui, a stone's throw from the cemetery where my paternal grandmother, Connie Ruth Booth (née Wood), is now buried. My parents have often told me that

my interest in the violin was sparked by the violin my grandfather—Connie's husband, Edgar Noel Booth—once played. Connie had kept it for years, perhaps in hope someone else in the family would take it up. Years later I would play this particular violin, having "graduated" several times through various child-sized violins—including the brittle (sounding) quarter-sized violin I learnt on as a five-year-old. My introduction to performing music was on this tiny instrument along with a dozen other young violinists on the stage at Collegiate. Later I would play that piano in addition to the violin on that same stage. In the following years I began to play in the large auditorium next to the classroom, performing in music competitions on piano and violin. By my final year in secondary school I was performing in Whanganui's various concert halls, including the city's opera house.

Not long before my grandmother Connie died, I attended a piano concert at this opera house. Playing was a renowned New Zealand pianist, Michael Houstoun. The repertoire was entirely J. S. Bach compositions. Sitting with my very-aged somewhat senile grandmother in the dark near the front of the audience, as the pianist began to play, she let out a loud sigh of pleasure— "isn't this wonderful" she exclaimed, making me a little nervous as she broke with the conventions of classical-music concert hall etiquette.

I remember a similar exclamation of joyous relief a few months later when I visited her in hospital. I had brought with me headphones and an iPod containing a playlist of classical music. I do not recall the first track on the playlist, but it would have been something from the Romantic period—probably orchestral or chamber music. I helped my grandmother gently insert the earbuds into large, pale ears. She closed her eyes, waiting for the music to drown out the beeps and clicks of the hospital machinery around her. The look of pain and confusion that had been on

her face seemed to dissolve as the music began to play. “Isn’t music wonderful” she sighed, eyes closed.

Music was never far from the ears of many Bushy Park volunteers either. Nearly a decade later in 2023, two years after I had completed my field research at Bushy Park, but still residing in Whanganui, I bumped into a former fellow-volunteer, Lincoln, at a lunchtime chamber-music performance. Chatting at half-time, we enjoyed catching up about the latest work happening at Bushy Park. But we spent more time discussing the repertoire of the concert and discussing our favorite composers and performers. Although it had been over two years since we had worked together in the sanctuary, I had no sense that this warm conversation or the time spent sitting together listening to music was in any significant way discrete from the hours we had previously spent working in the forest together two years ago.

Back in 2020 when I had interviewed Lincoln, he expressed his curiosity in the relationship between human music and bird song. He described listening in awe to tūī calls, telling me: “tui have two voice boxes and are able to produce very complicated music that we of course don’t hear. The music that WE hear is quite fantastic”. He then recalled hearing a sound-recording of a tūī call that had been manipulated to transpose the vocalization into clearly apprehended frequencies: “when you are able to slow it down, so you are able to hear it in our hearing range the scope of their songs is really quite…melodious? No, it’s not really melodious, but it’s certainly *in*tricate and complex.”

During my field research and throughout the course of writing this dissertation, questions of musicality frequently arose. Whenever they did, I often found myself circling back to the specific problems raised in critiques of the soundscape concept. However, these debates could be taken as just one small example of a much larger cultural battle in the modern West between

the arts and sciences for intellectual supremacy. Assumptions about which stance offers the most authoritative account of reality undergird numerous debates regarding the relevance of art and science, how they should be supported economically, and where one's claims are relevant and the others are not.[90] As I touch on throughout this dissertation, the increasingly-fragile prominence of a liberal politics guided by a staunchly scientific (perhaps even scientistic) epistemology, often makes itself apparent in the practices and discourses of New Zealand nature conservation. However, to first focus this much larger societal battle within the specific concerns of my home discipline, I want to briefly mention some of the ways music scholars have sought to navigate these debates. As I argue, this manifests in what I describe as "escaping the musical."

Sterne's critique of the soundscape concept foregrounds the influence of audio technology in general, yet he is also careful to note the particular application of this technology, specifically the listening to recordings of musical works. Although his mention of classical music is only brief, it makes Sterne one of the few commentators to acknowledge this particular form of musicality that was instrumental to Schafer's development of the soundscape concept. In contrast, other critics seem perplexed by Schafer's position as a composer of rather conventional classical music. Kelman for instance seems unable to contain Schafer's musical aesthetics within a broader definition of the soundscape. As he argues:

> Music is always but one sonic phenomenon among many, and, no matter how much music one hears, it cannot approach the complex meanings attached to sound as it is made by non-artists, and as it is heard beyond the gallery, the headphones, or the concert hall."[91]

[90] Lewis Pyenson, *The Shock of Recognition: Motifs of Modern Art and Science* (Brill, 2020).
[91] Kelman, 221.

Kelman extends this critique by questioning Kay Kaufman Shelemay's use of the term soundscape in her ethnomusicology textbook titled *Soundscapes*.[92] "By focusing on music," Kelman writes,

> Shelemay effectively avoids the very aspect of Schafer's soundscape that scholars have found so provocative and enticing: the possibility that we might take a broader approach in our study of sound to incorporate non-musical elements in it. […] "Unlike Schafer, *who aspires to hear all of sound as music*, Shelemay deploys the idea of the soundscape in such a way as to limit the study of sound *to* music.[93]

Kelman's critique at once points to and unwittingly demonstrates one of the fundamental contradictions in the frequent theoretical use of the soundscape concept, it's uncertain position between the musical and the non-musical.

What Kelman doesn't acknowledge is that Schafer was clearly influenced by Romanticism, evidence including his book on the pivotal German Romantic figure E.T.A. Hoffman.[94] Schafer, while influenced by the avant garde experiments of composer John Cage, produced a catalogue of works that generally appears aesthetically conservative, consisting largely of instrumental and vocal music. Compared to so often abstract non-tonal musical works that comprised soundscape composition of the 1970s, Schafer's music is very accessible to the average listener familiar with tonal Western classical music. Perhaps, then, when Schafer describes "the soundscape of the world as a huge musical composition" (an idea I return to in Chapter 4) his critics hear a call to evaluate the total sonic expression of the world on the terms of a Beethoven symphony. Might it be that what these critics struggle with most is Schafer's appeal that we appreciate the sonic world on *his* aesthetic terms, specifically *romantic* aesthetics?

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[92] Kay Kaufman Shelemay, *Soundscapes: Exploring Music in a Changing World* (New York and London: Norton, 2001).
[93] Kelman, 224.
[94] R. Murray Schafer, *E.T.A. Hoffman and Music* (University of Toronto Press, 1975).

For these critics, not only would this prerequisite bring with it the burden of Austro-German chauvinism, but it might also revive romanticism's challenge to the authority of the sciences. On these terms, romantic aesthetics is incompatible with modernist metaphysics. What can look like a clash of tastes can also reflect a larger concern for maintaining the sciences' institutional authority. In an era where the authority of the sciences' epistemological influence is (again) coming under fire from many factions across the political spectrum, it is unsurprising to find an atmosphere of defensiveness emerging within various liberal discourses.[95] A culture busy defending the supremacy of the sciences may detect in Schafer's portrayal of a "world composition" romantic philosopher Friedrich Schlegel's assertion that "all nature and science should become art". According to this view science, politics, religion, and philosophy must be guided by an aesthetic imperative. If "beauty is truth, truth beauty" as poet John Keats put it in "Ode to a Grecian Urn", then the authentic production of knowledge would not only accommodate the aesthetic but would dogmatically pursue it. How this tension manifests in the discipline within which I situate this dissertation is what I address in the following section.

Finding the music in ethnomusicology

Ethnomusicology's history reveals a unique struggle to shed the aesthetic imperative of romanticism. This is most evident in the dominant narrative that situates ethnomusicology as a science. Some of the earliest examples of ethnomusicology include the efforts of German psychologist Carl Stumpf and his pupil Erich von Hornbostel to classify the colonial world's musical instruments. Hornbostel's student George Herzog migrated to the United States and

[95] Brad Plumer and Coral Davenport, "Science Under Attack: How Trump Is Sidelining Researchers and Their Work," *The New York Times*, December 28, 2019, sec. Climate, https://www.nytimes.com/2019/12/28/climate/trump-administration-war-on-science.html.

taught several key figures in the discipline's postwar consolidation. Herzog prescribed a method that involved "collecting, recording, transcribing, describing, classifying, analyzing, and comparing music in order to increase the music knowledge-base and test theories concerning musical distribution, diffusion, and acculturation."[96] Herzog's approach was first and foremost a large-scale empirical one. Despite the centrality of ethnography as a qualitative research method in ethnomusicology, the dominant view of the discipline's history still situates itself within a type of research that takes the disinterested and quantitative basis of the hard sciences as its model. In an early effort to establish its epistemic legitimacy, ethnomusicology's formative years may exhibit another example of escaping the musical.

Yet, as with most dominant historical narratives, there are adjacent stories existing close by. For the history of ethnomusicology, this is a story of *applied* research, filled with characters who oppose the disciplinary descendants of Hornbostel to instead engage deeply in the qualitative aspects of music research—namely participation. If ethnomusicology for Herzog was primarily about collecting and analyzing data, for ethnomusicology's disciplinary others research was primarily about *creating* data. Daniel Sheehy (1992) points to music researchers like Charles Seeger, Benjamin Botkin, and Alan Lomax who he argues each understood one of their main goals as being the dissemination of music for public use, whether as material to be performed or consumed.[97] In ethnomusicology's lesser known "applied" history, music was something to be made, not simply "known," and research should recognize this fact in its methodology.

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[96] Jeff Todd Titon, "Applied Ethnomusicology: A Descriptive and Historical Account", in *The Oxford Handbook of Applied Ethnomusicology*, ed. Svanibor Pettan and Jeff Todd Titon (Oxford University Press, 2015), 15.
[97] Daniel Sheehy, "A Few Notions about Philosophy and Strategy in Applied Ethnomusicology," *Ethnomusicology* 36, no. 3 (1992): 323–36, https://doi.org/10.2307/851866.

If this is an inherent epistemological tension within ethnomusicology, it seems to be only heightened in the recent emergence of ecomusicology—a field that may seem to accommodate my research neatly. One of the field's founding figures, ethnomusicologist Jeff Todd Titon, defines it as "the study of music, culture, sound, and nature in a period of environmental crisis."[98] Allen and Dawe see in ecomusicology the efforts of music scholars to collaborate with environmental science researchers.[99] In doing so, it softens the boundaries between what C. P. Snow called the "two cultures" to form a "third culture" in which cross-disciplinary research goes beyond "collaboration and mutual citation" to achieve an "amalgamation of scientific, artistic, and humanistic disciplines."[100] Yet if multidisciplinarity makes ecomusicology a distinctly pluralistic field, what unifies it is the "eco" prefix, less to do with "ecology" and more a reference to "ecocriticism," that is, its governing ethic of critique. For Allen and Dawe, "the relevance of ecomusicology comes from its attendant possibilities for *adjusting* cultural and environmental norms."[101] Even though ecomusicology involves extensive collection, organization, and analysis of data, the end game is a critical intervention into the relationship between music, culture, sound, and nature.

Yet as some scholars have cautioned, when perpetually worried over, this nature-culture binary can end up being further reinforced. Ana Maria Ochoa Gautier has argued that ecomusicology's self-definition based on the natural versus the cultural only strengthens "the underlying ontology that such a relation implies."[102] Complimenting this critique is James

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[98] Jeff Todd Titon, "The Nature of Ecomusicology," *Música e Cultura* 8, no. 1 (2013): 8.
[99] Aaron S. Allen and Kevin Dawe, "Ecomusicologies" in *Current Directions in Ecomusicology: Music, Culture, Nature*, ed. Aaron S. Allen and Kevin Dawe (Routledge, 2015).
[100] Allen and Dawe, 5.
[101] *Ibid.* 4 (emphasis added).
[102] Ana María Ochoa Gautier, "Acoustic Multinaturalism, the Value of Nature, and the Nature of Music in Ecomusicology," *Boundary 2* 43, no. 1 (February 1, 2016): 140, https://doi.org/10.1215/01903659-3340661.

Currie's (2017), in which he detects an implicit turn away from the "imaginary" of art towards the "real" of planetary ecological strife.[103] Currie argues that this neglects the discipline's unique position to engage in a collective humanistic project of imagining new worlds within the sphere of art at a time when such imaginative work may be (again) desperately required. In its escape from the musical, ecomusicology passes up the unique opportunities afforded by musical creativity and expression, just as critics of Schafer's distinctly musical approach to the soundscape concept may foreclose similar possibilities of conceptual development.

Where, then, might a more imaginative engagement with the soundscape concept lead? One direction already plotted out is evidenced in Michael Veal's survey of dub music's emergence in the recording studios of Jamaican reggae producers in the 1970s.[104] Notably, Veal uses the soundscape concept to describe the generation of sounds heard in dub music that escape the usual lexicon of musical analysis. Reaching beyond musicology to describe these unique sonic qualities and features, Veal makes comparisons between dub producers and visual artists. In one instance he describes producer King Tubby as "dub's foremost colorist" who would "manipulate frequencies of sound in the same way a painter manipulates frequencies of light."[105] Conceptually, this comparison shifts the formulation of a soundscape away from being either a real or mediated audible location, and towards a notion that considers the active manipulation of sounds. This would suggest a soundscape can be thought of as more than something to be represented or captured but also something that is produced.

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[103] James Currie, "There's No Place," *Ethnomusicology Review* 21, accessed January 2, 2025, https://ethnomusicologyreview.ucla.edu/content/there%E2%80%99s-no-place.
[104] Michael Veal, *Dub: Soundscapes and Shattered Songs in Jamaican Reggae* (Wesleyan University Press, 2013).
[105] Veal, 131.

In discourses where the mastery of audio-technical equipment is assumed to go hand-in-hand with the effective and faithful representation of natural soundscapes, any reference to "production" assumes a more specific form of audio-technical production: creating sound objects that can be played-back repeatedly, allowing for objective representations of the sounds of natural environments. I would argue that the production of soundscapes goes far beyond the audio-technical representation of acoustic objects (or to use Ingold's term again, "surfaces"). Rather, producing soundscapes might also be thought of as a broader "para-sonic" activity. As I argue throughout this dissertation, it may involve activities as mundane as setting mousetraps or pulling weeds. However, to conclude this chapter on a methodological theme, producing sounds may also include various forms of writing.

Writing soundscapes

Ethnographic writing has been a foundational tool in the development of modern ethnomusicology. It is the discipline's primary way of representing soundscapes of all kinds. If dogmatic notions of audio-technology's fidelity of sonic representation were softened, perhaps ethnography could also be considered active in the *production* of soundscapes, as places perceived auditorily through positioned perception. Such recognition, I believe, would require further attention to the relative "critical immunity" the soundscape concept seems to have achieved within ethnomusicology. Since Murray Schafer's popularization of the soundscape concept, ethnomusicologists casually referred to the "soundscape" of a given musical context or ethnographic field site, yet there is no explicit methodological engagement with the concept as a theoretical lens. Despite the disciplinary expectation to unpack its various concepts applied, it would seem that in ethnomusicology the soundscape concept is generally considered a neutral

concept. This contrasts notably with the critiques outside of ethnomusicology I discuss above where the soundscape concept has faced considerable scrutiny. Why then has it achieved a position of critical immunity within ethnomusicology? This dissertation is in part a response to this surprising absence.

One useful way to begin a critique of the soundscape concept from an ethnomusicological perspective is to focus further on ethnomusicology's relationship to the natural sciences. Such a relationship (or a perceived lack of) was made readily apparent to me while working at Bushy Park. There were many times during my field research where it felt that my permission for gathering knowledge in the sanctuary was supported by the previous partitioning of this territory for research by the conservation sciences. Like many other eco-sanctuaries in New Zealand, Bushy Park is a site well-studied by ecologists and animal behaviorists and numerous scientific articles address the birdlife of Bushy Park.[106] Along with many ethnomusicologists before me, I was entering colonial territory in the wake of natural scientists, armed with the mandatory tools of archival collection. In this context, the sound recording can take on a distinctly colonial guise.

Sound recording is widely recognized as a tool of extraction within ethnographic disciplines, although it has received less attention in ethnomusicology.[107] One exception is Dylan

[106] Isabel Castro et al., "Presence and Seasonal Prevalence of Plasmodium spp. in a Rare Endemic New Zealand Passerine (Tieke or Saddleback, Philesturnus carunculatus)," *Journal of Wildlife Diseases* 47, no. 4 (October 1, 2011): 860–67, https://doi.org/10.7589/0090-3558-47.4.860; John Innes et al., "Movements and Habitat Connectivity of New Zealand Forest Birds: A Review of Available Data," *New Zealand Journal of Ecology* 46, no. 2 (2022): 1–21; Bryce M. Masuda and Ian G. Jamieson, "Age-Specific Differences in Settlement Rates of Saddlebacks (Philesturnus Carunculatus) Reintroduced to a Fenced Mainland Sanctuary," *New Zealand Journal of Ecology* 36, no. 2 (2012): 123–30; Julia Panfylova et al., "Post-Release Effects on Reintroduced Populations of Hihi," *The Journal of Wildlife Management* 80, no. 6 (2016): 970–77, https://doi.org/10.1002/jwmg.21090.
[107] Michael T. Taussig, *Mimesis and Alterity: A Particular History of the Senses* (Psychology Press, 1993).

Robinson, who has compared ways in which Indigenous and settler peoples have sought to share and preserve musical artifacts:

> The aim of Indigenous people in sharing songs with ethnographers was to ensure they were kept safe for future generations—generations who today continue to hold hereditary rights to the presentation of these songs. In contrast, from the perspective of ethnographers, gathering Indigenous songs was done under the auspices of knowledge sharing for the Canadian public.[108]

Robinson quotes the Canadian Government's policy on museum collection, stating its aim as being "to enhance Canadians' knowledge, understanding, and appreciation of events, experiences, people, and objects that reflect and have shaped Canada's history and identity, and also to enhance their awareness of world history and cultures."[109] To serve the needs of the settler state of Canada, the nation's museums are responsible for collecting and disseminating knowledge of the lands and peoples that constitute its territories.[110] Yet as Robinson highlights, many objects stored and displayed in Canadian museums, including sound recordings, are not universally understood as categorizable types of heritage:

> When songs are not firstly songs but forms of doing (healing, law, and sovereignty), how does this 'doing' change on their transfer from an oral to material medium? What remains when the integral ancestral and familial lineages of these songs become disconnected from our communities, leaving younger generations without knowledge of protocol surrounding their use? In the absence of such knowledge and context, should these songs be left in the archive, given that potential misuse of their power in the world may lead to significant damage when they are performed outside the appropriate contexts?[111]

This archival impulse, while beginning to be critiqued within ethnomusicology, may be difficult to shake.[112] Without further introspection on the use of sound recording technology within the

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[108] Robinson, 151.
[109] *Ibid.*, 157-58.
[110] For a New Zealand context see Joanna Kidman, "Pedagogies of Forgetting: Colonial Encounters and Nationhood at New Zealand's National Museum," in *Teaching and Learning Difficult Histories in International Contexts*, ed. Terrie Epstein and Carla Peck (Routledge, 2017), 95–108.
[111] Robinson, 151.
[112] Noel Lobley, *Sound Fragments: From Field Recording to African Electronic Stories* (Wesleyan University Press, 2022).

discipline, both in the past and today, ethnomusicology may inadvertently continue to reinforce modes of research that disconnect people from place, music from musician, and voice from speaker.

While ethnography remains the dominant research method in current ethnomusicology, it is likely that presumptions remain about audio-recording technology as a tool capable of transparently (read: neutrally) representing the world. Indeed, given the extensive critique of language as a means of transparent representation, particularly in ethnographic disciplines, it would be no surprise that such a supposedly neutral tool of representation would come as welcome relief to researchers struggling to respond to ethnography's crisis of representation.

To better appreciate the peculiarities of audio technology, ethnomusicologists might spend more time experimenting with their sound recorder, treating it with curiosity—even ambivalence—rather than presuming it wields the power to represent the world transparently. As I discuss in the Chapter 3, sound recorders, when treated a little more ambivalently, can reveal not only their technological limits, but also highlight the limits of various sonic concepts widely used in sound studies and related fields—including the soundscape concept. It may be that bundled within assumptions about sound recording technology's capacity to transparently represent reality is a hazy understanding of the soundscape as a kind of sonic object that exists independently in the world. Before ethnomusicologists can begin to meaningfully critique this idea and instead consider soundscapes as things produced (including through ethnographic writing), we may have to further reflect on presumptions and expectations we hold about sound recording technology and its capacity to transparently represent the sounds that populate our field sites. This dissertation is in part an attempt to begin this conversation, both through my own critique of the soundscape concept from an ethnomusicological vantage point, and through my

own ethnographic account, which both describes and participates in the making of a New Zealand nature conservation soundscapes.

Chapter 2. The work: volunteering in the sanctuary

My regular drive to Bushy Park from Whanganui is a short commute, taking less than thirty-minutes by car. Most Tuesday and Thursday mornings I drop off Michelle to work at the local high school before heading out to Bushy Park. Sometimes I carpool with a few of the other volunteers. We drive through the northern outskirts of Whanganui township—through neatly manicured hedges of semi-rural lifestyle blocks, past the commercial berry farm and café—and out into the countryside. The vehicles we pass are a familiar sight on any rural New Zealand highway: along with the stream of commuters and the occasional RV we usually pass a truck-and-trailer with tanks full of cow's milk on their way to one of the region's numerous dairy-processing plants; or perhaps we'd see a mud-splattered animal haulage truck loaded with sheep or cattle heading south to an abattoir in Whanganui. We would pass through the small settlement of Kai Iwi, once a bustling railway village, now just an elementary school and a small collection of mostly rundown rural houses. Dotted around the edges of Kai Iwi are three small marae. These sub-tribal meeting houses and compounds were established during the nineteenth and twentieth centuries by Māori dislocated from their ancestoral territories. Due to the rapid government-driven development of pastoral agriculture, local people were pushed off their land into smaller communities orientated around individual marae. Today, these three marae in Kai Iwi remain vital nodes of community for local Māori: as sites for funerals, wider-family celebrations, and political or cultural events.

Just past Kai Iwi is the turn-off to Bushy Park—still another 10-minutes' drive along a narrow rural backroad, winding through rolling hills of pasture, pine-forest plantations, and old farm cottages. I eventually familiarized myself with this road after a few months of regular car travel to and from the sanctuary, becoming less surprised by the dusty pick-up trucks zooming

around blind corners. Sometimes I would have to pull to one side to let a logging truck pass by heading in the opposite direction, its trailers groaning with freshly harvested radiata pine. Occasionally I would come across a temporary sign placed on the side of the road by a local farmer warning of stock movement on the road ahead. It was usually a mob of sheep, being herded from one paddock to another further down the road. Yet, with the price of sheep wool and meat declining in recent years and the demand for cheap, fast-growing timber from commodity markets in China steadily increasing, it was far more common to come across a logging truck than a farmer and his sheep. While in the imagination of conservationists, Bushy Park stood still as an icon of New Zealand's natural environment since time immemorial, the land surrounding it was in an obvious ongoing state of change.

If driving alone, I would often listen to music on these trips to the sanctuary. It became part of my routine, something I enjoyed, and a salve to the monotony of the drive. I would switch off the stereo as I turned into the sanctuary's tree-lined driveway that led from the road entrance. From the roadside, only the easternmost border of the sanctuary's forest could be seen. More striking than the native forest in the distance was the two rows of old oak trees planted in the early 1900s that lined the driveway. During this period when G.F. Moore was building the Bushy Park homestead, New Zealand's newly arrived European inhabitants wanted to establish their presence not only through the built environment but the natural environment as well. An oak-lined driveway remains a common sight across rural New Zealand, each old farm homestead marked out by stands of introduced trees, most now over a century old. These oak trees, along with various other introduced Northern-European tree species, reminded me of the settlers' attempt to beautify and render more familiar a land that appeared wild and intimidating.

Turning off the narrow country round into the tree-lined entrance to Bushy Park, I often noticed the large new sign advertising the sanctuary: “Bushy Park Tarapuruhi”, emblazoned with the Forest and Bird branding. Entering the driveway I would pass through two large white gates,

always left open. These gates appeared to be mostly symbolic, an aesthetic expression of the sanctuary’s early-20th century origins, and trappings of the homestead’s national heritage status.

Heading down the narrow driveway hoping to avoid a tourist speedily exiting the sanctuary, I would pass the understory of mostly native shrubs with a sprinkling of ivy and hydrangeas— two introduced species now considered weeds at Bushy Park. The driveway was narrow with a couple of blind corners. On mornings arriving for work, it would be rare to come across another vehicle leaving the sanctuary, so we would usually zip down the drive ignoring the “5 km” sign at the entrance.

Then there were the next set of gates, of far greater consequence to the preservation of Bushy Park's native flora and fauna—the gates that allowed access beyond the fenced sanctuary itself. Halfway up the driveway, they are a stark contrast to the colonial-era wooden gates at the road entrance: two wide metal gates covered in fine but hardy mesh that remained shut unless opened by a button within reach from the driver's side window. A local Māori man who I got chatting to at the pub one night observed, "they're like the gates into Jurassic Park!" The gates are around 2 meters high, and the tops are covered by an overhanging strip of metal to prevent any animals from climbing up and over the gate. This is also the design of the predator-proof fence surrounding the sanctuary.

Beyond the first set of gates is s a grassy area, about 10 meters square, enclosed by the same predator-proof fence, leading on to another set of identical gates. This area is like an "airlock" in a space craft—any creatures intended to be kept out of the sanctuary, if they

happened to dash through while the first gates were open, could then be contained in this area. Within this holding compartment are numerous traps, checked weekly by the volunteers, although in my experience it was very rare that an animal would make it through. Nevertheless, it provides an added layer of protection between the inside and outside of the sanctuary, which emphasizes its status as a vulnerable and precious natural environment.

Beyond the two electric gates, the driveway continues upwards, winding through dense native rainforest. The large exotic oaks are replaced by large tawa and pukatea, with a dense understory of ferns and self-regenerated native seedlings. However, the distinctive lime-green leaves of hydrangeas continue to sprinkle the edges of the driveway, and during the summer months, their exotic powder-blue petals stand out against a background of subdued native greens and browns. During the first few weeks of my time as a volunteer, I spent several afternoons managing these hydrangeas, ensuring their suckers did not reach beyond the driveway's edge into the forest. The sanctuary's Trust had chosen to keep these hydrangeas within the fence boundary as an example of Bushy Park's colonial botanical heritage, leaving it to the volunteers to prevent these plants from slowly creeping beyond the driveway. If left unmanaged, this small stretch of hydrangeas would eventually spread throughout the understory, smothering the natural regeneration of native seedlings.

A couple of hundred meters inside the gate, the driveway forks in two. To the left is the main public carpark, shaded in summer by large poplar trees. From here, visitors get their first view of the larger forest as they look down the sloping paddock before them. The driveway forking right continues up towards the homestead. The forest recedes, opening up onto large mown lawns and flower gardens, and the occasional large exotic tree. Like the oaks along the entrance to the sanctuary, these trees were planted at the same time the homestead was built.

Further up the rise towards the homestead the driveway splits again. To the right is a sealed carpark reserved for homestead visitors and guests. From this carpark, visitors can look back out across the southeastern corner of the forest, along the oak-lined driveway, and beyond to rolling pasture dotted with poplar and Monterey cypress trees, most of them younger than the sanctuary's exotic trees, but just as much arboreal markers of colonial presence on the land. This view is easily taken in from the long, elegant porch of the homestead and can be glanced from inside the building through the large bay windows jutting out the from the rooms at either end. Although the southwestern corner of the homestead had a vantage point of the forest's predominant range, most of the rooms faced south-east towards the visible farmland reaching back towards the Whanganui township.

Continuing up past the homestead, the driveway soon comes to an end in a cul-de-sac courtyard, surrounded on two sides by a building once used as the homestead stables. It was built in the early 1900s, just prior to the building of the homestead itself. A portion of the stables have since been restored and adorned with some of the farm's original equipment, functioning as a small museum exhibit. The largest room in the building has been renovated and fitted out as an information center for visitors. It doubles as a classroom for school groups visiting the sanctuary. The walls of the room are lined with posters informing visitors about Bushy Park's history and its recent conservation projects. A display case is filled with taxidermized birds, including species that currently reside in the sanctuary.

On the adjacent side of the courtyard is a small bunkhouse, used by visiting scientists granted permission by the Bushy Park Trust to stay on site for longer durations. Behind the bunkhouse is the volunteer shed, which includes a kitchenette, used regularly by the volunteers to make mugs of tea, and a small office for Mandy, the sanctuary's manager. This shed is the hub

for volunteers working in the sanctuary. Gathering in the morning to receive instructions from Mandy, we would then spiral out across the forest to undertake our various tasks. Sometimes we would set out alone, but more often, Mandy delegated tasks to groups of two or three. Most volunteers would work together for at least a morning, some staying on to work through to into the late afternoon.

Forest and Bird stamps its mark on the volunteer shed, branded posters lining the walls with information about New Zealand's native flora and fauna. Magazines published monthly by Forest and Bird sit stacked in the corner of the room as surplus, free for any volunteers to take home. The latest Forest and Bird magazine sits on a large wooden table in the center of the room. Sometimes there is a tin of cookies on the table as well, or some fruit brought in to share from a volunteer's home garden. This is where the work register stays. Volunteers sign in and out recording the hours they worked and the tasks they completed.

As a simple but practical space for the volunteers to gather, its modesty reflects the particular kind of work they perform—mostly going unnoticed by the many visitors to Bushy Park. In this shed, I was part of countless conversations amongst the volunteers as we sat around the table eating sandwiches and drinking instant coffee after a morning of work in the forest. If spaces like this are recognized as nuclei of nature conservation work, then we might recognize nature's voice as sounding a bit like the conversations of volunteers, taking a lunch break, the faint whiff of stale peanut butter still on their fingers—not from their sandwiches but from handling the dozens of mouse traps recently placed or checked throughout the sanctuary earlier that morning.

Nature's gift

To bring into greater focus the efforts of volunteers working in Bushy Park, I return to Forest and Bird's voice-giving slogan as a starting point to discuss the unique quality of this work: Te reo o te taiao | giving nature a voice. The "giving" in the second half of this slogan suggests at least two forms of generosity: one is the public's giving of money. Donations fund much of Forest and Bird's business activities, which include lobbying the New Zealand Government. The idea of an NGO giving voice to the voiceless is so familiar it borders on the cliche. And nature, as a helpless victim, forever being harmed by the forces of unbridled economic development, is the voiceless entity in this equation. However, Forest and Bird's unique take on this trope hinges on a second reference to nature's voice: the sounds of New Zealand's endemic birds. If birds like the hihi, tīeke, toutouwai, or tūī that I frequently encountered in Bushy Park are considered a part of nature's voice—as such birds have been since at least the arrival of the first settler Europeans to New Zealand (recall Joseph Bank's diary entry)—then Forest and Bird can *literally* help give nature its voice by acting to protect the lives and habitats of these native New Zealand birds so they may continue to sing.

However, as I discuss in this chapter, it is not only donations that support the work of Forest and Bird. Groups of volunteers like those working at Bushy Park also play essential roles in the NGO's voice-giving mission. Forest and Bird's army of dedicated and passionate unpaid workers evidence a second form of generosity, which takes shape in their giving of time and labor. As I aim to show in this chapter, giving nature a voice takes work, and for many volunteers at Bushy Park, this work is hard. To safeguard the regeneration of the precarious native ecosystem contained inside Bushy Park's fence, the volunteers are tasked with the demanding job of pest control. The fence keeps out most of the animals that would otherwise

predate freely on the sanctuary's endangered bird population. And the forest's earlier predator population of possums, stoats, and rats was irradicated by the volunteers in the years prior to my duration of field research. However, mice—which compete for food sources with the sanctuary's native bird and insect species—continue to have a presence in the forest and are the target of an ongoing pest-control program carried out by the volunteers. Equally problematic are the weeds or exotic pest plants that seek to overgrow the still recovering native forest flora. During my field research, pest control made up the bulk of the volunteers' workload. Volunteers tended to find killing mice unpleasant, and the weeding work physically taxing. But as long-time volunteer and dedicated rodent killer Peter put it plainly: "if you didn't have pest control, where would you be? Where would the forest be?"

By focusing on this work, I mean to build on some of the social scientific attention already paid to nature conservation. Much of this research focuses on conservation organizations' roles within a global political economy. These organizations stand out as particularly rich sites for critical scholars to examine the ongoing hegemony of neoliberalism.[113] Although the work of conservation volunteers has appeared in some of this research, it is often overshadowed by attention to NGOs as institutions and the outsized influence they play in shaping the direction of contemporary conservation work. Yet, as geographer Jamie Lorimer points out, volunteering makes up a core part of conservation work globally, making it "an important mechanism for Northern economies to fund and deliver national and international biodiversity conservation obligations."[114] Lorimer suggests that the work itself demands greater critical attention in a way that "avoids both the hyperbolic boosterism of its advocates and the

[113] See footnote 20 and 21.
[114] Jamie Lorimer, "International Conservation 'Volunteering' and the Geographies of Global Environmental Citizenship," *Political Geography* 29, no. 6 (August 1, 2010): 311, https://doi.org/10.1016/j.polgeo.2010.06.004.

dogmatic cynicism of its critics."[115] As I hope to demonstrate in this chapter, ethnographic attention to this labor needn't be preoccupied with leveling broad value judgements about nature conservation as a monolithic institution. Instead, I aim to bring into relief the subtle experiences of doing the work itself. Rather than pursuing a direct critique (or pollyannaish celebration) of Forest and Bird's claimed multicultural solution to New Zealand's conservation challenges, I want to vividly articulate the conservation work that constitutes one small part of it. In doing so I hope to tease out a relationship between labor and nature that may help further understandings of conservation in New Zealand more broadly.

My theoretical starting point for examining this work is *the gift* formulated by Marcel Mauss.[116] Whereas Mauss's notion of the gift has received limited attention in ethnomusicological research,[117] within anthropology it continues to provoke lively discussion. One pertinent example is the controversy surrounding the *HAU: Journal of Ethnographic Theory*, named with reference to Mauss's use of the Māori concept of hau in developing his social theory of gift-giving. Criticisms included a letter to the journal's editors, written by a collective of Māori scholars from New Zealand known as Mahi Tahi.[118] They raise several issues regarding the journal's application of hau as a brand, reminding us it was a Māori word and concept before it became synonymous with Mauss's theory of the gift. This challenge was initially brushed off by a journal board overwhelmed by internal politics related to the exploitation of voluntary labor by junior academics (although the journal would later briefly

[115] Lorimer, 312.
[116] Marcel Mauss, *The Gift: Expanded Edition* (HAU Books, 2016).
[117] Jim Sykes, *The Musical Gift: Sonic Generosity in Post-War Sri Lanka* (Oxford University Press, 2018).
[118] Mahi Tahi, "An Open Letter to the HAU Journal's Board of Trustees," Association of Social Anthropologists of Aotearoa New Zealand, June 18, 2018, https://www.asaanz.org/blog/2018/6/18/an-open-letter-to-the-hau-journals-board-of-trustees.

acknowledge the issues raised by Mahi Tahi).[119] Fortunately, the letter provoked a wider discussion within anthropology about the abstracted use of Indigenous concepts by non-Indigenous scholars.[120]

One of the letter's authors, education scholar Georgina Stewart, has written elsewhere about Mauss's treatment of hau, focusing on his reading of the ethnographic source detailing an exchange of letters between anthropologist Elsdon Best and his Māori interlocutor Tamati Ranapiri.[121] Stewart notes that following Mauss's popularization of hau, its meaning within a Māori world view (which was comprehensively articulated by Ranapiri in his letters to Best) was pared away in later anthropology. She observes that most of these academic discussions overlook the everyday meaning of hau as wind or breath. This everyday meaning has significant bearing on its more abstracted, spiritual meaning. As Stewart puts it:

> [W]e only sense air when it moves. Likewise, the esoteric meaning of hau is the detectable movement of spiritual force, carried by the acts, intentions and associated objects, of those with whom we interact. Hence, the thing someone gives us, in return for a valuable we were given in the first place, carries the spiritual force or memory of those relationships, and is referred to metaphorically as the hau taonga.[122]

In highlighting this important relationship between hau as wind, breath, and spiritual force, Stewart charters a path for future directions in anthropological discussions of hau—as a rich relational model tied to a Māori world view.

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[119] Hau Journal of Ethnographic Theory Board of Trustees, "Answer to the Māori Scholars - Mahi Tahi.," accessed January 2, 2025, https://www.haujournal.org/index.php/hau/announcement/view/20.
[120] Paige West, "From Reciprocity to Relationality: Anthropological Possibilities," Society for Cultural Anthropology, September 26, 2018, https://culanth.org/fieldsights/series/from-reciprocity-to-relationality-anthropological-possibilities; Raminder Kaur and Victoria Louisa Klinkert, "Decolonizing Ethnographies," *HAU: Journal of Ethnographic Theory* 11, no. 1 (March 2021): 246–55, https://doi.org/10.1086/713966.
[121] Georgina Stewart, "The 'Hau' of Research: Mauss Meets Kaupapa Māori," *Journal of World Philosophies* 2, no. 1 (June 28, 2017), https://scholarworks.iu.edu/iupjournals/index.php/jwp/article/view/917.
[122] Stewart, 6-7.

In the present chapter, as I build on certain strands of past theoretical responses to Mauss's formulation of the gift, I keep Stewart's reorientation of hau close to mind—back to wind and breath, which undergird the spiritual qualities of the word. For me to use a Māori word and concept in an ethnography that focuses on the activities of settler subjects (and to use this word writing as a settler researcher), may raise red flags regarding the ongoing appropriation of Indigenous knowledge by non-Indigenous scholars. At the same time, to engage in broader theoretical analyses of a theme like the gift whose origins are so intimately tied to Māori contributions to social theory while excluding this word and concept (and along with it, a Māori worldview that has been thoroughly articulated by Māori scholars in their own academic writing and research), would surely mirror the very problem that Mahi Tahi pinpointed.

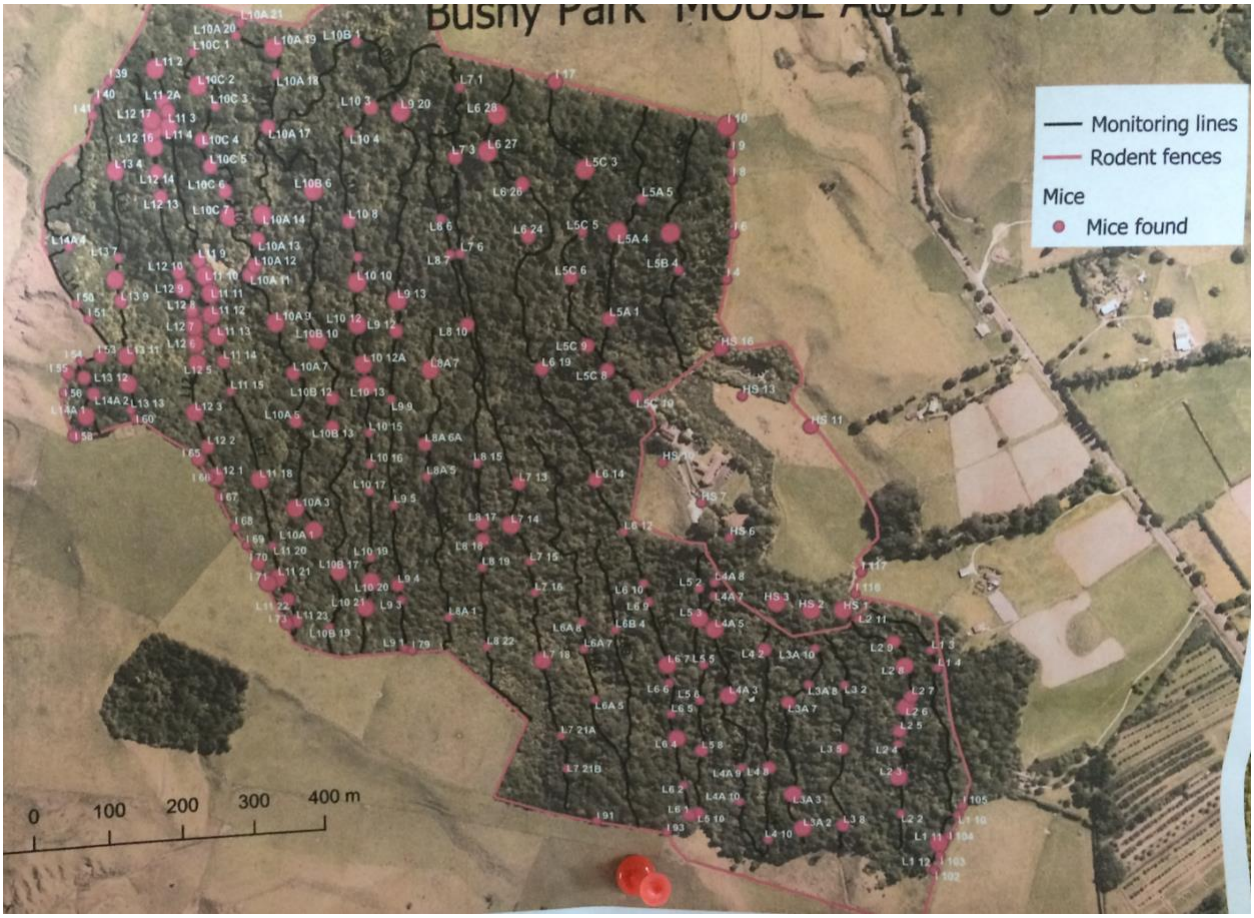
Throughout the present chapter, I focus my discussion by drawing carefully on a selection of Māori scholarship so as to show how the reciprocity expressed in various Māori articulations of hau compares with the exchange of give and take involved in Bushy Park's conservation work. And further, this Māori scholarship helps me position this conservation work within a historical context that is often obscured in mainstream narratives of New Zealand nature conservation.

Killing animals

During a quarterly rodent audit of Bushy Park, a larger than normal group of volunteers would spend a day inserting ink-coated cards and peanut butter lures into hundreds of plastic tunnels which are then methodically stationed throughout the sanctuary. The cards are left overnight to detect any rodent activity and then retrieved the next day. Animals, usually mice,

attracted to the peanut butter will walk through the tunnel across the fresh ink leaving their tracks on the remaining blank card. Based on the total presence of mice captured on the cards, Mandy can calculate a rate of rodent presence in the sanctuary. This is an essential way for Mandy to measure the success or failure of the various pest-control regimes rolled out by the volunteers. In 2020 I participated in all four of Bushy Park's rodent audits. It was a task I came to look forward to. Unlike most of my usual weekly tasks like weeding or public-track maintenance which took place close to the volunteer shed, the audits afforded me the opportunity to explore parts of the

sanctuary farther afield.



The northwestern sections of lines 10, 11, and 12 were some of the most rugged in the sanctuary. While they were clearly blazed with the ubiquitous florescent pink tape strung throughout the forest, these tracks were steeper and often overgrown. Compared to the flat or gently undulating terrain of most of the sanctuary, the northwestern corner dropped steadily down into a deep gully before sloping back up to the northern boundary fence. By the third audit in late October of 2020, I was familiar enough with these northwestern trapping lines to work alone laying out and collecting the tracking cards. With a walky-talky I would always be within radioing distance of at least one other volunteer.

On the second day of the third audit, I was given the task of collecting cards from sections of lines 11 and 12. Martin, one of the other regular volunteers was to collect the nearby

cards on lines 9 and 10. Although I had suspected Mandy would give these lines to both of us, it wasn't until she had already sent the rest of the other volunteers off to collect cards from the first nine lines, leaving only me and Martin standing outside the volunteer shed that I knew for sure we'd each be heading out to the far corner of the forest to spend the next couple of hours clambering up and down the steepest of the sanctuary's trapping lines. Mandy looked at us both with a sheepish smile, knowing that although we'd each be up to the challenge, it was going to be tiring work. Laughing, Mandy said "sorry guys but are you willing to share lines 9 through 12? I know it's a slog but you're the only ones here today familiar enough with that corner of the forest". Martin smiled. "I suppose so, I'm really getting too old for this though!" Mandy chuckled. "If you're not back by lunchtime we'll send out a rescue party!"

It took me and Martin about twenty minutes to walk out to our designated trapping lines. While the access tracks were flat enough, there were still many tripping hazards: tree roots, supplejack (a common rainforest vine native to New Zealand), and muddy sections of the track. I was impressed by his physical strength and endurance for a man in his seventies and felt like I couldn't slack off or seem to be enjoying myself too much when working with him.

Martin told me he "wasn't a tree hugger", but he loved being in the forest, or as he often said, he "just likes being out in the fresh air". He was also an extremely hard worker. Almost aways the last volunteer to finish work at the sanctuary for the day, he was quick to raise his hand for anything involving a shovel, and I don't recall him ever missing a day of volunteering while I was there. Martin was born in England and migrated to New Zealand in the 1990s to work as a civil engineer building roads in the rugged northern reaches of the North Island. Now retired but not having lost the passion for his earlier vocation, he often took the lead with any significant maintenance work in the sanctuary. During 2020 the volunteers were responsible for

repairing several leaking drains around the Bushy Park homestead. These kinds of tasks combined problem-solving and logic with onerous physical labor and grit: identifying the source of the leak involved digging up yards of 100-year-old clay pipes, nearly two feet underground, and during the wetter conditions of winter, this kind of work could be muddy, slippery, and frustrating. Yet while it was the more physically demanding tasks that Martin seemed to prefer over the somewhat more relaxed forest-based nest checks or bird-feeder replenishment, when the choice was between spending the day potting seedlings in the nursery or crisscrossing miles of trapping lines throughout the sanctuary checking mouse traps or laying bait, Martin would pick the latter. However, this work involved navigating rugged terrain, and although I rarely noticed Martin having to stop to catch his breath, once I began working with him, I quickly came to expect a flow of frustrated curses as he tripped, slipped, and stumbled his way up along the trapping lines.

Although I never saw Martin seriously injure himself in the forest, the uneven tracks were a constant frustration during his work as a volunteer. A few months earlier, while checking traps together on some less treacherous terrain, I first noticed that Martin sometimes struggled to maintain his footing on steep sections of the track. I laughed when he said, "if I was twenty years younger, I'd be hopping down these tracks like a gazelle!" He was one of the strongest and fittest volunteers at Bushy Park, but not the steadiest on his feet when navigating rough terrain. The cursing would sometimes lead to a brutal swipe at the offending vine or tree root if he happened to have a stick in hand. It was a crotchetiness I found endearing, though. Behind the grumbling, I recognized a deep care for the place he volunteered to help look after.

I share this account of Martin's "love-hate" relationship with the forest to preface my discussion of pest control to highlight the curious mix of pleasure and frustration that many

volunteers seemed to feel throughout the course of a day working in the forest. Studies of conservation volunteering tend towards an articulation of the positive emotions experienced by volunteers, the "pollyannaish" sentiment noted by Lorimer spread across much of this research. Throughout my time working at Bushy Park, although it was clear all the volunteers took great joy from the work, there were many aspects of volunteering that proved challenging, even unpleasant. How volunteers persevered with the work in the face of these numerous challenges is one of the main issues I articulate in the present chapter.

Later that week I was back on the northern boundary, this time doing some fence maintenance with Martin, Lincoln, Tasmin, and Mandy. We had just lugged out a dozen 10-foot-long planks of wood which we were to fit along the base of the fence where birds had been enjoying dust baths to the detriment of the fence's impenetrability. Arriving hot and bothered, we were surprised to encounter a family of ducks and ducklings hanging around the fenceline inside the sanctuary. We soon discovered why they hadn't scuttled off as soon as they'd heard us coming: one of the ducklings was stuck in a DOC 200 trap. It had not quite made it into the chamber with the trap-mechanism so was still alive but nonetheless in distress, squeaking continuously while its family responded, peeping in chorus. It was a strangely unsettling situation. We did not know quite what to focus on, at once trying to deal with the unwieldy planks while being distracted by the cheeping bird stuck in the trap, a few steps away from being flattened into a pancake of duckling guts and feathers.

Miraculously the duckling navigated its way back out the narrow entrance of the trap to rejoin its family. We all breathed sighs of relief and paused to sip on our water bottles. Tasmin, a recent high school graduate and one of Bushy Park's youngest volunteers, seemed especially concerned about the duckling. As we got back to work securing the planks to the base of the

fence, Tasmin and I talked about the often-grim work of pest control in Bushy Park. He described recently coming across a live mouse in a trap, which had somehow managed to avoid getting its head obliterated by the hammer and instead trap its foot. Tasmin, ever the logical thinker, retrieved a nearby mouse trap, setting it off on the mouse's head. While this was one of the stranger examples of the kinds of challenges volunteers faced when undertaking pest control, the dilemma Tasmin faced was similar to other disquieting situations volunteers found themselves in while checking mouse traps—a far more gruesome task than the quarterly rodent audits. Dealing directly with mice killed in traps regularly provoked ethical questions related to conservation work in New Zealand: which animals deserve to die? Which animals deserve to be saved? And what degree of collateral is acceptable, when numerous animals are inadvertently caught in the middle of this violent conservation regime?

On my first day checking mouse traps I worked with Julie. She was very welcoming and a pleasure to work with, being both humble and funny. She shared with me her love of movies and how much she enjoyed spending time in New Zealand forests (also being a member in the local hiking club). Julie was one of the fitter volunteers amongst the group. Along with Martin and several others, she would often be assigned the longer routes by Mandy for a morning checking and resetting traps. These hours spent roaming the forest offered a perfect opportunity to talk with the volunteers and get to know them. Conversations that began in the forest often became the starting point for later conversations during formal interviews with the same volunteers. I didn't interview Julie, but we often continued our forest chats around the table over lunch, and sometimes into the afternoon, where we might do lighter work repotting seedlings in the sanctuary's small nursery or preparing monitoring-cards for an upcoming rodent audit.

During our checks that first day, Julie and I found six dead mice. Once we had extracted the carcass from the trap and collected it in a bag, we would reset the trap. This included smearing peanut butter onto the trigger, which proved an effective lure. After a few false starts, and some sore fingers, setting the traps was relatively straightforward. Compared to the powerful DOC 200s used primarily to kill stoats, or the large ratchet traps to kill rats, the tiny traps used to kill mice seemed harmless enough. However, they could still leave the user with a sore finger if accidently triggered. And they were deadly to mice when triggered directly on the head, neck, or chest.

Returning to the volunteer shed with the dead mice in a plastic bag, we emptied them into the foliage beneath some nearby shrubby trees, covering them in loose soil. The mice were in varying degrees of decomposition. During my first few days checking mouse traps, the smell of peanut butter mixed with dead mouse seemed to get stuck in my nostrils. I had been looking forward to a cup of tea but was not as interested in the cookies.

Louise returned from the forest soon after me and Julie. We compared our takes. Louise had a dozen. Grimacing, she told us of having discovered one trap that had somehow managed to kill two mice at once—she called them "the twins". Mandy, sitting nearby enjoying a cup of tea, overheard this comment and giggled, teasing Louise that she would need therapy after her trap-checks. Peter, seated next to Mandy, also chuckled heartily. He told us how he would drown mice whenever he caught them live at home— "little devils!" he called them. Sue, sitting across from us, seemed a bit taken aback. Seated next to Sue was her husband Stu, who then told us a story about how he used to catch mice in his previous job as a baker (they would burrow into bags of flour and make nests). He recalled drowning them as well. I was not sure whether Peter and Stu considered drowning mice a more humane way to kill them than the brute force of a

mouse trap, or whether they believed these creatures somehow deserved to suffer a terrifying watery death.

There was no expectation that the volunteers would completely eradicate the sanctuary's resident mice. Not only was it an impossible task to achieve practically, but there were also some ecological advantages to having a small population of mice, the main one being that it provided a reliable source of food for the sanctuary's birds of prey. Mandy said that with no mice, the hawks and falcons would target small birds like hihi, a species already struggling to maintain their numbers in the sanctuary. There was also the issue of mice entering the sanctuary hidden in vehicles. When I asked Peter about his view on Bushy Park's mouse control regime, he was quick to raise the issue of visitors inadvertently bringing mice in with them. He believed any increases in mouse population was driven by mice entering from outside the sanctuary: "What has definitely happened for mice to have come in is they're jumping ship from camper vans, caravans, tradesmen, that they stow away. That's why all of a sudden, we've got this mice problem in the forest." Here Peter was referring to a recent rodent audit that suggested a significant jump in Bushy Park's mouse population. Although Peter could tolerate a small number of mice in the sanctuary, the issue was about ensuring continuity of pest control, an equilibrium. The mice would forever struggle to survive within the sanctuary, having their population continually knocked back, while being steadily drip-fed by stow-away mice.

Trapping was, however, not always a sufficient means to managing this equilibrium. After one particular rodent audit, it was clear the latest round of trapping was not keeping the numbers low enough. At this point we turned to poison. Brodifacoum was the toxin of choice. Acting as a blood thinner, the animal consuming the poison slowly dies from internal bleeding. The brute force of the mouse traps seemed humane compared to the suffering inflicted by poison

on the sanctuary's mouse population. There was also the risk of secondary poisoning, particularly for those birds of prey that feed on mice in the sanctuary. During my field research, one of the volunteers found a sick hawk in the forest. When he reported it to Mandy, she suggested it may have been affected by the recent brodifacoum roll out. With poison's increased effectiveness at killing mice came a greater risk of collateral damage.

Poisoning pest-animals to manage New Zealand's conservation estate has become a controversial issue in recent years. The Government's widespread use of sodium fluoroacetate (known more commonly as "1080"), while highly effective at controlling the billions of pest animals that occupy state-owned forests, has also provoked backlash from animal-rights activists and recreational/partial-subsistence hunters.[123] Despite numerous public-awareness campaigns led by the Government and environmental groups (including Forest and Bird) seeking to quell fears and quash conspiracy theories about 1080, opposition to its use remains strong in pockets of New Zealand society.[124] Driving around rural areas on the East Coast of the North Island where recreational hunting is popular, it's common to see pick-up trucks with bumper stickers reading BAN 1080 (or sometimes more pointedly: FUCK 1080). Numerous academic papers written by New Zealand authors have been published seeking to improve scientific understandings of the chemical's use and effectiveness, it's impact on non-target animals (especially native birds) as well as the New Zealand public's perception of it.[125] However,

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[123] W Green and M Rohan, "Opposition to Aerial 1080 Poisoning for Control of Invasive Mammals in New Zealand: Risk Perceptions and Agency Responses," *Journal of the Royal Society of New Zealand* 42, no. 3 (September 1, 2012): 185–213.
[124] Geoffrey N. Kerr, Kenneth FD Hughey, and Ross Cullen, "Public Perceptions of 1080 Poison Use in New Zealand" (Research Square, January 23, 2023), https://doi.org/10.21203/rs.3.rs-2456974/v1.
[125] Sean A. Weaver, "Chronic Toxicity of 1080 and Its Implications for Conservation Management: A New Zealand Case Study," *Journal of Agricultural and Environmental Ethics* 19, no. 4 (August 1, 2006): 367–89, https://doi.org/10.1007/s10806-006-9001-1; Charles Eason et al., "An Updated Review of the Toxicology and Ecotoxicology of Sodium Fluoroacetate (1080) in Relation to Its Use as a Pest Control Tool in New Zealand," *New*

careful attention to the social and cultural factors that are at play remain sparse in the literature.[126]

To my initial surprise, the topic of 1080 rarely came up in my conversations with volunteers. Whenever it did, however, I would usually be given a brief but passionate defense with reference to the usual argument that without it New Zealand would not be sufficiently equipped to stay on top of the pest-animal species. Advocates for the use of 1080, whether Government agencies, NGOs, scientists, or conservationists, while not denying that its widespread use causes collateral damage, make the point again and again that 1080 remains the only scalable option to manage New Zealand's pest-animal population. Regardless of scale—whether a small conservation site like Bushy Park, or the national conservation estate—the threat of a spike in introduced species that predate on New Zealand's native birds seems enough to provoke a turn to poison and a turning away from the suffering it causes.

Prior to my field research, I had next to no immediate experience with the killing of animals. I grew up on a small farm outside of Whanganui and was exposed to a degree of violence I presume fairly common to rural New Zealand life. I would accompany my dad shooting possums in our apple orchard and go out duck shooting with the neighbors during the hunting season. Our family kept chickens which my dad would occasionally butcher. We also raised larger animals for the freezer, including sheep, cattle, and pigs. Usually, we had these animals slaughtered in one of our own paddocks by a "home-kill" professional. On one occasion

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Zealand Journal of Ecology 35, no. 1 (2011): 1–20; Clare J. Veltman and Ian M. Westbrooke, "Forest Bird Mortality and Baiting Practices in New Zealand Aerial 1080 Operations from 1986 to 2009," *New Zealand Journal of Ecology* 35, no. 1 (2011): 21–29; CT Eason, J Ross, and A Miller, "Secondary Poisoning Risks from 1080-Poisoned Carcasses and Risk of Trophic Transfer—a Review," *New Zealand Journal of Zoology* 40, no. 3 (September 1, 2013): 217–25.

[126] Tame Malcolm, "Is Poisoning Pests the Māori Way?," The Spinoff, March 14, 2022, https://thespinoff.co.nz/atea/14-03-2022/is-poisoning-pests-the-maori-way.

my dad chose to take two of our pigs to the abattoir in Whanganui for slaughter. He only did this once. I recall talking to him about it years later. He described being shocked by our two pigs' reactions on arrival at the abattoir, a place brimming with other animals recently delivered for slaughter and processing: as they were loaded out of his small trailer into the mucky slaughterhouse pens, his pigs started to foam at the mouth and squeal like he'd never heard before. These memories now seem to resonate differently after my time spent working at Bushy Park. While inside the sanctuary, I felt that somehow the natural beauty of the forest shielded me from the horror of the pest-control required to help support it. My mandate to kill mice was warranted by the evidence of earlier pest-animal control programs' success, clearly on display in Bushy Park's flourishing ecosystem. Since then, however, my recollection of that violence seems to have merged with my other memories, fears and fantasies of animal suffering.

Ethnographic researchers have addressed some of the challenges of participating in field research activities that involve violence of various kinds. Jana Krause has highlighted how ethnographers may need to adopt limited or "uneven" forms of participation during field research, and examining the ethical choices made in setting these boundaries can be part of the ethnographic process.[127] Such reflection is rare amongst ethnographers who engage in or witness forms of animal suffering, despite the widely-shared experiences of ethnographers from Western societies participating in field research amongst communities who hold contrasting ethical norms regarding animal welfare.[128] The kind of violence against animals I witnessed and participated in as a conservation volunteer, while normalized by the people around me—both inside and outside

[127] Jana Krause, "The Ethics of Ethnographic Methods in Conflict Zones," *Journal of Peace Research* 58, no. 3 (2021): 329–41.
[128] María Elena García, "Death of a Guinea Pig: Grief and the Limits of Multispecies Ethnography in Peru," *Environmental Humanities* 11, no. 2 (November 1, 2019): 351–72, https://doi.org/10.1215/22011919-7754512.

the sanctuary (in New Zealand society more broadly)—presented challenging questions for me as an ethnographer. During my time working at Bushy Park, I tried to approach the task of animal pest control with a sense of cool pragmaticism. This was not only a necessary part of the sanctuary's conservation efforts to support the flourishing of its endangered bird population, but also a core part of the work, which I'd chosen to participate in as an ethnographer. I was not only participating in the violence, but in the ethical dilemma that many other volunteers wrestled with. Inside the sanctuary, I "held it together," and was able to push aside the deeper feelings of disgust and guilt that were provoked by the pest-animal control. It seemed that these feelings were somehow *contained* by the sanctuary. Outside it, they found occasion to reemerge, albeit in mutated forms.

It was near the height of summer and the final few weeks of my time dedicated to field research. I recall driving home after a sweaty day working in the sanctuary, passing through a large herd of sheep. In rural New Zealand, it is quite common to find farmers driving stock along sections of public road to access nearby farmland. Growing up, I had often encountered sheep and cattle while driving on rural back roads, paying little attention. On this afternoon, I had the air-con blasting as I merged into the throng of panting animals. The farmer on his motorbike at the back of the herd whistled his dogs to direct the sheep to one side of the road so I could carefully pass. I peered out the window at the dozens of bleating sheep, running beside me, noticing some of the animals were bleeding, one of them appearing badly injured with what looked like a large gash on its neck.

Continuing on home I found myself fighting back tears as I replayed over and over in my head the suffering I had just seen. I thought of the bleeding sheep, an injured animal stumbling along a hot tar-sealed road, terrified by the noisy motorbike and barking dogs behind it. At the

time it seemed impossible to reconcile the situation I found myself in. The concentration of unsettled feelings that had distilled in me across the preceding months had found an object to leap upon. Whereas in the forest, I could turn away from the violence of killing mice and rest my attention on the natural beauty around me, when driving through a mob of panicked sheep, I was submerged in suffering. Nor were there any endangered birds within ear shot to sing me a soothing tune.

Humans' violence towards animals is part of our collective story as a species, as is our varied intellectual and emotional responses to it.[129] As it manifests in a settler-colonial context, this violence is tethered to broader ethics of animal exploitation and killing.[130] Today environmentalists and animal rights activists in New Zealand share common ground in their criticisms of mainstream animal agricultural practices.[131] Sometimes they frame their critiques with decolonial rhetoric.[132] As I suggested above, however, this partnership can find itself on shaky ground when it comes to the management of pest-species animals for conservation purposes. Some of the volunteers I worked with did not eat animal products yet tolerated participating in the violent acts required of conservation work. If we were to realize Forest and Bird's mission of giving voice to nature, then we must be willing to give something up.

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[129] Richard W. Bulliet, *Hunters, Herders, and Hamburgers: The Past and Future of Human-Animal Relationships* (Columbia University Press, 2005); Graham Huggan and Helen Tiffin, *Postcolonial Ecocriticism: Literature, Animals, Environment*, 2nd ed. (London: Routledge, 2015), https://doi.org/10.4324/9781315768342; Anthony J. Nocella, ed., *Defining Critical Animal Studies: An Intersectional Social Justice Approach for Liberation* (New York: Peter Lang, 2014).
[130] Kelly Montford, "Agricultural Power: Politicized Ontologies of Food, Life, and Law in Settler Colonial Spaces" (University of Alberta, 2017), https://doi.org/10.7939/R37D2QP4H.
[131] "Intensive Winter Grazing in New Zealand Is a Welfare and Environmental Disaster," PETA Australia, accessed January 2, 2025, https://www.peta.org.au/campaigns/food/intensive-winter-grazing-nz/.
[132] "Heartache and Hope: A Tour of South Island Dairy Farming," Greenpeace Aotearoa, December 18, 2024, https://www.greenpeace.org/aotearoa/story/heartache-hope-south-island-dairy-tour/.

This may be an example of what anthropologist Annette Weiner describes as the principle of "keeping-while-giving" common to the gifting practices she studied.[133] The Bushy Park volunteers give their labor to keep something of what is left following the widescale environmental degradation of colonialism and the large-scale forms of agriculture that took shape in its wake. In giving their time and effort, and with it accepting the often-unpleasant duty of killing small rodents, they are able to keep the forest and its avian population alive and well.

Giving one's labor without financial reward etches out possibilities for many forms of joy, which I articulate in more detail in the chapters to come. But it can also give rise to unique forms of suffering. For all the satisfaction that working at Bushy Park brings many of the volunteers, it comes with struggles that may sometimes feel uncontainable. Weiner, in her analyses posits that this form of giving is tinged with tragedy. Citing anthropologist Ernest Becker, Weiner writes:

> the very fear of death haunts us from birth, motivating us towards acts of heroism that give us 'a feeling of primary value, of cosmic specialness, of ultimate usefulness to creation, of unshakable meaning.'…The motivation for keeping-while-giving is grounded in such dynamics—the need to secure permanence in a serial world that is always subject to loss and decay. Enormous energy and intensity are expended in efforts to transmute or transcend the effects of deterioration and degeneration and/or to foster the conditions of growth and regeneration. Therefore, attention to regenerating or recreating the past is neither random or inconsequential.[134]

By participating in the violent regime of pest-species management, while being confronted with death any given day in the forest, the volunteers are also participating in a project of renewal. Yet if this renewal is not just ecological, but also cultural, what kind of past are they seeking to recreate? What kind of voice does nature speak in?

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[133] Annette B. Weiner, *Inalienable Possessions: The Paradox of Keeping-While Giving* (University of California Press, 1992).
[134] Weiner, 7.

Killing plants

At the beginning of a day's work dedicated to weed control, Mandy would assign a particular tool to each volunteer depending on the kind of weed they were responsible for removing. Sometimes gloves would suffice—a cheap pair could be bought from the local hardware store for $5. The gloves would protect fingers and palms from most prickles, but dirt could still accrue under fingernails if enough work was done. The rubber fingers and palms were water resistant, but no matter how new or well fitting, dust, mud, and soil would still find its way into the gloves. Importantly, though, by using gloves volunteers could pull weeds faster, and for longer periods, until their backs got tired, or they got fed up with pulling a full patch of weeds only to walk a short distance in the forest to find another patch twice as big as the last.

One of the first weedy plants I had to deal with were the hydrangeas along the driveway. When only saplings, they could easily be pulled by hand, although a few saplings were still stubborn. Often a set of loppers would be needed. I would chop the plant as close to the ground as possible, and then dab the exposed root with a globular green herbicide. The gloves helped here too, keeping the chemicals off my hands, but Mandy still asked that we wash our hands after working with it. Unlike the karaka saplings, hydrangea bushes would sprawl in the most unexpected ways. They seemed to fight back whenever I tried to pull, prune, or poison them. I'd trip and stumble. Within the first few days of weeding hydrangea, I wrecked my favorite pair of Italian-made hiking boots, the soles being pulled straight off near the end of an especially vicious fight with a giant hydrangea bush.

The more I pulled, cut, and poisoned weeds the more it seemed the weeds were actively resisting me; the large viny weeds would seem to twist around me the more I fought with them. Sometimes I would trip over a weed while continuing to pull it from the ground, getting caught

in one set of vines while simultaneously pulling or hacking at another. It became apparent that weeds were not linear but tangled. They don't have a clear geometric sense of direction (up-down/left-right) but a chaotic sense of movement, almost as if they defy gravity. I started thinking about how plants can resist their own destruction, it just happens in a different scale of time. I also started to think how birds move within the forest in similar nonlinear ways. Perhaps trees and birds move in similar nonlinear directions, it is just that we have become accustomed to thinking of trees as growing in one direction, possibly a reflection of the way we think about trees as resources rather than for what they are in their essence.

On numerous occasions, hands and hand-tools were insufficient for managing Bushy Park's weedy species. On my first day volunteering at Bushy Park, I worked with Dave and Tasman pruning low-hanging branches along the driveway leading to the double-gated entrance. We used a pole-saw: a small chainsaw head that can be operated several meters above the user at the end of a telescopic pole. Dave was very particular about safe operation of the pole-saw. Because I had no experience using it, he demonstrated its use before offering me the chance to try it. The task was to remove those branches that would interfere with larger vehicles, especially buses, which brought school children into the sanctuary for educational trips regularly throughout the year. Dave said drivers would get agitated if any branches scraped the top of their vehicles. Most of the trees we pruned were large native shrubs that had grown up beneath the giant oaks and yews planted in the early 1900s when the homestead was being built. It was the native trees supported in their growth by the exotic canopy that had become an obstacle to the important service of environmental education. With helmet and earmuffs on, I trimmed the overhanging foliage, avoiding the falling twigs, leaves, and small branches. Tasman and Dave tidied up behind me with rakes and leaf blowers, clearing the drive, returning it to its neat,

manicured order. If any vehicle approached as I was squinting above me with the pole-saw Tasman called out “Car”, and I’d lower the machine and move to the side. Dave gave a friendly wave to the drivers that passed, likely visitors to the sanctuary. The machine was relatively light, but after using it for fifteen minutes my arms and back started to ache.

A few months later I used the pole-saw again, this time pruning the forest edge along the fenceline near the homestead. I worked with Mandy, Esther Williams, and Allison (a returning volunteer from England). Mandy demonstrated where and how to prune the forest edge using the pole saw, and then turned the machine over to me. Even though the trees I was required to prune were mostly shrubby rather than established, I still had to be careful not to let any of the larger limbs fall on the fence. Once I’d been through a section of the forest edge and my arms were starting to feel weak, I’d put the pole-saw down and retrace my steps, kicking the trimmed foliage to the side, under the shrubs and down the bank.

I found the pole-saw easy enough to use when cutting into small single branches, like I’d done mostly while pruning along the driveway a few months earlier. Pruning the forest edge involved more “grooming”, shaving back smaller twigs and leaves, while avoiding getting the pole-saw tangled in patches of creeping muehlenbeckia vines that had intwined their way into the shrubs. At first when I glanced at the foliage overhead, I barely noticed these vines. To my untrained eyes the creeper’s leaves were of much the same color and size as the shrubs. When I’d get to an especially thick patch of creeper, the pole-saw was little match for the densely twisted lashings. Some patches of muehlenbeckia were so dense they risked pulling down the larger branches, which when overhanging the forest edge risked falling and damaging the fence. In such cases, the plants we wanted to thrive were often so densely entangled with those

suppressing them that mechanical tools were too brutal and indiscriminatory for the job. Instead, we would have to pull on our gloves and proceed with the work by hand.

In other cases also, our hands were the most efficient means for managing the weed plants. This work was not always delicate. Weeding karaka shoots by hand was one of the more physically demanding weeding tasks. Karaka shoots, unlike hydrangeas and the sanctuary's various other viny weeds, reached straight up towards the canopy. Six-foot high saplings would put up a fight when pulled by hand. My rubber gloves helped grip the thin but strong trunk, pulling with my legs and back, I'd sometimes fall back as they came loose from the firm soil. The roots would shower dark soil across the forest floor. I'd discard the sapling next to where it once stood, still as dark green as ever. I would then move on to the nearest standing karaka sapling and repeat the process. The larger karaka, those that formed part of the forest canopy, were more spread out, their orientation sprawling. To remove these established trees required petrol, oil, and chainsaws. Dave was the most experienced chainsaw operator amongst the volunteers and was proud of his efforts at felling trees within the sanctuary whenever Mandy called on him. Dave had to be careful where the cut karaka trees would fall. One patch I watched him cut down were close to the fence. If they fell in the wrong direction they could easily crash onto the comparatively delicate iron, wire, mesh, and pine-fence poles, ripping a hole in the sanctuary's perimeter.

During my time volunteering, karaka were the only native trees within the sanctuary to meet the exacting brutality of a chainsaw's whining teeth. While only a few decades earlier, foresters were felling thousands of acres of native trees every year for timber; decades before that, any settler who wanted to farm, would have used the much slower technique of felling even

larger native trees by a two-man handsaw and axe.[135] However, most of New Zealand's native forests were removed by the massive fires started by settlers seeking to clear the land to establish pasture.[136] Much of New Zealand's non-urban spaces are now planted in rye grass, a fast-growing energy-dense fodder suitable for large-scale sheep, beef, and dairy farming. Patches of virgin native forest like Bushy Park are an anomaly across this monocultural landscape. Killing plants was the *Modis operandi* of New Zealand's European settlers.[137] Why small pockets of forest were spared the axe, or flame provokes questions about these settlers' occasional affinity for the forests of these South Pacific islands.

As exceptions to the rule of settler land use, these remanent forest stands are now considered "gifts" to future generations. G. F. Moore bequeathed his homestead and forested property to Forest and Bird, giving birth to a new phase of nature conservation, that would be mirrored in the numerous other privately-owned eco-sanctuaries that sprouted across New Zealand through the late twentieth century.[138] In the hands of conservationists, the ecologies of these forests are nurtured back to health. This generally means removing all evidence of exotic species life, providing room for the native species to flourish again.

Although tourism is often treated by conservationists as an economic justification for ongoing management of conservation sites, it is clear that another form of economic exchange is

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[135] Carolyn King, D. John Gaukrodger, and Neville Ritchie, eds., *The Drama of Conservation: The History of Pureora Forest, New Zealand* (Springer International Publishing, 2015), https://link.springer.com/book/10.1007/978-3-319-18410-4.
[136] Robert M. Ewers et al., "Past and Future Trajectories of Forest Loss in New Zealand," *Biological Conservation* 133, no. 3 (December 1, 2006): 312–25, https://doi.org/10.1016/j.biocon.2006.06.018; Brenda R. Baillie and Karen M. Bayne, "The Historical Use of Fire as a Land Management Tool in New Zealand and the Challenges for Its Continued Use," *Landscape Ecology* 34, no. 10 (October 1, 2019): 2229–44, https://doi.org/10.1007/s10980-019-00906-8.
[137] Thomas R. Dunlap, "Remaking the Land: The Acclimatization Movement and Anglo Ideas of Nature," *Journal of World History* 8, no. 2 (1997): 303–19.
[138] John Innes et al., "New Zealand Ecosanctuaries: Types, Attributes and Outcomes," *Journal of the Royal Society of New Zealand* 49, no. 3 (2019): 370–93.

at work in the preservation of places like Bushy Park. Surrounded by swaths of highly valued agricultural land makes its flourishing biodiversity appear all the more valuable—even priceless. The allure of the forest radiates from within the picturesque familiarity of the agricultural countryside—glowing like a precious jewel set on a golden crown. There is something mysterious about the Bushy Park, a sense of time immemorial exuding from its plant life. To step into the forest is to experience something mysterious. It contains secrets that are sensed but not known.

It is perhaps no surprise then that Mauss's notion of hau seemed to resonate with my sense of the forest as bearing gift-like qualities. Many of Mauss's contemporaries took his reference to hau as a mystification of what could otherwise be explained coherently in scientific terms. Bronislaw Malinowski rejected Mauss's view of the gift, and instead understood gift-giving in terms of the economic obligation of the "sanction."[139] Claude Levi-Strauss, who had drawn significant influence from Mauss, would later present a structuralist critique of his notion of gift-giving. Mauss, Levi-Strauss claimed, was employing the concept of hau to construct a whole out of parts. For Lévi-Strauss, our exchange-oriented nature is the product of unconscious mental structures.[140] Following these critiques, scholars continued to engage positively with Mauss's analysis of the gift. These include Annette Weiner who treats gift-giving in terms of "inalienability." As "inalienable possessions" gifts are "imbued with the intrinsic and ineffable identities of their owners."[141] In contrast to commodified objects, inalienable possessions cannot

[139] Yunxiang Yan, "Gifts," *The Open Encyclopedia of Anthropology*, July 7, 2020, https://www.anthroencyclopedia.com/entry/gifts.
[140] Alain Guéry and Katharine Throssell, "The Unbearable Ambiguity of the Gift," *Annales. Histoire, Sciences Sociales* 68, no. 3 (2013): 821–37.
[141] Weiner, 6.

be exchanged fluidly in the marketplace. Rather, the custodian of these objects is responsible for managing their closed circulation with an established social group.

> Ideally, these inalienable possessions are kept by their owners from one generation to the next within the closed context of family, descent group, or dynasty. The loss of such an inalienable possession diminishes the self and by extension, the group to which the person belongs.[142]

Weiner's examples of inalienable possessions include royal crowns, antique furniture, and artworks, with most of her analysis focusing on small hand-made objects. So how might a place like Bushy Park come to be considered an inalienable possession?

As a product in part of the volunteers' labor, in the first instance, the sanctuary may appear as their shared possession—or if not theirs directly, then their "employers'"—Forest and Bird and the Bushy Park Trust. The work performed by the volunteers on behalf of Forest and Bird ensures that the forest will not be sold to a private owner, developed into an exclusive tourist retreat, or cut down to harvest its highly valuable native timber. Encased in a predator-proof fence, the forest is now positioned as a place that exists beyond the reach of the free market. While the forest is legally owned by the Bushy Park Trust, its status as a charitable organization prevents it from generating profit or having shareholders. And in delegating the task of Bushy Park's management to another charitable organization, Forest and Bird, the Trust maintains the status of the sanctuary as a place beyond the reach of business development and economic circulation.

However, within a settler colonial context, particularly one in which many liberal-minded organizations are seeking to fulfil broader multicultural societal progress that includes the participation of the nation's Indigenous peoples, ownership of land becomes a contested issue.

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[142] *Ibid.*

Bushy Park and the conservation work that takes place within it stands as a significant example of the fraught politics of land-use and landownership in contemporary New Zealand life. Bundled into the history of land confiscation and sale that defined the colonial take-over of the Taranaki region during the 1860s, there is already a shadow that hangs over Bushy Park regarding rightful ownership.[143] Although there are no legal challenges in the courts regarding the sanctuary's ownership, and Nga Rauru Kitahi have since settled their treaty claims made against the Government, this history remains relevant, continuing to inform decisions made by the Bushy Park Board. Their efforts to build stronger working relationships with Nga Rauru and the local hapū (smaller sub-tribal collectives) reflect a broader approach within many nature conservation project around New Zealand that seek to consult with and work alongside local Māori.[144] As I discuss later in Chapter 4, this approach, while offering some benefits also has limitations.

Focusing on ownership can constrain discussions of reciprocity to models of economic exchange more particular to a modern Western notion of relationships to land, place, and history. Here I turn to Māori scholar Amber Nicholson's discussion of hau, where she moves beyond the discussions of hau as a principle for understanding economic transactions.[145] Fundamental to her critique is an understanding of hau as a word and concept that has value in and of itself, rather than just another analytical term. Within a Māori world view, "both the life force of hau and its associated knowledge are *taonga* [treasures]" that should be understood first within its

[143] Vincent O'Malley, *The New Zealand Wars | Ngā Pakanga o Aotearoa* (Bridget Williams Books, 2019).
[144] Huhana Smith, "Collaborative Strategies for Re-Enhancing Hapū Connections to Lands and Making Changes with Our Climate," *The Contemporary Pacific* 32, no. 1 (2020): 21–46.
[145] Amber Nicholson, "Hau: Giving Voices to the Ancestors," *The Journal of the Polynesian Society* 128, no. 2 (2019): 137–62.

connection to related narratives, as one part of a much larger cosmological whole.[146] Recognizing hau as a Māori taonga means treating it as part of a much larger network of conceptual and material connections. To take it out of this network and apply it in an isolated analytic setting is to significantly diminish its explanatory power. As Nicholson puts it more clearly: "when taonga become separated from their people or lands, they become decontextualized and alienated from the rich *kōrero* [narrative]."[147] Separation from place is also separation from narrative.

The silencing of these stories is endemic to colonial violence. Therefore, part of any decolonial project is the revitalization of narrative and the reconnection of story to place. As Davis and Todd put it, this task involves

> tend[ing] to the ruptures and cleavages between land and flesh, story and law, human and more-than-human. Rather than positioning the salvation of Man—the liberation of humanity from the horrors of the Anthropocene—in the technics and technologies of the noosphere, we may tend once again to relations, to kin, to life, longing, and care.[148]

For hau to be revived as a living concept, it must be reconnected to the places from which it emerged. As a Māori taonga, hau lives in the forest, expressing this vitality and being known through it. This I see as one of the great challenges set forward by Mahi Tahi: to make sense of this particular form of gift, not only within the historical and cultural worldview of Māori, but also within an ecological context. Beyond the technics of conservation management commonly practiced in New Zealand lies a yet to be realized form of ecological recovery that recognizes

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[146] Nicolson, 137.
[147] *Ibid.*, 138.
[148] 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 (December 20, 2017): 775, https://doi.org/10.14288/acme.v16i4.1539.

place, people, and narrative. Bushy Park holds the seeds of this recovery, as gifts sitting dormant, waiting to be exchanged.

Restoration

One wintery morning in June I arrived at the sanctuary a few minutes late to find Mandy and several other volunteers already hard at work with shovels, spades, and pickaxes in hand. They were digging up and redirecting a pipe running from the homestead into a nearby paddock to make room for several new earth platforms that would extend the sanctuary's nursery. The seedlings raised here would then be planted out by the volunteers into a former grazing paddock within the sanctuary perimeter.

It had rained heavily the night before and was still drizzling this morning. Yet the job could not be put off; the small existing nursey area was bulging at the seams, and with a community planting day coming up in a few weeks, there was a desperate need to prepare more seedlings and a secure space to house them prior to planting. Mandy and Lincoln had been planning for some time to dig out the side of a small bank next to the existing nursey and turn it into several terraces along which new nursey platforms could be erected. Lincoln, who was also on the Bushy Park Trust, had some established if not officially recognized authority amongst the volunteers. I arrived that morning to find him giving directions to everyone working around him. "Grab a shovel, Tim, and start working on the end of the trench where the pipe exits. We want to get this dug up before it gets any muddier, this rain will turn the whole place into a mud bath before we know it!"

Within five minutes of digging my boots were already caked with mud and I was slipping and sliding all over the place. It was both frustrating and funny. A few of the volunteers were

laughing as they skidded over in the mud, but I was noticing Lincoln get more and more impatient as the morning progressed. A couple of hours into the job, at which point we were beginning to shape the new terraces for the nursery beds, Mandy and Lincoln were starting to disagree on how we should proceed. It seemed as if Lincoln had designated for himself the primary leadership role in this task, which would not be unusual if Mandy were busy with another task, but on this occasion, they were working together. Mandy was suggesting to Lincoln that we all begin digging away some soil from the bottom of the terraces, whereas Lincoln was insisting that it was better to work at levelling the top terraces first to avoid having to cart soil from the bottom up to the top for later levelling. Yet Mandy kept gently insisting we stick with her approach. After several interjections Lincoln finally vented his frustration, raising his voice and forcefully telling Mandy why he didn't want to follow her suggestion. Suddenly the funny, convivial feeling amongst the volunteers was gone. I felt myself going slightly red with embarrassment and looking around I noticed a few other volunteers seemed to feel a bit awkward too. The digging had stopped and now everyone one was just picking the mud out of their boots, cleaning off tools, and averting eye contact with Lincoln. I felt dazed, like all the energy I'd been putting into my shoveling had drained out through my feet into the muddy soil beneath me. Mandy remained quiet, and no longer seemed interested in engaging with Lincoln about the best approaches to building the terraces; it was obvious she just wanted to deescalate the situation. "Ok, it must be time for lunch then" she said quietly.

I felt annoyed with Lincoln. I'd often noticed his tendency to assume a leadership position, but he usually deferred to Mandy when it came to crucial decisions. Now I was beginning to think that maybe he thought of some jobs in the sanctuary as "his" and other jobs as "hers". It was clear from Mandy's insistence on how to approach the terrace task that she didn't

see things this way, although once Lincoln lost his temper, she was quick to agree with him, not because she seemed intimidated by him, but as a way to ease the tension amongst the group.

As we paused for a break at Mandy's direction—which in response Lincoln had said "11:30 is a bit early for lunch isn't it?", to which Mandy replied, "well we'll call it a cup of tea then"—she carried on as if nothing had happened, chatting happily away with the volunteers as we ate our lunch, although perhaps she was a little quieter than usual. After I'd sat down on the couch in the volunteer shed for a cup of tea and a sandwich, and had a chat with the cheerful Jimmy who happened to be in that day (he was one of the less regular volunteers who occasionally worked at restoring some of the old machinery in the homestead's stables) I was starting to feel better and the embarrassment of seeing an older respected volunteer lose his temper was fading.

It seemed like Lincoln wanted to continue working on the terrace job alone so after lunch Mandy delegated some new tasks to the other volunteers. She asked me to pull up some tarata seedlings (known as lemonwood in English due to its citrusy smell) from along the driveway near the exit to the public carpark. If I hadn't removed them, the homestead caretaker would have mulched them with his ride-on lawnmower, and we would have missed the chance to salvage some healthy seedlings for replanting in the restoration project.

I enjoyed this kind of work. While I liked working alongside other volunteers, chatting and getting to know them, I probably felt more relaxed working alone, especially on a day like this one where the morning had been full of remarkable if disconcerting volunteer activity. I kept thinking about Lincoln, wondering how he was feeling. As my annoyance with him began to fade, I remembered him telling me a few months earlier about a brain injury he had suffered in a car accident several years before he began volunteering at Bushy Park. Prior to the accident he

worked as an Anglican pastor in Wellington, but the injury left him in hospital for weeks, and when he was eventually discharged, he was unable to keep up his church commitments. He retired and spent several years struggling with the depression that was sparked by his injury. It was volunteering at a charity for people with brain injuries that eventually pulled him out of his depression. Soon after, the opportunity arose to volunteer at Bushy Park, where he would become one of the sanctuary's most dedicated volunteer workers.

Mandy knew Lincoln well and was aware of his brain injury. It dawned on me that earlier in the day she was most likely accounting for this. Lincoln's loss of control could have been related to the ongoing psychological challenges he faced with the lingering brain injury, and Mandy was sure to empathize with him on the matter. This was one of many moments during my field research when the sociability afforded by the volunteer work was tested, an occasion where the singularity of an individual volunteer's existence briefly disturbed the cohesive surface of the collective brought together by work. I would often sense these ripples as at once disruptive and poignant, as moments of tension where a volunteer's unique identity and presence could be contained—even tolerated—and sustained. Somehow the tension was held, rather than ignored or dismissed. Moments like these, I believe, highlight something of the value of the work in itself and express yet another living example of a gift economy. What is more, it provides the conditions for a conservation soundscape to emerge. As I discuss in the next chapter, not only does this work provide opportunity for volunteers to immerse themselves in the sounds of the forest, but it also frames their relationship to these sounds and the creatures they resonate from.

Chapter 3. The Birdsong: unseen sounds of Bushy Park

On any given morning in the courtyard of the volunteer shed as the workers prepared for the day's work ahead, we were likely to hear the call of a sulphur-crested cockatoo somewhere out in the forest.[149] Someone in the group would inevitably turn their gaze in the direction they perceived the calls were coming. Often it was long-time volunteer Esther Williams, who had a special affinity for the sharp calls of larger birds (she once jubilantly recalled to me her encounter with a native falcon, known in te reo Māori as the kārearea, hearing its high-pitched call as it swooped above her during a canoe trip along the Whanganui River). For most volunteers, the harsh cries of the cockatoo—an Australian species long ago introduced to New Zealand and now deemed invasive by some conservation groups—couldn't be ignored. Sometimes even Mandy, the sanctuary's manager, would flinch. Volunteers might respond to the cockatoos' calls with a smirk or a giggle. Occasionally they would scold the birds loudly, yelling in their direction something like "get out of here!" or "you're not welcome!" These interruptions were more than just casual reactions to a noisy bird nearby, but were calls of encouragement, rallying cries to aid the day's work ahead.

Excluding introduced species like the sulphur-crested cockatoo from the sanctuary is one of the key tasks of a Bushy Park volunteer. The cockatoos' noisy squawks are an abrasive sonic reminder of non-native species invasion, and a reminder to volunteers of their assumed duty to protect New Zealand's threatened species and ecosystems. Conversely, in New Zealand's public imagination, a "bustling dawn chorus" of native birdsong reminds listeners of a nation's successful conservation efforts to preserve the species that have been under threat since human

habitation. As ecosystems and species of this South Pacific archipelago evolved over millions of years, there was an almost entire absence of terrestrial mammals—several species of bats being the exception. The arrival of pacific peoples around a millennium ago, followed later by European settlers, not only resulted in the over-hunting of species and the destruction of landscapes that supported native-fauna life, but it also saw the introduction of numerous predator species. Amongst these were rats, stoats, and possums, all of which have been targeted in the recent high-profile "Predator Free 2050" campaign. This nation-wide cross-agency attempt to eradicate three of the most well-known introduced species by the middle of the twenty-first century has been referred to as New Zealand conservation's "moon-shot".[150] This national rebrand, even if it comes close to the stated aim, will be evidenced not only in the collected statistics of predator-species kills, billions of dollars of government and philanthropical investments in new conservation technologies, and a sprawling network of community conservation groups, but more broadly it will be proven in the "bustling dawn chorus"—the closest thing to a synecdoche for the nation's modern conservation movement.

By 9 o'clock in the morning when the volunteers have arrived for the day's work, the forest's dawn chorus has dimmed to a murmur. Surrounding the volunteer sheds are the smaller exotic birds—sparrows, blackbirds, and thrushes—which produce a background twitter, common to residential backyards in Whanganui (like my own). As we move into the forest to begin our work, we hear more and more of the sanctuary's native bird species: the high-pitched shimmering notes of hihi; the piercing squawks of tīeke; and the cascading cries of toutouwai. Occasionally I'll catch sight of one of these birds out of the corner of my eye, but usually I only

[150] Alexandra Palmer and Laura McLauchlan, "Landing among the Stars: Risks and Benefits of Predator Free 2050 and Other Ambitious Conservation Targets," *Biological Conservation* 284 (August 1, 2023): 110178, https://doi.org/10.1016/j.biocon.2023.110178.

hear them. Bushy Park's native birds spend most of their lives in the forest canopy beyond the visual range of volunteers working below on the forest floor. These are birds more often heard than seen. Their calls are abstractions that resonate in the forest, augmented beyond their small fragile bodies into the archetypal voice of nature. For volunteers, the experience of listening to "nature's voice" is a fundamentally an *acousmatic* experience.

First appearing in music scholarship as a label for a genre of electronic music,[151] the acousmatic is now used as a concept in music theory and criticism to describe the experience of hearing sounds without certain knowledge of where they originated. Leading this discussion was music theorist Brian Kane, who defined the acousmatic as:

> a shared, intersubjective practice of attending to musical and nonmusical sounds, a way of listening to the soundscape that is cultivated when the source of sounds is beyond the horizon of visibility, uncertain, underdetermined, bracketed, or willfully and imaginatively suspended.[152]

As a volunteer, listening to birds in Bushy Park is very much a shared, intersubjective practice that involves cultivating an awareness of bird vocalization through ongoing participation in conservation work. While birdsong is largely beyond the horizon of visibility, it is (to use another of Kane's useful terms) also often *underdetermined*. For the volunteers, a given bird call does not have a predetermined meaning. It is not necessarily aesthetically beautiful, nor is it presumed to have a single referent. Rather, birdsong's meaning emerges in relation to the conservation activity being undertaken at the time. Key to the significance—even the presence—of birdsong in the forest is the conservation work itself.

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[151] Marc Battier, "What the GRM Brought to Music: From Musique Concrète to Acousmatic Music," *Organised Sound* 12, no. 3 (December 2007): 189–202, https://doi.org/10.1017/S1355771807001902.
[152] Brian Kane, *Sound Unseen: Acousmatic Sound in Theory and Practice* (Oxford University Press, 2014), 7.

Kane's discussion of acousmatic experience is founded on his "tripartite" ontology of sounds.[153] I explain it here as I have found it particularly helpful in elucidating the unique acousmatic experiences of volunteers working in Bushy Park. According to Kane's tripartite sonic ontology, a given sound emerges as a result of two discrete objects interacting. In this interaction, each object takes on the role of either a source or a cause. The effect—the listener's perception of the sound—completes the sound's total constitution. Kane's simple example of a violin is useful in demonstrating this sonic ontology. The body of the violin is the sound's source, the violin's bow is its cause, and the listener's perception of this interaction is its effect. In an auditory situation where the listener can immediately establish a correspondence between the sound's source, cause, and effect, this would be an example of a *non*-acousmatic experience. For listeners acquainted with the violin and how it functions, the auditory effect of a violin being played would leave little doubt as to that sound's source and cause. However, for a listener unfamiliar with the violin, its auditory effect might provoke curiosity, even confusion. Doubt arises as to the source and cause of the perceived auditory effect. Moreover, if the listener has no simultaneous *visual* access to the resonating violin, this sense of doubt can be heightened—opening up space for the imagination.

Audio recording and reproduction technology has only increased the opportunity for acousmatic experience. Because a perceived sound has been mediated by audio technology, untethering its prior source and cause from the immediate effect, it takes a leap of faith, or imagination, for the listener to presume the perceived sound's source and cause is a violin and a bow. As I hope to show throughout this chapter, Kane's formulation of the acousmatic in terms

[153] Kane, 165.

of a sound's source, cause, and effect affords useful ways to conceptualize auditory experience beyond a metaphysics of sound constrained by audio technology.

It may be worthwhile at this point clarifying a distinction between the acousmatic and a related term, "schizophonia," which actually has much stronger links to the soundscape concept. Kane helps tease apart the distinct meaning of each term. Whereas schizophonic sounds as defined by Murray Schafer "require both a copy and an original", acousmatic sounds as Kane defines them, "only require *spacing* of the source, cause, and effect."[154] Schizophonic sound, as defined by Kane, is consistent with Jonathan Sterne's account of the soundscape concept (as I discussed in Chapter 1). Recall that Sterne argues the technologically derived soundscape concept sets a listener up to "experience the broader phenomena of sonic mediations from a stable and surprisingly delicate position."[155] Framed by schizophonia, sounds when understood via the soundscape concept, can only be perceived logically in terms of a binary relationship between original and copy: the perceived sound is either technologically mediated or unmediated. This understanding of the soundscape concept conflicts with Kane's tripartite model of sounds, which instead asks us to consider the dynamic and variously underdetermined relationships between a sound's source, cause, and effect. Considering this three-part relationship in place of an original/copy binary relationship can move us away from what may be sound studies' underlying phonographic metaphysics, as I discuss below. A schizophonic analysis of sounds begins from a starting point of audition as already a phonographic experience. Breaking this binary open and refashioning it in terms of a three-part relationship, I would argue, can lead us towards new, and renewed, understandings of listening that exceeds the purely auditory. Or

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[154] Kane, 225 (my emphasis).
[155] Sterne, "The Stereophonic Spaces of Soundscape," 67.

rather, it suggests that auditory experience exceeds the sonic. Instead, listening, as an embodied practice, involves a commitment to relationships, which is helped by an understanding of one's place within a network of ecological, cosmological and historical relations.

In the present chapter, I expound on Kane's formulation of acousmatic experience in terms of a sound's source, cause, and effect, examining some of the ways volunteers make sense of the acousmatic situation they find themselves in while working in the sanctuary's forest. I argue that Bushy Park's "unseen sounds" perform vital connections between the people, place, and history that constitute the forest as a peopled, storied ecosystem. Attention to these connections can take us beyond the soundscape concept as understood by soundscape composers towards another kind of soundscape concept, one particular to the experience of volunteering in Bushy Park.

Listening to bird life in Bushy Park

Emma and I were returning from the Western edge of the forest after checking on some poison that Mandy had recently laid in hope of killing a rogue rabbit that had entered the forest. Somehow the creature had negotiated the two-meter tall "predator-proof" fence surrounding the sanctuary (Mandy suggested it had been dropped in by a young hawk playing carelessly with its prey above the forest canopy). It was nearing the end of the year, and the weather was warm, but it was pleasantly cool beneath the forest canopy. We had spent most of the morning chatting, but by now we'd fallen into the usual silence that seemed to settle whenever I spent several hours working with another volunteer in the forest. Emma had started volunteering at Bushy Park near the end of 2020, although her involvement in the work was far more extensive and specialized than most other volunteers. Nearing the end of a Masters degree in conservation management,

Emma had been awarded a grant to study the breeding patterns of hihi. This involved spending countless hours in the forest, often alone, observing the behavior of hihi around nest boxes and feeders. For much of the duration of her research, Emma had the unique opportunity of residing in Bushy Park, staying in a bunkhouse near the homestead. While her work with hihi was in large part a contribution to the completion of her Masters degree, her research would also prove useful for Bushy Park and other sanctuaries managing hihi breeding programs.[156] Moreover, given Emma's embeddedness in Bushy Park, she was able to contribute to many other ongoing tasks alongside the volunteers, participating in everything from weeding and fence checks, through to mouse trapping and rodent audits. Mornings like this one became a regular occurrence only a few weeks into Emma's time as a Bushy Park "resident."

As we walked steadily along the soft forest track through the gully, we could hear little else except for leaves and twigs crunching under our feet. The sanctuary's birds did not tend to spend much time down this low in the gully. We came across a toutouwai (also known as the North Island robin) searching for insects on the forest floor. We startled it and it gave off a loud cry of warning, although as we continued on the bird followed us looking for bug-life disturbed by our footsteps. This morning, we were both surprised to hear a new sound. It was so quiet and impossible to accurately distinguish the direction of its source. "What IS that?" I asked Emma. "I've got no idea, but it sounds like it's coming from somewhere along line 8. Let's take a look." Shortly ahead we veered off the main access track onto trapping-line "8", which was indicated by a small blue plastic blaze nailed to a tree. The track took us uphill, out of the gully towards the sanctuary's northern boundary. This diversion felt warranted; what we were hearing was not

[156] In 2024, Emma was hired to manage the hihi conservation program on Tiritirimatangi, the island from where Bushy Park's resident hihi were translocated.

a bird call either of us had noticed before. “I can’t quite pick the sound out” I said to Emma. “It’s so quiet. I thought I might actually just be imagining it!”

Although Emma couldn’t immediately identify it, she suspected it was the call of several hihi chicks. This would be a lucky discovery: so far this season, no breeding pairs had been found to have nested naturally (outside the man-made nesting boxes), and we were heading up a trapping-line without a nesting box. “I’ve heard them at nest boxes before. They sound kind of gravelly, quite distorted, almost like polystyrene being cut”. “Woah, what a great way to describe it,” I responded. “I know exactly what you mean!” I had already observed nest boxes in Bushy Park with hihi juveniles inside—Emma’s reference to the crunchy, high-pitched squeaking of polystyrene packaging jogged something in my memory.

We pushed on further up the trapping line, our ears pricked for the sounds of chirping hihi chicks. The forest was still relatively quiet this far inside the sanctuary’s core, but we could now hear the occasional tīeke call and a few tūī in the distance. Stopping occasionally to silence our footsteps, we’d strain our ears to pick out any hihi-chick call. But the further up the track we got, the less we could perceive the polystyrene squeak. “Perhaps they were nesting across somewhere towards line 7” Emma said. Looking up into the canopy she noted: “there’s a large rata tree over that way. They could be there up there nesting”. Looking up towards the large native tree we listened some more but could no longer hear anything except for the odd fragment of tīeke chatter, and the quiet rustle of leaves and branches above us as the wind gently began to pick up.

Part of Emma’s study involved surveying intraspecies interactions of hihi at the sugar-water feeders strategically located throughout the sanctuary. This included numerous 12-hour days of sitting at feeders observing behavior. While most volunteers would be lucky to catch the

occasional glimpse of a hihi throughout a routine workday, in contrast, during her time at Bushy Park, Emma had regular and ongoing encounters with the birds. It's not surprising then that her descriptions of hihi sounds were both numerous and idiosyncratic. Just as evocative as her description of the hihi-chick calls was her portrayal of the common "stitch" call produced by adult hihi, a sound most volunteers were familiar with. Emma evocatively described this shimmering, high pitched, percussive sound as "glass marbles crashing together".

When I interviewed Emma, I asked her if there were other (non-hihi) sounds she thought she would remember once her research project was complete and she had left Bushy Park, she briefly mentioned the calls of several other birds living in the sanctuary, but seemingly disinterested in the topic, she quickly returned to recounting hihi sounds. "Besides the stitch and the territorial call for the hihi, it's the discovering for myself that little murmuring chatter that they do. All the other kind of minor sounds [of the hihi] that you wouldn't think of I'll associate with Bushy Park". Emma had spent time listening to recordings of hihi calls prior to beginning field research, but it was the daily exposure to hihi sounds that afforded her the chance to begin noticing the variation in the sounds they make. "I didn't realize hihi could make that many sounds until I started listening to them." This comment provoked her to vocalize an imitation, what she described as a "weird gurgling".

Listening over such regular and drawn-out periods for hihi surely influenced Emma's adeptness at describing their calls. But what also stood out was her isolation during these periods of listening. Unlike most of the other volunteers, Emma would be working alone during these observations. Without the distraction of other people, she was able to notice the unique qualities of hihi calls, perhaps in ways inaccessible to other volunteers who would be focusing on tasks not directly related to hihi or chatting with other volunteers while working.

Quickly being able to identify hihi by the calls was essential to Emma's observation skills, including pinpointing their location sonically so she could then identify a bird visually. Emma quickly became proficient at identifying specific hihi using binoculars to see their leg-band combination. Often the sound of a hihi was an enticing call to wander off into the forest so as to identify the bird.

> If I hear one, if I'm not on a purpose that day, if I have a bit more time, then I'll stop and listen to see if I can hear it again, and if it's getting further or closer away…sometimes I'll head off monitoring lines, and I'll go have a listen if I can figure it out, sometimes I find them–I found a male as you go down the driveway, the kauri trail, I found a male, I saw him, I had a binoculars on him, I can maybe see a band, and then the trees moved, because it was windy, and then I lost him. And that was based off the positioning of his call, and I knew he was male because of the way he was calling.

Although Emma did not use a sound recorder for data collection or analysis in her research, she would occasionally use her phone to capture snippets of audio as reminders of the day's work. She recounted listening back to a recording she had made near a hihi nest box:

> If I listen back to that sound I can immediately picture that nest box…I immediately picture what could be going on in that nest box, like I know there's chicks in there because of the sound, because the female's just obviously entered and is feeding her chicks so they get REALLY LOUD, and then they quiet down, because the female's just finished feeding them, and then they'll get REALLY LOUD when the female is leaving again, and I immediately imagine that, in my brain, because of the sound—it's kind of wild!

For Emma, these audio snapshots were memory prompts, sonic evocations of real places and past experiences. She said to me: "I suppose that's what people do, if they remember something about that place, you'll obviously have a memory about that place, but if you hear that distinctive sound that made that place…if you hear that sound again, then you'll link back to that place". For Emma, the sounds of a place would seem far more evocative of a place than other material or symbolic traces. The sounds of hihi calling "made" the place of Bushy Park for her, and the

small audio excerpts of field recordings she made for herself felt like direct "links" back to the sanctuary.

Whereas Emma's immersion in the sounds of hihi was condensed around the small three-month window of her field research at Bushy Park, other workers in the sanctuary had already been exposed to hihi calls for several years. Mandy, the sanctuary's manager had worked at Bushy Park ever since the translocation of the first hihi from Tiritirimatangi, one of the small now-uninhabited islands off the coast of Auckland city where the remnant population of hihi have flourished after conservationists stepped in to manage the habitat. A dozen hihi were translocated from Tiritirimatangi to Bushy Park in 2015. In the first few years the population grew steadily but it has since plateaued at around fifty birds. Compared to other translocated bird species in Bushy Park like the tīeke and toutouwai, which both continue to flourish, the hihi have struggled to maintain a rapid growth in population. Mandy has suggested that hihi may lack the necessary abundance of natural food sources that their counterparts on Tiritirimatangi have. She also suggested the lack of genetic diversity has led to hihi breeding problems within Bushy Park.

Mandy shared a keen awareness of hihi calls with Emma. As she said to me when we discussed the significance of bird sounds for the workers in Bushy Park:

> I notice particularly hihi [call], because it's a kind of mark for us about the success or not of that population which is touch and go. I'm particularly attuned to hihi and I'll note it for other people if I'm with them, I'll go "ohhh, hihi" just so that other people are starting to think like that too. So I feel myself supporting that bias, I guess, because it's our most critical species here, and because us understanding who's around, in terms of hihi, is really useful for us understanding that population.

Learning to identify the sounds of hihi was an important task emphasized by other volunteers too. Early in my field research as I was meeting volunteers and introducing my research project, they would often assume I had a specialist knowledge of bird calls and would ask me if I could recognize the bird calls of the forest. Meeting Fiona for the first time, she

quizzed me on the sounds of different birds as we walked through the forest replenishing hihi feeders. I never suggested I had an ornithological background, or even a special interest in birds. But perhaps they believed I could easily identify bird calls because of my presumed specialized aural skills—a "good ear" or "an ear for music" as I'd heard such skills referred to growing up. Yet whether or not Fiona thought I might have an ear for bird calls, she seemed intent to test my aural ability. On our first day working together, as we chatted quietly, she suddenly asked me to identify a bird calling out next to us. I vaguely recognized it, but couldn't discern whether it was a tīeke or a hihi. I took a guess and answered with feigned confidence "that's a hihi". "Very good" she responded. I felt some relief, as if I'd proved my legitimacy as a specialized listener and someone skilled enough for her to be bothered working with.

After several months of field work at Bushy Park, I found it interesting to note how newer volunteers articulated their experience of hearing some of the sanctuary's endemic birds. Esther, A Dutch woman now living in New Zealand, began volunteering around July 2020. I noticed she took a particular interest in the sanctuary's birdlife. By the following hihi breeding season she had become responsible for monitoring several hihi nest boxes, a job that required a lot of care, patience, and dedication. Like other volunteers who spent a lot of time alone in the forest, Esther learnt to identify the calls of the sanctuary's endemic birds quite quickly. I recall working through the forest together when Esther responded to a nearby tīeke, saying "you sound like you're singing a nursey rhyme". Her comment made me think of the lilt in their repeated calls, which when coupled with their harsh, almost mocking tone, brought to mind playful school-yard rhyming games.

Tīeke vocalizations are one of the most distinctive sounds heard by volunteers and visitors in Bushy Park—equally abrasive as the cockatoo, but sweetened by their association

with a successful native-bird translocation project. The translocated population adapted quickly to their new environment, a success made obvious by the prevalence of their abrasive, repetitive calls throughout the sanctuary. Tīeke are especially vocal when volunteers encroach on their territory within the forest. The more time spent working in the forest, the more often a volunteer gets to hear the alarm call of a tīeke alerting its nearby partner to a human intruder. Many volunteers would be compelled to respond vocally to the alarm call of a tīeke they had inadvertently disturbed. Sometimes a friendly greeting—a "hi there!" or "hello"—directed at the calling bird was enough. Other times a response my lead to a conversation about the uniqueness of tīeke calls.

Alethea, who also started working at Bushy Park after I had begun my field research, had evocative articulations of tīeke call similar to Esther's. During an interview with Alethea, I asked her if there were any sounds at Bushy Park she had been surprised by. She responded: "When I was first there, hearing the tīeke so close and so loud…obviously they're warning the rest of the forest: 'Hey! Humans here!'" For Alethea, the novelty of the tīeke call evoked a sense of caution, as if the birds were remarking on her conspicuous presence in the forest.

As someone with a deep curiosity in the sounds of the forest, Alethea was the first volunteer to participate in a field-recording session with me. For one of our sessions we sat for half an hour with the recorder next to a hihi nest box along the northern boundary of the sanctuary. The forest was particularly quiet on this sunny autumn afternoon, and apart from the occasional call of a tūī or toutouwai out in the middle of the forest, we barely heard a bird call for the duration. It was not until the end of the thirty minutes of recording that we noticed the tapping of a tīeke above us in the canopy. While it wasn't calling, we could clearly hear it foraging for bugs in the rotting frond of a large punga fern. Suddenly—crack...crash!—the

rotting frond and the tīeke's source of food fell to the ground. Alethea and I both stifled our laughter, not wanting to disturb the natural quiet of the forest we were capturing with my sound recorder. Listening back to the field recording, the crash of the fern is quite audible, although probably of little interest to listeners other than Alethea and me. Rather, like Emma's audio snapshots of her time spent sitting at hihi nest-boxes, this recording was capable of jolting a personal memory—for me, of sitting with Alethea, and watching with tīeke above us disturb the punga frond and watching it crash down to the forest floor. In this case, it was not the familiar sound of the tīeke call, but its interaction with the forest environment that said something to us about this unique ecosystem.

Regular volunteers came to notice the quieter, more subtle calls of tīeke—a stark contrast to the abrasive tīeke warning calls most volunteers quickly became familiar with. When discussing tīeke calls with Mandy one day, she commented on these subtler sounds, noting their melodic quality. I began to notice these sounds after several months volunteering in the sanctuary. By May, I was noting in my field journal how quiet the forest was starting to seem, as I started to discern the subtler calls. I wrote:

> *The melody was an ascending 5th followed by a glassy, almost digital phrase, more complex melodically; harmonically it felt like a semi-tone shift. I think I've heard fragments of this call but only in passing. The forest was so quiet, and the call cut through so clearly. I had to stop for five or so minutes and listen.*

Much like Emma, who felt the quieter calls of the hihi would stick with her and remind her of Bushy Park long after she had finished her research, these quiet tīeke calls stand out for me as especially distinctive of my time working in the sanctuary.

Unlike the aloof tīeke, toutouwai often strike first-time volunteers as brazenly approachable. Volunteers most often refer to toutouwai by their common English name as North Island robin, or simply robin. The small dark birds regularly follow volunteers through the forest,

nibbling on the trail of insects scuffed up by our feet trampling through the forest floor. Like tīeke, toutouwai have a loud alarm call. If I surprised a toutouwai while walking through the forest, it would often let out a piercing, shrill call, although it would rarely budge, standing its ground and waiting for me to pass by. Emma described the "piercing call right by my ear" as she stumbled across a toutouwai while walking through the forest. Her playful response was to "turn to it and say, "*excuse you* robin!'"

Yet, as with hihi and tīeke vocalization, there was an apparent variation in toutouwai calls that became more discernable the more time I spent in the forest. I found the difference between mature and juvenile calls particularly interesting. Juveniles produced a soft fizzing call, quite distinct from the shrill descending call of mature toutouwai. Emma was one amongst several volunteers to notice a distinction between the two. She would encounter them in the forest "when they're wanting to be fed, they're like [mimics toutouwai call] demanding food". Toutouwai clearly had no shortage of food sources in Bushy Park as they were the most prolific native bird in the forest along with the tīeke. The toutouwai population was so well established that other conservation projects in the region were beginning to source the birds from Bushy Park for translocation to new sites.

There are numerous birds volunteers hear in the sanctuary that they do not treat with the same curiosity or significance. These include the introduced or "exotic" birds. Mandy shared with me how she noticed feelings of ambivalence or aversion amongst volunteers in their reactions to the calls of exotic birds in the sanctuary. She noted how people, "got worked up about" the sounds of exotic birds like magpies and cockatoo. While she acknowledged finding these sounds "mildly irritating," by and large she tolerated them. Mandy shared with me that members of the Bushy Park Board were considering creating a policy for how to manage these

exotic birds within the sanctuary boundary. For Mandy, she felt it was important that if such a policy were to be rolled out, it would need to be warranted by an imbalance in ecological competition, "not just human irritation."

For other volunteers, the sounds of birds beyond those made by the most valued species left little imprint. Emma told me of her surprise when she sent a sound recording made in Bushy Park to a friend, who remarked on the large range of bird sounds. Emma responded: "I've actually kind of tuned them out, because I listen directly for hihi calls, like sometimes I'll hear tīeke, or I'll be walking along, and I'll see one and then because I've seen one, I'll link it to the sound that I'm hearing".

Even for long-time volunteers, however, identifying many of Bushy Park's bird species by their calls alone does not come easily. Lincoln commented in an interview about how he often confused the sounds of hihi with toutouwai: "no one can avoid identifying [tīeke] call [chuckles]. But some of the other ones…I still have to THINK about the difference between the hihi and the robin—just because I've never been inclined to sort of stop and analyze and listen." I presumed Lincoln had a "good ear" given his love of classical music. Yet stopping and listening to the birdsong of Bushy Park was not something he was in the habit of. The birdsong formed the backdrop to his work in the sanctuary, and while he noticed the different calls, he was not drawn into an isolated analytical mode of listening. Unlike Emma, whose role within the sanctuary was specifically to pay close and undistracted attention to the birdlife, Lincoln, like most other volunteers was committed to other work. It might not involve listening directly to birdsong, but this work played a vital role in supporting the lives of the birds that populated the forest and help constitute the conservation soundscape of Bushy Park.

Sounds unseen in a rainforest

For Bushy Park volunteers, whereas "giving nature a voice" often involved hard and sometimes unpleasant work (as discussed in Chapter 2), by contrast *listening* to nature's voice in the sanctuary would appear far less bound up in the work of killing animals and plants. Dead mice, and stubborn weeds were immediately present to the volunteers, sometimes taking over all the bodily senses. Bird song was not only usually beyond the horizon of visibility above the volunteers in the forest canopy, but its meaning was also often underdetermined by the conservation work itself. This acousmatic experience of listening to birdsong in the sanctuary might seem to position "nature's voice" beyond—or literally *above*—the messy work of "giving" that volunteers participate in. What then is the relationship between this work and the "voice of nature" itself? If the birdsong is more of an acoustic marker that permeates the forest than something tangible like a dead mouse or a stubborn weed, what relationship does it have to the volunteers as they seek to situate themselves within the ecological and historical context of the sanctuary? Approaching these questions using Kane's formulation of acousmatic experience in terms of a sound's source, cause, and effect, may help answer these questions. Just because a sound is unseen, does not mean that sound is necessarily any less knowable.

While some of the examples of bird sounds, I discussed above were heard outside the immediate setting of regular volunteer work, most were in some way related to the essential tasks that justified the volunteers' presence in the forest. Other than my account of the tīeke and the falling punga frond which Alethea and I witnessed while making a field recording together, all the other sounds discussed were perceived by volunteers while working in the sanctuary. This is not to suggest that the work *determines* the volunteers' awareness and connection to the birdsong of the forest. While in my conversations with Mandy, she seemed to focus on the

relationship between the birdsong and particular conservation aims—hihi call being a "mark" of the population's success (or not) to establish in the sanctuary—this is understandable given her particular responsibility as sanctuary manager and planner of work. Mandy's responsibility and commitment to seeing the hihi population thrive may have narrowed her associations with the hihi call. To apply Kane's notion of an acousmatic sound's source, cause, and effect, Mandy could be understood as perceiving the hihi call itself as sonic effect, with its source being the stable ecological environment of the sanctuary, and the cause being the ongoing work involved in managing the hihi population. The unseen sound is thus closely connected to the forest, and the conservation work itself.

In contrast, Emma, who was engrossed by the hihi, seemed to make sense of their calls within a wider set of references beyond just the work of volunteering in the sanctuary. Over the months spent working in the forest on her research, Emma's fluency with hihi bird call developed significantly. This is evidenced in her ability to describe the bird calls in nuanced, evocative ways, as well as her affinity for the quiet murmur of hihi she came to associate most strongly with Bushy Park. For other volunteers like Esther and Alethea, while they regularly encountered bird calls during routine work in the forest, their responses to these calls were unrelated to the work as such. Tīeke call for Esther evoked a memory of a nursery rhyme, and for Alethea a sense of the bird's territorial behavior. Even for Mandy, bird calls could resonate with meaning beyond an association with a specific conservation goal. It was Mandy who first mentioned the quieter calls of tīeke to me, which helped me focus my own attention in the forest, perhaps prompting me to describe the timbre and pitch of the call in my field notes. As I discuss in the next chapter, there are also other references beyond the conservation work itself that influence Mandy's perception of bird calls in the sanctuary.

In these cases where birdsong is perceived by volunteers without direct associations to the work itself, the source and cause of the audible effect are not so simple to infer. For instance, Emma's memory of the surprisingly quiet murmuring call was not associated with one bird or one cause and source. Rather it evoked a blend of memories and sounds, bound up together with the effect—even if this effect itself (a combination of memories of similar murmuring calls) is not straightforward to isolate. Similarly, the source and cause of the effect perceived when Esther discerned the trace of a nursery rhyme in hihi call is difficult to pin down. Perhaps my attempt to describe the timbre and pitch of the quiet tīeke call was such an attempt, in which case my perception of the source and cause was bound up with my particular knowledge of Western music theory.

For volunteers, birdsong was not, however, just something to be perceived imaginatively, or analyzed abstractly (even if my music-theoretical description of the tīeke bird call was a rare occurrence). More often it provoked a response, usually one involving a question. One of the questions many volunteers asked when hearing a bird call was "Is that the sound of a hihi?" If the effect (the high-pitched call of a bird) is treated as certain, many volunteers will perceive the source and cause in the general, yet unspecific (read: uncertain) terms of "a bird" (in which case the source and cause is conflated—if divided the source may be understood as "vocal cords" and the cause "breath of the bird"). For volunteers not confident in their ability to determine a bird's species by its call alone, that sense of uncertainty would largely remain until the calling bird was visually identified. Due to the dense canopy of the Bushy Park forest, a sighting of the calling bird was not expected, although a volunteer's peripheral sighting of a flash of the bird's yellow feathers amongst the browns and greens of foliage may be enough to ward off any ongoing doubt. In my case, when I was beginning to identify hihi call by sound alone, I required the

confirmation of experienced volunteers like Fiona. The effect (more specific than just "a bird"; *either* a hihi or tīeke) was in this specific case more associated with the specific location. In grasping for source and cause I was considering my sense of the immediate environment. I was close to a hihi feeder, although I had seen numerous tīeke while walking along this path. Thus, wresting with the uncertainty of the sound's source and cause (combined into either "hihi" or "tīeke) led to questions of the "where." Questions of a sound's source and cause are thus intimately connected to a volunteer's sense of place and their awareness of their position within it.

My analysis here of the source, cause, and effect of the acousmatic in Bushy Park can only begin to scratch the surface of what might be at play in the sonic experience of volunteers working in the sanctuary. However, I think it offers some viable context for discussing further the implications of taking seriously the acousmatic nature of audition in forest environments. Moreover, it raises questions about how to articulate these experiences, what role audio-recording and playback technology has in this process, and how broader conceptions of the soundscape may influence such discussions.

Various ethnographies include accounts of the acousmatic quality of forest environments, even if they do not refer to them as such. Michelle Kisliuk, in her formative performance ethnography of BaAka music and dance, neatly expresses the relevance of acousmatic experience in the rainforests of the Central African Republic's Lobaye region.[157] Kisliuk writes:

> I found that the close interaction of BaAka song with the surrounding forest weaves singing and listening into a simultaneous process, more so than in any other music I know. I never did hear BaAka discuss this experience overtly, probably because the melding of song and soundscape is so complete as to seem self-evident.[158]

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[157] Michelle Kisliuk, *Seize the Dance!: BaAka Musical Life and the Ethnography of Performance* (Oxford University Press, 1998).
[158] Kisliuk, 26.

Similarly, Steven Feld highlights the unique soundscape of the forest ecosystems undergirding his ethnographic research on the Bosavi plateau of Papua New Guinea.[159] He writes:

> [these are] the basic questions that had intrigued me from my earliest times in Bosavi. How to hear through the trees? How to hear the relationship of forest height to depth? Where is sound located when you can't see more than three feet ahead? Why does looking up into the forest simply take one's senses into the impenetrable density of the canopy?[160]

As Kisliuk and Feld each reveal, rainforests are uniquely acousmatic environments. The sounds they describe are sounds unseen. In these examples, the forest sounds identified by each ethnographer are not simply "natural" sounds that resonate primarily outside the scope of human culture. Rather they are presented as "responses" that affirm (or unsettle) the forest inhabitants' sense of self and place, while "placing" the listener within the environment. Both BaAka singers and Bosavi singers know themselves and where they are through the reflection of their song (or lack thereof) back at them from the surrounding forest.

While Kisliuk and Feld both compliment their written research with audio recordings in various ways (*Seize the Dance* includes a companion website with audio-visual recordings of BaAka performance, while *Sound and Sentiment* was followed up with several commercial sound recordings documenting the Bosavi soundscape), they each place great emphasis on the descriptive and analytic power of ethnographic methods. In presenting their respective accounts of auditory experience in rainforests, they employ written ethnography as the primary means to present their insights. Similarly, they use audio recordings to support rather than drive their research efforts. In learning something about the soundscapes of rainforests, we expect to garner

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[159] Steven Feld, *Sound and Sentiment: Birds, Weeping, Poetics, and Song in Kaluli Expression* (University of Pennsylvania Press, 1982).
[160] Feld, 90.

most of our new knowledge from their evocative descriptions and analyses of life in Lobaye or Bosavi.

Leading up to my field research, studies like these gave me the confidence to pursue my own study of acousmatic experience in a rainforest environment from an ethnographic point of view. Yet throughout my field research I often felt the weight of the sound-recorder (sometimes literally, tucked away in my backpack) influencing my assumptions about how best to represent this unique acousmatic experience. Despite my commitment to writing a dissertation, my thinking at this time was also shaped by the creative work of various soundscape composers. I often felt torn between the representational authority of the pen versus the sound recorder, even though I had ambitions of creatively coupling the two. I would recall Francisco López's commentary on recording in the rainforests of Costa Rica and how effective a tool it was in concentrating the affect evoked by his sonic collages of singing cicadas. He describes how "one rarely has the opportunity to see the sources of most of those sounds", noting that "[y]ou hear it with an astonishing intensity and proximity. Yet, like a persistent paradox, you never see its source."[161] López's description reminded me of arriving in Charlottesville, Virginia in 2016 during the height of summer where I was bombarded by the sounds of countless cicadas, singing their harsh metallic song day and night. I was stunned by the waves of sound that danced throughout the tall oak trees, and rarely did I see the body of a cicada (often only those lying dead on the pavement). The thrum would distract me as I sat in my bedroom trying to read the papers assigned for the following day's seminar. I would try to capture it using the sound recorder on my phone, but on listening back, it never evoked the sense of acoustic haze—the

[161] "Francisco López [Essays // Environmental Sound Matter]," accessed January 2, 2025, https://www.franciscolopez.net/env.html.

acousmatic doubt that plagued me during that first summer in Charlottesville amongst the daily chorus of cicadas.

López's compositions are meticulously produced, using high quality audio technology to capture and mix the sounds of natural environments like the Costa Rican rainforest. My phone, which I'd used to record the Charlottesville cicadas, and later my entry-level Zoom sound recorder that I carried around with me in Bushy Park, were both incapable of the sonic fidelity afforded by the kind of audio equipment used by professional soundscape composers. Yet I was aware that a dogmatic faith in audio fidelity was also a slippery slope, one I had already come to recognize undermining the political potential of creative work by various soundscape composers. I saw this failure evidenced in the assumption that sound-recording technology offered a transparent window onto the world, bypassing language, and with it human lives and agency. A top-quality sound recorder can quickly become a means to displace people from the natural environment, reaffirming the modernist notion so succinctly expressed by William Cronon, of nature being "the place where people are not".

As one example, soundscape composer Gordon Hempton expresses a certain aesthetic aversion to sounds produced by humans. Hempton introduces his work as follows:

> I seek out places in nature much like a landscape photographer, but instead of recording light, I capture sound. My pursuit of soundscape portraiture has taken me to the Kalahari Desert of South Africa and many other of the world's most remote places to escape noise pollution and capture nature at its most natural.[162]

Following in the footsteps of Murray Schafer and his colleagues in the late 1960s, work like Hempton's seeks to employ recording technology to transparently represent the audible aesthetic qualities of ecosystems outside urban and agricultural areas. Hempton aims to connect his

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[162] Gordon Hempton, "The Dawn Chorus," in *Environmental Sound Artists: In Their Own Words*, ed. Frederick Bianchi and V. J. Manzo (Oxford University Press, 2016), 145.

listeners to the sounds of his field-recording locations with as little mediation as possible. By choosing locations which, in Murray Schafer's terms are "hi-fi soundscapes" (environments with minimal sonic evidence of industrialization) Hampton aims for the highest degree of transparency.[163] Hempton does not edit or manipulate his recordings in post-production. As he writes: "When my work on location is over, there is nothing more for me to do than choose start time, end time, fade-in, fade-out."[164]

Despite his attempts to provide his listeners with an aural window onto the natural world "at its most natural", Hempton shares with other soundscape composers an aversion to providing listeners with too much supplementary written information. Taking as an example a recording like Hempton's "Dawn I", all we can gather from the information provided with the recording is that Hampton recorded it somewhere within the Brazilian Rainforest in the early morning of December 5th, 1990.[165] We can know nothing about how Hempton got to this location, how long he stayed there, or who he met. Given that he is recording in a location away from his home in North America, we can assume he had some assistance in discovering and traveling to and from this specific location. Any visit to the Amazon rainforest is likely to be supported in some way or another by local people, whether through transport, accommodation, or forest guidance. It is clear from Hempton's presentation of a soundscape composition like "Dawn I" he has no intention to recognize the presence of such people. As essential human actors within the web of activity that supported the production of this composition, they could potentially be recognized as necessary sources and causes of the sound effects he presents in audio-recording format.

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[163] R. Murray Schafer, *The Soundscape: Our Sonic Environment and the Tuning of the World* (Simon and Schuster, 1993).
[164] Hempton, 145.
[165] "Dawn I - YouTube," accessed January 2, 2025, https://www.youtube.com/.

Bernie Krause, known for his documentation of endangered soundscapes, including the many thousands of hours he captured of rainforests across the planet, may also be considered to privilege sounds' effects over their sources and causes. In his notion of acoustic niches, he categorizes sounds as either biophonic, geophonic, or anthrophonic.[166] He presents nonhuman creatures as naturally evolving to happily co-exist within their own acoustic niche so that they can be individually distinguished amongst the cacophony of numerous co-habiting species. The biophonic and geophonic evolved reciprocally. For millennia, humans were on the periphery of this geophonic and biophonic world. Yet, by the time industrialization took hold, this natural symphony was all but submerged under the babel of humanity. In Krause's terms, the anthrophony is now the dominant genre of sound heard on the planet today.

In arguing for the supremacy of biophonic and geophonic sounds in a world presently awash in anthrophonic sounds, what remains unanswered is the question of which particular acoustic niches are occupied by Krause's recordings themselves—along with the growing phonographic archive of "endangered and extinct" natural sounds. As audible effects separated from their prior sources and causes, how does this archive of natural sounds co-exist ecologically with the biophonic and geophonic sounds that surround it, and the creatures or natural forces that emit these sounds? As the fidelity of Krause's recordings have increased over his decades of field recording, so has the distance from the sources and causes of the sound effects he has captured. When his home in California was devastated by a wildfire in 2017, the most destructive in the region's modern history, while his letters, field journals, and photographs were all destroyed, his archive of sound recordings remained untouched, stored safety in digital

[166] Bernie Krause, "The Niche Hypothesis: How Animals Taught Us to Dance and Sing," in *Whole Earth Review* 57, no. 57 (1987): 14-16.

archives.[167] Krause's recordings are now more accessible than ever, but as the natural environments he recorded continue to degrade and fall silent, the connection between those sounds as effects their sources and causes become more tenuous. Perhaps this reveals another example of the "stable and surprisingly delicate" listening positionality Jonathan Sterne associates with the soundscape concept when overdetermined by audio technology.[168]

I would argue that sound "unseen" for Krause, Hempton, and various other soundscape composers, involves an unsee*ing* of sound, that is, an intended fragmentation of a given sound's effect from its relationship with a source and cause. Given the convenience and reach of digital technology, it is now easier to both isolate sound effects from their sources and causes (even escaping wildfires) to present these sounds as effects in their own right—as pure representations of a thing now no longer present—to a global audience. The resilience of these sound effects in the face of environmental destruction has no bearing on their sources and causes. And thus, no responsibility to the networks of people, places, and histories entangled throughout them. In an especially critical light, these soundscape composers appear to have a dwindling attachment to the people and communities that are *actively* seeking to ensure certain species will avoid extinction so they can continue to contribute to their local soundscape well into the future. Moreover, through a decolonial lens, the impulse to collect and protect sounds that came from places with Indigenous histories reflects an ongoing colonial habit of misunderstanding relationships between a given sounds source, cause, and effect. Much in the way Robinson observes ethnomusicologists collecting Indigenous songs while lacking an understanding of their

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[167] Phoebe Weston, Ellen Wishart, and Pip Lev, "No Birdsong, No Water in the Creek, No Beating Wings: How a Haven for Nature Fell Silent," *The Guardian*, April 16, 2024, sec. Environment, https://www.theguardian.com/environment/2024/apr/16/nature-silent-bernie-krause-recording-sound-californian-state-park-aoe.
[168] Sterne, "The Stereophonic Spaces of Soundscape," 67.

ontological status (which I discussed in Chapter 1), similar critiques may be leveled at Krause, Hempton and others. From various Indigenous perspectives what is the meaning of a sound effect that has been stored in digital form and separated from its prior source and cause when that place has been degraded ecologically, or barred from customary use?

If conservationists like those who work at Bushy Park are stemming the loss of certain biophonic sounds and helping sustain evolutionarily driven acoustic niches, we should recognize their work as implicated in the source and cause of the birdsong we hear as an audible effect. Yet the story should not stop there. As a territory of Ngā Rauru prior to European colonization, the sound sources, causes, and effects presently contained by Bushy Park exist in a much larger ecological, cosmological, and historical network. Where the sanctuary's volunteers fit within this network is an issue I seek to address throughout this dissertation.

Sound studies, voice studies, acousmatic questions

In directing attention to the variously interrelated sources, causes, and effects that constitute the acousmatic sounds and experiences of volunteering at Bushy Park, I am necessarily moving away from the kinds of broader assumptions about nature that soundscape composers like Hempton and Krause hold—that the places where people are nature is not—assumptions that are reinforced by their distinctly phonographic approach to working with and conceptualizing sound as such. This perhaps warrants that I more clearly situate my discussion within the field of sound studies, teasing out some of the underlying phonographic assumptions that I see shaping its development and continuing to influence its critical and analytical direction.

When I refer to "sounds studies" I have in mind a particular genealogy of sociocultural research that has common links to historian and media theorist Jonathan Sterne's *The Audible*

Past.[169] Not only has this key text been cited many hundreds of times by other scholars seeking to define sound studies, but it has also helped resuscitate a myriad of earlier texts from the past, many of which due to their peculiar focus on sounds did not fit neatly into their author's home fields or disciplines. Of these texts already cited Murray Schafer's *Tuning of the World* is a notable example. It stands alongside the widely referenced books of Friedrich Kittler, Jacques Attali and science historians Trevor Pinch and Karin Bijsterveld.[170]

Perhaps the strongest argument made collectively by these scholars is that the auditory experiences of modern subjects cannot be neatly distinguished from the broader cultural impact of audio-recording technology. The argument goes that evidence of audio-recording technology's prolific position in modernity suggests it has fundamentally shaped the auditory experience of modern listening subjects. We are so immersed in the products of audio-recording technology that our basic understanding of what constitutes listening would not make sense outside an epistemology defined by constant interaction with audio products. Jonathan Sterne puts it clearly when he writes that modern subjects have "no direct intellectual or experiential access to the faculty of hearing in its supposed state of nature. We can posit that the interiority of experience exists and try to describe it, but that access is always mediated."[171] In its boldest

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[169] Jonathan Sterne, *The Audible Past: Cultural Origins of Sound Reproduction* (Duke University Press, 2003).
[170] Friedrich Kittler, *Gramophone, Film, Typewriter* (Stanford University Press, 1999); Jacques Attali, *Noise: The Political Economy of Music* (University of Minnesota Press, 1985); Trevor Pinch and Karin Bijsterveld, eds, The Oxford Handbook of Sound Studies (Oxford University Press, 2012). For sound studies scholars working today who identify as such, this presentation of their field may appear a crude caricature. It does not account for the diversity of research often associated with sound studies emerging from numerous disciplines across the arts, humanities, social sciences, design, engineering, and medicine amongst others. I would expect, however, that any given definition of sound studies would be largely influenced by the disciplinary or methodological proclivity of the definer. Whatever the sound studies scholar's academic home, their definition is likely to emphasize certain strains of research over others. As an ethnomusicologist, were I to present a more comprehensive list of sound studies research, I would mention numerous music scholars and critics including Steven Feld, Nina Eidsheim, Steve Goodman, Marie Thompson, Mark Katz, Jason Stanyek, Benjamin Piekut, Dave Novak, Ana Maria Ochoa Gautier, Martin Daughtry, and David Toop.
[171] Jonathan Sterne, "Hearing," in *Keywords in Sound*, ed. David Novak and Matt Sakakeeny (Duke University Press, 2015), 72.

form, this argument supports an ontology of sounds that is fundamentally phonographic—a metaphysics of phonography.

Concurrently, there is a strong argument to be made that sound studies scholars have much to gain from extending discussion of auditory culture beyond the limited realm of phonographically mediated listening. Here I follow Gavin Steingo and Jim Sykes in their "remapping of sound studies", an attempt to not only question the field's phonographic bias but also its clear privileging of sonic cultures from the Global North.[172] They go so far as suggesting these two biases naturally align:

> Much initial work in sound studies as an intellectual field of inquiry was propelled by scholars working within science and technology studies and related disciplines such as communications and media theory […] The focus of that work was the historical development of sound reproduction technologies, positioned as roughly analogous with Western "modern" devices. On the few occasions that 'underdeveloped' areas of the world appear in the subsequent sound studies readers…they are positioned mainly as laboratories for exploring how Northern technologies spread.[173]

Although it may take some time for sound studies phonographic bias to dissipate, in writing this dissertation, I have been buoyed by the work of scholars who have contributed research to sounds studies that depends far less on a phonographic sensibility, and have sought to interrogate these concepts and theories, particularly when the peculiarities of ethnographic research rub up against the generalities of cultural theory.[174]

Given the way "nature's voice" has emerged again and again throughout my field research and in my writing since, I have found myself drawn to the sound studies scholarship that engages with post-structuralist critiques of voice and its presumed foundational role within

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[172] Gavin Steingo and Jim Sykes, eds, *Remapping Sound Studies* (Duke University Press, 2019).
[173] Gavin Steingo and Jim Sykes, "Introduction: Remapping Sound Studies in the Global South," in *Remapping Sound Studies*, ed. Gavin Steingo and Jim Sykes (Duke University Press, 2019). 12-13.
[174] See J. Martin Daughtry, *Listening to War: Sound, Music, Trauma, and Survival in Wartime Iraq* (Oxford University Press, 2015).

Western philosophy. These critiques share appreciation for the work of French philosopher Jacques Derrida, who saw the West's most influential thinkers treating the voice as a guarantor of meaning, a transcendental bearer of intention, reason, and moral sensibility.[175] Many theorists after Derrida have continued pointing to the Western tradition's tendency to treat the voice as the bearer of immaterial essences of the human including the soul, spirit, or mind.[176] Amongst these theorists are numerous sound studies scholars, who approach Derrida's critique of the voice as both a philosophical justification to support their project and a position to push back against. Notably, the question of voice—what is it? from what is it made? what or who is bestowed with one —becomes a unique kind of question when special consideration is given to the phonograph and its influence on modern aurality. As cultural critic Rey Chow writes:

> Although Derrida's reading of Husserl is not informed by sound reproduction technology, it was probably not a coincidence that the problematic of the inner voice, the essence of the phenomenological reduction, emerged at a time when the voice as such had become eminently reproducible with the invention of machines such as the phonograph."[177]

Surprisingly, despite an obsession with reproducing human voices evidenced in the phonograph's early history, the predominant treatment of phonography in sound studies views the technology as an opportunity to *sidestep* discussions of voice. Rather it has become commonplace to treat the phonograph and its technological progeny as a path to "the real"—sound before, or external to, the representational and discursive agency associated with vocality.[178]

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[175] Joseph Claude Evans, *Strategies of Deconstruction: Derrida and the Myth of the Voice* (University of Minnesota Press, 1991).
[176] Nina Sun Eidsheim and Katherine Meizel, "Introduction: Voice Studies Now," in *The Oxford Handbook of Voice Studies*, ed. Nina Sun Eidsheim and Katherine Meizel (Oxford University Press, 2019), xii–xxxix.
[177] Rey Chow, "Listening After Acousmaticity," in *Sound Objects*, ed. James A. Steintrager and Rey Chow (Duke University Press, 2018), 115.
[178] Christoph Cox, *Sonic Flux: Sound, Art, and Metaphysics* (University of Chicago Press, 2018), https://doi.org/10.7208/9780226543208.

Perhaps it makes more sense to think of phonograph technologies less as hosts to "sounds themselves" and more as extensions of the human capacity for dialogue—even with beings who are not physically present. As cultural theorist Richard Middleton notes, phonography was once embroiled in attempts to preserve contact with the recently deceased. He writes: "the connection of phonograph technology with tropes of death stems from its very beginnings. Preservation of the voices of the dead, it was envisaged, would be one of its principal functions."[179] If the phonograph was first a "speaking machine", only to become a recorder of "pure sound" later, it should then be possible to discern the spark of its vocalic beginnings condensed beneath the layers of discourse that frame it as a disinterested tool of audio data collection. More than just wielding the capacity to represent voice as a particular type of sound object, phonographic technology can be a mediator of dialogue.

What would it be like to have a conversation with a sound recording? And what kind of vocalic exchange might ensue? How I listen to a sound recording may be just as important as the content of the sound recording itself. As Eidsheim and Meizel put it: "Independent of the source—human, animal, nature, or machine—listeners choose to judge a sound as 'voice' or 'not voice.' We can make or break a voice and all its attendant meanings by the way we listen to it."[180] That is, I can choose to hear a sound recording as a fixed, indifferent representation, presumably heard the same by all listeners in any given time or place. Or I could hear in it a *question*—and *ask* it one in response, imagining the beginning of a dialogue. Just by simply asking the question and waiting for an answer embodies a different metaphysical assumption

[179] Richard Middleton, "'Last Night a DJ Saved My Life': Cyborgs, Avians and Siren Bodies in the Era of Phonographic Technology," *Radical Musicology* 1, 2006, 6, https://eprints.ncl.ac.uk. See also Jason Stanyek and Benjamin Piekut, "Deadness: Technologies of the intermundane," *TDR/the drama review* 54, no. 1 (2010): 14-38.
[180] Eidsheim and Meizel, "Introduction: Voice Studies Now," xiv.

than the one I have so commonly assumed in my relationships with sound recordings and phonographic technology.

Returning to the soundscape recordings I made in the forest, then, what I initially thought of as failures I now consider questions asked of me by the place—Bushy Park, as a place at once real, imagined, remembered, forgotten, familiar, and obscure. These recordings are Bushy Park's call to me, and I am obliged to respond. They are not objective representations of place, nor are they artistic, subjective expressions. They are specific and singular (if not immediately discernable) questions, gestures of exchange and reciprocity, calls across planes of experience, awareness, medium, and sensitivities.

These are provocations of the *acousmatic question*. To hear a voice and ask "who is this" has the potential to snap us out of a phonographic metaphysics, even if only for a moment:

> [T]he reason we ask *Who is this?* when we listen to voices is precisely that we cannot know the answer to that question….we ask that very question not because a possible ontology of vocal uniqueness will deliver us to the doorstep of an answer but because of voice's inability to be unique and yield precise answers….Its import lies in the contradiction that it cannot be fully answered—and thus must be continuously pursued. In the totality of the chain of impossible-to-answer questions, we find our response.[181]

Here musicologist Nina Eidsheim neatly summarizes the contradictory quality of the acousmatic question, although she does not make the link to acousmatic experience immediately obvious. This requires returning to Brian Kane's presentation of the acousmatic as an experience where a listener is faced with uncertainty, while still leaving open the possibility of deriving some meaningful form of knowledge from it. Indeed, by embracing this uncertainty and enlivening it with the imagination, the listener can work with the uncertainty and reach a kind of fidelity that resonates with them.

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[181] Eidsheim and Meizel, 3.

If the acousmatic question is asked intentionally and it is embraced as a reasonable question to ask and seek an answer to, the sensory awareness of the outer world can be stimulated, and the work of the imaginative inner world can be charged. Thus, acousmatic experience, once it is recognized less as a kind of detached, individual auditory experience and more as the *provocation* of a question, points directly to the fundamental role of *speech acts* in any human perception of audition more generally. This is a notion of audition in which sounds are there to be perceived and received with a foundational expectation to respond. Indeed, the very capacity to receive is based on the logic (or *dia*logic) of communicative interaction. If this is the case, then the voices of Bushy Park, the voices of a recovering rainforest, are those that find their way to asking the acousmatic question while also being open to listening for a response.

Yet, "*who is this?*"—the fundamental acousmatic question—remains an ongoing unanswerable question in the background of work at Bushy Park. Despite the ubiquity of acousmatic experience in Bushy Park, there remain many barriers to the acousmatic question being asked by many of the volunteers. One of the biggest barriers is a widely shared ontological assumption that forests, and the creatures that constitute them, do not qualify as the kind of actors for whom a "who" is an appropriate pronoun. On these grounds, when in Bushy Park, the acousmatic question is not only unanswerable, as Eidsheim puts it, but also un*ask*able. How can I ask the question "who is this speaking to me" when I'm not aware of an actor with the presence, agency, or intention necessary to speak?

The commonly held settler-colonial understanding of speaking actors is largely limited to humans as speakers. To speak is to be fully human, to have political agency, to be creative, to express intention and bear knowledge. And "speaking" is the utterance of *words*, of organizing

meaning through the controlled navigation of a culturally shared linguistic system. From this vantage point, it may feel beyond the pale to allow non-human, non-linguistic creatures into a community of speakers and listeners. Another barrier is the unknown "who" of the settler subject. "Who is this" is a kind of unaskable question for a settler subject due to the habit of masking our own histories and genealogies to maintain a dominant, if precarious, position of social power in a settler-colonial nation.

Throughout this dissertation, I am attempting to engage with some of the acousmatic questions that arose throughout my field research. "Why are you here?" returned again and again, whether as a question I heard being asked of me by the volunteers, asked of themselves, or asked of us all by the forest. "Where have you come from?" is another question asked just as often. These are not questions that resonate in the familiar timbre and rhythm of a human voice. Rather they are half-imagined, and half presented by the forest, all coming together from within the more-than-sensorial, more-than-embodied experience of working in the sanctuary.

Chapter 4. The sanctuary: inside(rs) and outside(rs)

Late summer in New Zealand sees the hihi breeding season come to its end. By this time in 2020 I was only three months into my field research at Bushy Park but starting to become familiar with the sanctuary's patterns of work, what jobs were assigned weekly, and what jobs changed as the seasons changed. Although most of the regular volunteer work happened on Tuesdays and Thursdays, certain tasks required volunteers to spend the occasional off-day working at the sanctuary. With the hihi breeding season ending, there were a few essential tasks to get done that could not wait. One was checking the number of birds still drinking sugar water from the various artificial feeders dotted around the sanctuary. One Monday in the middle of March I volunteered for a morning with James and Mandy to undertake a hihi-feeder survey. This involved sitting at a feeder for an hour and noting down each hihi we saw. The three of us started together at a feeder only a two-minute stroll from the volunteer sheds. James and I were both new to this task, so Mandy gave us some initial guidance. We would then split up and head out into the forest to check a couple of feeders individually. By this stage in the breeding season the hihi were feeding far less from the feeders given that most of the new chicks had fledged and the intensive few weeks of parenting had concluded. On this morning, I only saw two hihi; in contrast during the middle of the breeding season an hour at one feeder would result in dozens of sightings. It was slow, quiet, but important work.

Yet like most of the volunteering done at Bushy Park, any time spent working together was an opportunity for conversation. Even while we watched together at the first feeder as scientific surveyors, the three of us chatted quietly. On this morning, our task required us to pay careful attention to the sights and sounds around us while we sat quietly in the forest. The work called for static bodies but active senses. Several minutes into our survey, Mandy suddenly

exclaimed, “the birds are singing to us!” Although we hadn’t seen or heard any hihi, many of the forest’s other birds were making their presence known, calling out to each other and flitting about in the canopy above us. The murmuring forest had found its way to the center of our attention.

As we continued the hihi survey, I puzzled over Mandy’s comment. I thought about how she had used song as a concept to frame the relationship between us and the birds in this moment—the birds as performers and us as an audience. It contrasted with the way I’d been coming to think about birdsong since I’d started volunteering a few months ago. During most of my work in the forest, it had seemed the birds were mostly oblivious to me and the other volunteers, and any vocalizations in response to our presence were simply behavioral reactions indicating alarm to nearby birds. This was also possibly the first time I had heard Mandy make a value judgement of this kind about the birdsong of Bushy Park. She was usually very scientifically pragmatic when talking about the birds, so this was a notable exception. She expressed this attitude neatly when she described the sanctuary’s birdsong as “an indicator, so when I go into the forest and it’s really noisy— ‘yay!’ You know this is a healthy forest, this is stuff going on that should be going on.” On this morning, however, it seemed she was attributing some kind of aesthetic agency to the birds. Their song was more than just an indicator of biological health. In saying “the birds are singing *to us*” I felt Mandy imply a notion of performer-audience relationship common to hegemonic Western approaches to musical performance: performers are the active interpreters of great compositions, and audiences are the silent, passive, appreciators of the performers’ acts. It was a mode of musicking I’d become more resistant to and suspicious of since beginning my musicological studies. And it was also a position of suspicion I’d brought with me, without much reflection, into Bushy Park as a music

ethnographer. At this early stage in my field research, I was trying to familiarize myself with what I assumed to be a common scientific attitude to interpreting bird vocalization, and I saw Mandy as one of the most authoritative figures to express this attitude. I presumed that conservationists like Mandy understood bird vocalization primarily as an indication of ecological vitality. When Mandy exclaimed that the birds were singing to us, it disrupted what I had comfortably but naively believed was a normal and unwavering scientific listening positionality. Did this indicate the aesthetic influence of Western music on the disinterested judgement of a scientifically minded conservationist?

Questions about the place of music in Bushy Park emerged again several weeks later. While checking some mouse traps I noticed something that sounded strangely like recorded music. I pushed my way through the shrubby understory back out onto the public-access walking track where I shortly realized I was hearing the beat of a drum kit, a warbling electric organ, and some echoey vocals, all being propelled from a tiny speaker. Suddenly I recognized the song: it was Steve Miller Band's "Fly Like an Eagle". And it was coming from the phone of a sanctuary visitor. The visitor soon appeared as we came face to face. Hastily muting her phone, she apologized, telling me she usually enjoyed listening to the sounds of the forest's birds when visiting Bushy Park, but today she felt like listening to the radio on her walk and wasn't expecting to encounter anyone else. I laughed, commenting that it seemed wholly appropriate to be listening to a song about a bird in a place that is celebrated for its bird song!

Later that day I wrote in my fieldnotes: *It's only just occurring to me now that I've never heard recorded music in Bushy Park. Why is recorded music such a rare thing to find in a forest sanctuary? And why does it seem so out of place when it is there?* This encounter provoked me

to continue thinking about the place of music in a conservation soundscape, or rather its expected absence.

During these initial surprise encounters with fragments of Western musical culture in Bushy Park, but particularly with the "Fly Like and Eagle" encounter, I was struck by an apparent need for the suspension of everyday relations between people and recorded music for the sanctuary to function as a discrete socioecological space. If a defining sonic feature of modern life is the ubiquity of recorded music, whether in the private sonic-space of headphones, or the many public spaces where recorded music is broadcast—coffee shops, supermarkets, malls—then its general absence in places like Bushy Park is notable.[182] Is it another example of the strangely modern attempt to partition the ugliness of human culture (as popular music has been portrayed) from the beauty of non-human nature? I began to think that perhaps entering the forest demanded the suspension of normal musical listening practices. And perhaps Bushy Park, as a settler-colonial "technology of exception," not only affects the lives of the creatures who exist in and around it, but it also demands specific disciplined forms of engagement with sonic culture—I can listen to nature, but I cannot mix it with listening to music. It struck me that there was something to consider here regarding intersecting distinctions between the musical and the nonmusical, the natural and the cultural. In a place that felt defined by its vividly demarked border—the predator-proof fence—perhaps there was a sociocultural need to bolster this physical demarcation with practices of listening, including the exclusion of certain everyday sounds and habits of audition.

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[182] Marta García Quiñones, Anahid Kassabian, and Elena Boschi, eds, *Ubiquitous Musics: The Everyday Sounds That We Don't Always Notice* (Routledge, 2016).

In the previous chapter of this dissertation, I examined some of the unique bird sounds that populate Bushy Park, and what these sounds mean to the sanctuary's volunteers. If Bushy Park were to be understood as one instance of a conservation soundscape, then these might be considered the "sounds" of this *sound*scape. In the present chapter I begin to articulate the second half of Murray Schafer's famous neologism: the "scape" of a conservation sound*scape*. Here I focus on the place where the sounds are produced, heard, and contained. As I hope to have demonstrated across the previous chapters, what volunteers hear when they are in Bushy Park has a lot to do with what they are doing and where they are in the sanctuary. In the present chapter I thus begin refining my portrayal of the *whereabouts* of Bushy Park. As a uniquely defined space, the sanctuary offers volunteers the opportunity to at once participate in community-based nature conservation and to appreciate the sonic indicators of their work—the bird song. I attempt to contextualize this work and its correlated auditory experience by further articulating Bushy Park as a unique kind of space. Understandings of the sanctuary as such need not be limited to either the work that goes into constituting it nor the sounds that resonate within it. Rather, Bushy Park is an example of a space uniquely demarcated by the material boundary of the predator-proof fence. Taken at face value, the fence could simply be considered a *frame*, containing the sociocultural practices and values evidenced in the work of the volunteers and the sanctuary bird song many of them cherish. However, frames can have meaning in themselves, particularly when the spaces they compartmentalize are considered so distinct by the people who make use of the frame.[183] Therefore I use the present chapter to focus on some of the key aspects of Bushy Park that distinguish it from the outside world.

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[183] Gerald Mast, "On Framing," *Critical Inquiry* 11, no. 1 (September 1984): 82–109, https://doi.org/10.1086/448276; Verity Platt and Michael Squire, eds, *The Frame in Classical Art: A Cultural History* (Cambridge University Press, 2017).

To do this I pay particular attention to how the sanctuary is accessed, or just as often, how access to the sanctuary is denied. I approach this task of describing what might be considered the "boundary work" involved in defining Bushy Park as a distinctive conservation space.[184] Returning to particular discussions within music studies that have addressed the distinctions between the musical and the non-musical, I adopt a musical perspective for the task at hand. I engage these discussions by outlining the intriguing connections between Murray Schafer and one of his greatest musical influences, a central figure in 20th century art music, John Cage. Schafer's development of the soundscape concept was highly influenced by Cage's aesthetics. As I hope to demonstrate in the present chapter, it can be especially revealing to consider a relationship between Schafer's formulation of the soundscape concept, Cage's notion of a musical composition as a "frame" that contains a musical listening experience, and the borderwork involved in demarking conservation spaces like Bushy Park. More than just bringing into focus some of the cultural affinities that imbue the physical structure of the fence with its meaning, it also frames a discussion of how Māori are positioned within (and against) mainstream conservation in New Zealand.

Schafer's world composition

During the 1970s as Schafer was developing the soundscape concept, he was concurrently toying with a related idea: the "world composition." While it did not gain the equivalent notoriety of the soundscape concept within music and sound studies, it nevertheless expresses some of the same aesthetic and ethical issues he was wrestling with at the time. In *The*

[184] Hauke Riesch, "Theorizing Boundary Work as Representation and Identity," *Journal for the Theory of Social Behaviour* 40, no. 4 (2010): 452–73, https://doi.org/10.1111/j.1468-5914.2010.00441.x.

Soundscape, Schafer wrote of "treat[ing] the world as a macrocosmic musical composition", which he qualified as "an unusual idea" but nevertheless one founded in the preeminent ideas of John Cage.[185] Here Schafer refers to a letter he received from Cage in response to a query about his personal definition of music. Cage wrote to Schafer: "Music is sounds, sounds all around us whether we're in or out of concert halls: cf. Thoreau". In noting Cage's reference to philosopher Henry David Thoreau, Schafer suggests he has *Walden* in mind, where "[Thoreau] experiences in the sounds and sights of nature an inexhaustible entertainment".[186] By linking his "unusual" idea of a world composition to the aesthetics of a preeminent composer, Schafer neatly positions himself within an influential lineage of American thinkers, drawing together one of the earliest environmentalists with one of a contemporary disruptor of the Western musical tradition. And as Jeff Todd Titon has noted, Thoreau, beyond being a key figure in the development of modern environmentalism was also fascinated by natural sounds. In Thoreau's later years "listening became an important means toward his knowledge." [187] If Cage was implicitly situating Thoreau as an intellectual predecessor, then Schafer was possibly making the same gesture here in citing Cage citing Thoreau, situating himself in this lineage.

Schafer, like John Cage before him, and countless other composers, heard music everywhere in the experience of everyday life.[188] When Cage wrote to Schafer describing music as "sounds around us whether we're in or out of concert halls" he espoused what art historian and theorist Douglas Kahn describes as the "musicalization" of the world.[189] This musicalization

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[185] Schafer, *The Soundscape*, 5.
[186] *Ibid*.
[187] Jeff Todd Titon, "Thoreau's Ear," *Sound Studies* 1, no. 1 (January 1, 2015): 144–54.
[188] David Rothenberg and Marta Ulvaeus, eds., *The Book of Music and Nature: An Anthology of Sounds, Words, Thoughts* (Wesleyan University Press, 2001).
[189] Douglas Kahn, *Noise, Water, Meat* (MIT Press, 1999).

practiced by Cage, Schafer, and many other post-war composers has become a defining feature of contemporary art music aesthetics, "expanding the material and technical base while maintaining the autonomy of musical practice".[190] What is more, Kahn observes, "it casts musical premises far afield of their natural habitat, where music is further situated and supported through its incorporation into other practices and discourse of culture and aurality".[191] Yet, compared to Cage's radical appreciation for all sounds, including the urban and industrial sounds Schafer famously loathed, it's far from radical to say that natural sounds already assumed by the dominant culture as being beautiful can in some imaginative way be appreciated musically. Schafer even suggests this in an early publication when he quotes an entry from a 1956 Oxford dictionary on the definition of music, one being: ""pleasant sound e.g. song of a bird, murmur of a brook, cry of hounds".[192] Musicalization thus has its aesthetic limits for each composer, and Cage's were very different from Schafer's.

What they seem to share, albeit in different ways, is a concern with autonomy, or rather, a *letting go* of control over sounds. Cage expressed this in his claim that a composer should "give up the desire to control sound, clear his mind of music, and set about discovering means to let sounds be themselves rather than vehicles for man-made theories or expressions of human sentiments."[193] This is not as easy as it may first seem. Musicologist Benjamin Piekut observes this in his commentary on Cage's aesthetics:

> Sounds *are* themselves, yes. They push back, they surprise, they do far more than their inscriptions can indicate. But…they require much work on the part of Cage and others in order to exist. Instead of merely presenting us with natural things as they truly are, Cage

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[190] Kahn, 102.
[191] Kahn, 102.
[192] R. Murray Schafer, *Ear Cleaning: Notes for an Experimental Music Course* (BMI Canada, 1967), https://cir.nii.ac.jp/crid/1130282271405429632.
[193] John Cage, *Silence: Lectures and Writings, 50th Anniversary Edition* (Wesleyan University Press, 2012), 10.

> is embroiled at every stage of their transformation: observation, selection, amplification, measurement, inscription, quantization, and distribution.[194]

Piekut points to the tension at the heart of Cage's aesthetics between creative mastery and the abdication of all creative control.

While Piekut's comments may accurately reflect Cage's approach to creating notated scores, they apply less neatly to the composer's use of sound recording technology. Like Schafer, Cage saw in the phonograph and its technical progeny a potential means for letting sounds speak for themselves, albeit in ways that sought to expand normal human auditory reach (rather than representing the "perfect" natural auditory experience).[195] This line of thinking has been extended in recent sound studies scholarship that articulates the unique qualities of phonographically captured sound. Philosopher and critic Christoph Cox writes: "A phonograph record or magnetic tape is a sensitive surface that contracts and preserves vibrations. Yet the phonograph hears differently than does the human ear, whose habits of 'listening' have attuned it to articulate sound—speech, music, and the like."[196] Quoting media theorist Friedrich Kittler he rehearses a claim often espoused in sound studies that the phonograph "registers acoustic events as such". On this notion Cox goes on to quote Jonathan Sterne:

> Sound itself, irrespective of its source, became the general category or object…. Speech, music, and other human sounds were reduced to special categories of noises that could be studied by the sciences of sound. In acoustics, frequencies and waves took precedence over any particular meaning that they might have in human life.[197]

Whereas Sterne makes this statement within the context of a critical analysis of the influence of phonographic technology on modern cultures of listening, Cox takes it as a normative

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[194] Benjamin Piekut, "Chance and Certainty: John Cage's Politics of Nature," *Cultural Critique* 84 (2013): 151, https://doi.org/10.5749/culturalcritique.84.2013.0134.
[195] Douglas Kahn, "John Cage: Silence and Silencing," *The Musical Quarterly* 81, no. 4 (1997): 556–98.
[196] Cox, *Sonic Flux*, 86.
[197] Cox, 87.

affirmation of Kittler's view, and goes on to use it to situate Cage's aesthetics: "Cage's music is never about the signifier but always about the sonic real, sonic materiality itself.[…]*If music belongs to the symbolic, then sound belongs to the real.*"[198] Is this, following Sterne's reasoning, a conclusion that can only be drawn once the influence of phonographic technology on human perception has been thoroughly assimilated? I would suggest it points to the crux of an existing division between *music* as such and the *sound* that sound studies scholars are preoccupied with, or to put it like Cox, a concern "not with the communication of musical values but with an exploration of what Cage called 'the entire field of sound' and the nature, movement, and transmission of sound as a material, physical substance."[199] If the "entire field of sound" is another way of describing the "world composition," is it something that can only be detected with a sound recorder at hand?

Prior to beginning my field research, I had barely spent any time ruminating on Schafer's idea of a world composition, being preoccupied instead with the utility of the soundscape concept. Yet alongside this emerging theoretical commitment, I was occasionally reminded of Schafer's far more peculiar—and quite specifically musical—idea. I vividly recall one occasion sitting in the middle of the forest with my Zoom recorder listening to the birds, the wind in the trees, and the distant bellowing of cattle from beyond the sanctuary boundary. Suddenly it occurred to me that I was listening to the forest *as if it were a musical composition*. In this moment, the forest, a place I had come to know as a gridded network of traps and tracking tunnels, and secure habitat for endangered native birds, was suddenly presenting itself as a work

[198] Cox, 93 (emphasis added).
[199] Cox, 102–3.

of art. Bushy Park had taken on the persona of something far more specific than a conservation soundscape. Rather it appeared as a singular living, breathing musical composition.

Almost as its own kind of aesthetic experiment, I started to play with this notion in the proceeding months of field research. Although I had been steeped in the influence of musicology's thorough historicizing of the musical work throughout my graduate study, I felt inclined to simply see what would happen if I re-examined this concept in the context of doing field research.[200] Would it help magnify certain qualities of Bushy Park that would otherwise be barely visible? Rather than seeking to revive an outmoded notion of the musical work's autonomy, my provisional embrace of the concept could prove a way to further critique it.

As I played with this concept of the musical work during the later stages of my field research, I returned often to what I had learnt about the influence of romantic aesthetics on contemporary Western culture. I often considered how romanticism had overlapped with Europe's nineteenth-century colonial expansion and the extent to which the aesthetic and political power of each remain intwined, continuing to influence lives and cultures in the present.[201] For critics attuned to the cultural politics of settler self-indigenization, the romanticism of Schafer's world composition may also emit whiffs of ongoing aesthetic colonialism.[202] Reading Schafer's key publication *The Soundscape*, these critics would likely

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[200] Jerrold Levinson, "What a Musical Work Is," *The Journal of Philosophy* 77, no. 1 (1980): 5–28, https://doi.org/10.2307/2025596; Lydia Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (New York: Oxford University Press, 1992); Leo Treitler, "History and the Ontology of the Musical Work," *The Journal of Aesthetics and Art Criticism* 51, no. 3 (1993): 483–97, https://doi.org/10.2307/431520; Stephen Davies, *Musical Works and Performances: A Philosophical Exploration* (Clarendon Press, 2001); Gavin Steingo, "The Musical Work Reconsidered, In Hindsight," *Current Musicology*, no. 97 (April 1, 2014), https://doi.org/10.7916/cm.v0i97.5326.

[201] Kevin Douglas Hutchings, *Romantic Ecologies and Colonial Cultures in the British Atlantic World, 1770-1850* (McGill-Queen's Press - MQUP, 2009).

[202] Nigel Leask, "Decolonizing Romantic Studies," in *Decolonizing the English Literary Curriculum*, ed. Ankhi Mukherjee and Ato Quayson (Cambridge: Cambridge University Press, 2023), 386–403, https://doi.org/10.1017/9781009299985.021.

note the way Schafer integrates the myth of Indian disappearance into soundscape composition's origin story:

> A West Coast Indian girl taught me how to listen to the voices of the trees through the bark of their trunks. "They tell the story of my people," she said. When the white men arrived in British Columbia, they could not teach the Indians to use the mechanical saw, or to fell trees in such a way that one tree could be made to knock down four others—the so-called domino technique. When the spirit of the deity inhabits the tree, one hesitates. Today, as the forest industry bevels down the woods, no one hears the frightened cries of the tree victims.[203]

In his wistful conclusion, Schafer might be seen to express the assumption that there are no longer any native people to hear the nonhuman suffering of old-growth forests being clear-felled.[204] With the Native having disappeared, Schafer, as the figure of romantic composer, enters to fill the gap, tapping directly into nature, a gesture seen to run throughout the Western art music tradition's ongoing support of the composer as genius.[205]

As a settler of America's far-north, critics may also believe Schafer assumes his geographic isolation from urban density affords him a closer connection with pre-colonial nature. The figure of the rugged frontiersman appears in the work of numerous soundscape composers, as Erik DeLuca notes in his discussion of John Luther Adam's work (touched on in Chapter 1 of this dissertation).[206] Soundscape composer Brian House has reflexively observed this tendency in the aesthetics of soundscape composition more generally—a kind of transcendent listening that ultimately does more to barricade listeners from natural systems than help them recognize their situatedness within them.[207] This aesthetic position is reflects a broader settler colonial impulse

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[203] Schafer, *The Soundscape*, 84.
[204] Roxanne Dunbar-Ortiz and Dina Gilio-Whitaker, *"All the Real Indians Died Off": And 20 Other Myths About Native Americans* (Beacon Press, 2016).
[205] Mary Hunter, "'To Play as If from the Soul of the Composer': The Idea of the Performer in Early Romantic Aesthetics," *Journal of the American Musicological Society* 58, no. 2 (August 1, 2005): 357–98, https://doi.org/10.1525/jams.2005.58.2.357.
[206] Deluca, "Selling Nature to Save It."
[207] Brian House, "Against Listening," *Contemporary Music Review* 36, no. 3 (May 4, 2017): 159–70.

to separate people from nature. Natural sounds represented in soundscape composition can quite easily evoke places without people. As I suggest in Chapter's 1 and 3, however, whether it is romanticism that has bolstered this aesthetic, or a broader phonographic metaphysics remains a question very much open.

This returns me to the question of the soundscape concept's musicality. What I ultimately find the most difficult to contend with in the critiques I have outlined so far are their unrelenting *oppositional* quality: The soundscape concept *must* be decoupled from its musical origins for it to wield sufficient theoretical legitimacy to meet the scientific standards of sociocultural research. On such terms music is whatever happens beyond the realm of what can objectively and dispassionately be described as encompassing the soundscape as such (perhaps it should even be *protected* from this noisy, unpleasant acoustic environment). What would happen if instead—without any expectations or judgement—I was to consider Bushy Park on the terms of a musical composition?

As I hope to show throughout the rest of this chapter, doing so can open a line of thought for the descriptive and analytical task of portraying Bushy Park ethnographically: *like* a musical work—to treat it *as if*. I wanted to push beyond the assumption that there lies an opposition between "music as symbolic" and "sound as real". My attention to Bushy Park's frame-like qualities became an exercise in developing the imaginative potential of a musical work, letting it spill outside its conceptual boundaries of the concert hall and into the world around it. I wanted to consider the sanctuary as a place that could be understood both by its material borders and its conceptual capacity to contain ideas about nature, culture, music and that which exists beyond music. Since then, my task of writing about this experience has been to evoke a place bound not only by metal, wire, nails, and wood, but also by shared understandings of what sounds should

and should not be heard within the fence's borders. If the musical work remains a dominant signifier in a culture still living in the shadow of Romanticism, then it might offer some clue as to how boundaries between nature and culture are policed, and how cultural others are excluded from participating in the preservation of nature.

Framing Bushy Park

The weekly fence check begins on the sanctuary's north-eastern boundary, just a five-minute walk from the volunteer shed. I follow the boundary counterclockwise, the total circuit taking a couple of hours. The fence itself is made from thick mesh wire, secured to sturdy poles spaced a couple of yards apart. It is about seven feet tall, topped with a thick steel sheet, about a foot wide facing outwards that prevented animals from crawling up and over the fence into the sanctuary. At the base of the fence the mesh wire continues down into the soil about six inches, folding inwards. There is a gap an arm's width between the fence and the forest edge all the way around the perimeter of the sanctuary. The task of a fence check involves maintaining this gap, pruning away any shrubs or branches that were reaching out towards the fence. I leave the kawakawa shrubs as these had been ear marked for regular harvest by the local iwi. Sometimes I pick a leaf and chew on it as I continued my fence check. The leaf's hot peppery oils, released as I chew on it, numbs my mouth.

The stretch of grass between the forest and fence is regularly mowed, and the base of the fence is sprayed with herbicide to prevent weeds from obscuring any potential holes or damage. The resulting bare soil edge is a popular location for some of the sanctuary's birds to use as a dust bath. Over the years, the gradual wearing-away of this soil has exposed the base of the mesh

fencing. This sometimes required the volunteers to secure long strips of timber to the fence base, leaving about a four-inch gap to fill in with extra soil.

During a conversation with Alethea, she commented on the sound of the wind whistling through the boundary fence. “It was like ‘oh isn’t this wonderful.’ Even though there wasn’t much wind, it created quite a strong sound. The sound that it produces, it just adds a dimension to the fact that it’s a predator proof fence with this beautiful sound.” Another volunteer described the sound of the fence as spooky, evoking the sound of the moors. This suggests a memory of a pre-colonial place, not in New Zealand but in England. The place of the settler “before”, whether known in reality or imagined, produced through the cultural representations of a homeland. If the sounds of a South-Pacific rainforest represent the chaos of a colonial encounter, then the sounds of a British Isle moorland stand for a home that was never known but provides the backdrop for a settler existence. In novels like Wuthering Heights and The Hound of the Baskervilles the open moorlands of rural England stood for an untouched, uncivilized, and terrifying nature quite appealing to the nineteenth century Romantic imagination. The imagined world from this moment in literary history most spatially consistent with the fenced forest of Bushy Park is likely to be Frances Hodgson Burnett’s The Secret Garden. An Edenic enclosure, Burnett’s garden is a peaceful retreat from the surrounding “wide expanse of black ocean” of the Yorkshire moorlands, which emitted a “wild, low, rushing sound”.[208] Although Bushy Park is surrounded by agriculturally productive pasture, the sound of the fence can still evoke an imaginative border between the managed nature (the garden) and unmanaged nature (the moorlands). The fence may thus be thought of as Bushy Park’s outermost layer, not only physically, but sonically as well.

[208] Frances Hodgson Burnett, *The Secret Garden* (Scholastic UK, 2013), 51.

From the boundary edge, the stark contrast between the virgin rainforest and heavily grazed pasture is most evident. The north-eastern boundary looks out across miles of grassy flats speckled with sheep and cattle. In the distance are rolling hills covered in pine-forest plantations. Any sheep grazing near the fence scatter as I move my way along, heading west. Cattle are usually a bit more curious, watching me approach with their heads bowed, peering at me cautiously. During the lambing season (late July through September) the lambs will follow closely behind their mothers. Flecks of white dot the green fields: an occasional dead lamb, overcome by acute diarrhea or unable to bear a particularly cold night, slowly decay into the pasture. Fiona told me that during her time running a plant nursery, she had tried to get farmers to grow more native trees on their farms, not only to enhance biodiversity but to create shelter and protection from the elements for livestock. I would often think of Fiona's plea whenever I noticed a dead farm animal lying in the paddock on the other side of the fence.

Along this edge of the sanctuary, a few yards beyond the boundary fence are the remnants of an old farm fence, what once protected the forest from grazing animals but would have been useless at preventing smaller mammals that would prey on the forest's avian inhabitants. This was a reminder of the change in forest management practices over time, from an effort to manage introduced farm animals to one prioritizing the protection of native bird species. The old fence, no longer functional, was simply left to slowly decay. Some of the oldest batons would have been made from timber felled from the forest itself. These native hardwoods were naturally resistant to the weather, and often lasted longer than the newer chemically treated batons milled from fast growing pine trees. Further along the boundary fence, the only evidence of any recent felling are the stumps of several giant Monterey cypress, most likely planted in the early part of the 20th century and felled only a few years ago. The trunks were dropped into the

sanctuary, smothering the trees and shrubs below. In the years since, the undergrowth had regenerated, and the giant decaying trunks were now obscured by fresh green growth of native plants slowly returning.

After reaching the most northern point of the sanctuary, the fence begins to descend north-west into a gully to a culvert where water drains from the western edge of the forest. Looking out across the farmland beyond the fence, I see the flat plateaus droop into green grassy gullies, ribbed with sheep trails, occasionally disrupted by a muddy slip where the hillside has given way after heavy rain. Less than a century and a half ago, this pasture would likely have been cloaked in dense lowland rainforest.

Passing the entrance to one of the main trapping-line arteries named “Kiwi Ridge”, I soon turn a corner and begin heading south-west. The adjacent pasture is flat with some small patches of remanent native bush. One lone cabbage tree stands in the paddock, the last fragment of native fauna amongst a sea of exotic rye grass, nourished regularly by imported synthetic fertilizer.

As I near the most southern point of the sanctuary I pass a large grove of karaka trees inside the sanctuary tucked amongst the other native trees. While the karaka species is recognized by botanists as being native to New Zealand, it is often identified as a pest plant in regions outside its natural range because of its capacity to self-seed prodigiously and grow much faster than the seedlings native to the region, in turn overshadowing them and slowing their regeneration. Volunteers were sometimes confused as to the status of karaka: was it exotic or native? How could it be native if it was considered a pest species? There was also the fact that

Māori had cultivated and regularly harvested karaka prior to European colonization, their berries when treated being a nutritious food source.[209]

From the southern boundary of the sanctuary, I can look out across some of the last paddocks of pasture remaining within the fence. When I began my field research, cattle were still grazing these paddocks; by the end, they were gone, leaving the paddock to be dotted with hundreds of planted native seedlings (and grassy weeds) as part of the sanctuary's largest revegetation efforts so far. From the southern boundary of the sanctuary, I can see the Tasman Sea, dividing New Zealand from Australia. On clear days Kāpiti Island—one of New Zealand's first eco-sanctuaries, can just be made out on the horizon.

Along the south-eastern boundary, I head back toward the driveway. To connect back to where I started my fence check, I cross through a smaller paddock with large gum trees to the right where dozens of kererū (native pigeons) would roost during the spring. Sometimes they would swoop across the field in massive flocks making a tremendous noise. Kereru were regularly hunted by Māori prior to European colonization of New Zealand. Since their protection under the 1953 Wildlife Act, hunting kereru has been outlawed. This has not eliminated the cultural practice outright, and it is known to continue occasionally throughout the country.[210] One volunteer admitted to me having eaten kereru many years earlier when it was offered to her on a hiking trip.

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[209] Robin Amber Atherton, "Ngā Uri o Karaka : A Genetic Study of the Karaka/Kōpi Tree in Aotearoa/New Zealand : A Thesis Presented in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Genetics at Massey University/Te Kunenga Ki Pūrehuroa, Palmerston North/Te Papaioea, New Zealand/Aotearoa" (Massey University, 2014), http://hdl.handle.net/10179/5715.
[210] Philip O'B. Lyver et al., "Tūhoe Tuawhenua Mātauranga of Kererū (Hemiphaga Novaseelandiae Novaseelandiae) in Te Urewera," *New Zealand Journal of Ecology* 32, no. 1 (2008): 7–17.

Because of the few farm animals still living within the sanctuary boundary while I was completing my research, I got the smallest flickers of what it might be like to sustain a livelihood in regular contact with farm animals. On one occasion while doing a fence-check I was walking through the paddock between the wetlands and the entry to the sanctuary. Heading toward the main gate I came directly across several grazing cattle. As they saw me walking in their direction, they became quite curious, first walking and then running towards me. I felt intimidated but tried to casually shoo them away. They flinched at my gestures and slowed their gaits but did not seem especially afraid. I had been told by other volunteers that the cattle can be "quite lively", but I have nothing to worry about, as long as I can show them "who's boss". The cattle let me walk by and I made it to the gate untouched. I realized however, that I was feeling very ready to protect myself if they had charged at me, rehearsing in my head the violence of yelling, kicking, and punching the animals in self-defense. It made me think how much easier it must be to kill animals while overcome with fear, recognizing the creature you are killing may be an imminent threat to your own safety.

Resonant boundaries between nature and culture

Rarely would volunteers spend time working on the other side of the fence. While pest control took place in the paddocks surrounding the sanctuary, this work was done by a paid contractor, who would set and check large DOC 200 traps every few hundred meters along the fenceline. A local farmer also helped manage the rabbit population by going on the occasional hunt with a rifle. Occasionally, however, an unexpected issue might arise that required the volunteers to hop the fence. Mostly, these tasks were related to potential incursions. On several occasions I was assigned a task to help manage the rampant rabbit population in several

paddocks next to the sanctuary. The biosecurity concern was that the rabbits would burrow under the fence and enter the forest. I was initially surprised that rabbits would be considered a threat to Bushy Park. When I raised this query with another volunteer, I was told that although rabbits don't prey on birds, predators like rats and stoats would follow them into the park through their tunnels.

Throughout the duration of my field research the population remained steadily too high, which Mandy considered one of Bushy Park's most pressing biosecurity threats. One of my first tasks at the sanctuary was to help Mandy fill in rabbit burrows. This was a slightly grim task given that juvenile rabbits were possibly still in the burrows (and closing in the burrowing would likely result in their slow suffocation). While shoveling dirt into the holes dotted throughout the paddock, I noticed several rabbits scurrying away from us along the sanctuary fence line. I expected they would be back soon enough to investigate our interference. Later we saw a family of pukeko nearby, equally eager to avoid us. Pukeko are one of the few New Zealand birds that thrived in the face of deforestation and agricultural conversion. They now breed comfortably on farmland throughout the country. One of the parent pukeko scampered away from the fence across the pasture, perhaps trying to distract us away from the brood of chicks. To my surprise, the other parent flew over the fence into the sanctuary leaving the baby birds stuck on the wrong side. It is not uncommon to spot Pukeko in a pile of bloodied feathers on the side of roads throughout the country—along with the introduced Australian possum, pukeko are one of New Zealand's most common "roadkill" species.[211]

[211] The bird's Māori name is commonly used in conservation and amongst the New Zealand public. Its Māori name was possibly cemented in New Zealand culture with the 1981 Christmas song "A Pukeko in a Ponga Tree" (a slightly tongue-in-check "kiwiana" revision of the classic English Christmas song "Twelve Days of Christmas").

We also found a dead stoat lying next to a DOC 200. It may have been killed by the trap and the contractor had discarded it nearby when resetting it. If so, the stoat remained well intact (the DOC 200 traps are powerful and easily crush the body of a small stoat). There wasn't any obvious damage to the animal's head or body. It was as it if had dropped dead at the sight of the trap! As another example of settler's efforts to reimagine New Zealand in their northern-hemisphere image, the introduction of stoats and other mustelids was intended to help eradicate the recently introduced rabbits, which had proliferated to a point where they were outcompeting sheep and cattle for pasture. Introducing the stoat turned out to be a disastrous attempt at "biocontrol", leading to a massive decrease in the country's native fauna as the stoats proliferated by ignoring the rabbits and instead feasting on nesting birds and their eggs. Today we are now stuck with the dual task of killing rabbits *and* stoats, while having to double down on efforts to protect endangered native birds.

Bushy Park's boundary fence implies a definitive barrier between an environment that is viewed as quintessentially natural and another that is marked by the influence of modern industrial society. It frames the inside of the sanctuary as pure nature (native birds, untouched rainforest) and the many kinds of creatures living just beyond the sanctuary's borders are marked as the product of human culture. Yet despite the obvious material barrier between the sanctuary's inside and outside, the ongoing maintenance and attention to its relatively fluid borders suggests the relationship between the life on both sides of the fence somehow reinforces a perceived distinction between the two. If there was no fence at all, there would be far less a sense of the significant differences between those creatures that live in the forest and those living in the surrounding pasture. Rats and stoats lucky enough to avoid the DOC 200s would again prey on hihi and tīeke. The cattle would amble through the forest, browsing on seedlings and ferns.

Sheep would seek shelter from wet weather when lambing. The inner natural, as carefully curated (and thus fundamentally cultural) as it is, would be subsumed by the mass of animals that make up the much larger proportion of New Zealand's non-human animal population. But this is not the case. The fence remains standing, well-maintained by dedicated volunteers, and it continues to perform the borderwork of New Zealand nature conservation that positions eco-sanctuaries like Bushy Park as its jewel in the crown.[212]

It is this peculiar distinction between nature and culture, at once highly contrived, yet also so seemingly necessary, that I found myself ruminating on frequently while undertaking fence checks and many other fence-related tasks throughout the duration of my field research in Bushy Park. While it was obvious how effective the fence was for segregating endangered native birds and their habitat from introduced animals like sheep, cattle, rats, rabbits, and stoats, I often wondered what kind of life the forest could support without the fence. As powerful a frame as the fence was in regimenting the lives of managed creatures living within and around it, there seemed no obvious "natural" inevitability that the lives of these creatures and their descendants should continue this way.

I was reticent to share these thoughts with the volunteers, not wanting to imply I had doubts about their collective project. However, I did speak with Mandy near the end of my field research about the significance of the fence in the sanctuary's conservation mission. I was not surprised by her response, which indicated an unwavering commitment to the fence's essential status. While she saw long-term potential to expand the forest beyond its present borders, the resulting rise in predator numbers would be daunting to manage. We spoke about the potential to

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[212] Guojie Zhang, James Higham, and Julia Nina Albrecht, "(Re)Creating Natural Heritage in New Zealand: Biodiversity Conservation and Tourism Development," in *Creating Heritage for Tourism*, ed. Catherine Palmer and Jacqueline Tivers (Routledge, 2018).

create “corridors” between Bushy Park and nearby forests, allowing birds to safely migrate to and from the sanctuary. I was surprised by a note of skepticism when I raised this idea. As we chatted more it felt as though she expected Bushy Park’s threatened bird populations to live out their evolutionary existence within the bounds of predator-proof-fenced sanctuaries.

Once something finds its way within the protected boundaries of a cherished cultural environment, it may seem hard to imagine that thing surviving outside its walls. The boundaries between the sanctuary and the outside world, as with a concert hall and the urban environment surrounding it, require ongoing maintenance to guarantee their physical and ideological integrity. Reflecting on this association, I find myself drawn to considering the aesthetic impulses and inheritances that motivate a continued push for preservation of such boundaries. If a conservation soundscape can be compared to a concert-hall soundscape it may be worth considering the cultural affinities that help bind the communities who support and benefit from these unique places.

Throughout the duration of my field research and in the years since as I continued to reside in Whanganui, whenever I attended a local classical music concert, I would expect to see several of the volunteers I worked with at the sanctuary. For some volunteers it seemed their dedication to conservation was mirrored in their patronage of the arts. I recall my first day volunteering at Bushy Park chatting with Dave—whose daughter-in-law happened to be one of my violin teachers as a child—about classical music. In the following months I would talk regularly with other volunteers while working in the forest about their love of classical music. Often, I felt their knowledge of Western classical music was far richer than my own, and it would be fair to say I had as much to learn from them about Beethoven piano sonatas as I did working as a conservationist in a forest sanctuary. Yet rarely during these conversations was an

explicit connection made between their love of classical music and commitment to conservation work. To comment on the connection would have seemed odd. Rather it was taken as a given: the people who volunteered as conservationists were, in general, lovers of classical music. However, if classical music was something that could be discussed inside Bushy Park, as a performative practice, it was to remain largely outside the sanctuary's gates.

I would argue that these interrelated cultural affinities, at once nurtured and demarcated by the boundary fence, express again a much larger issue regarding the ongoing tension between the arts and sciences in modern Western culture, which I began to discuss in Chapter One. Reflecting on the volunteers' relationship between music and conservation, I want to delve further into one aspect of this tension: the notion of *organicism*. As a concept that has preoccupied music critics and scholars since the nineteenth century, organicism continues to stimulate academic discussions regarding the relationship between culture and nature.

During the 1990s many musicologists came to associate organicism with regressive social and political values due to its perceived relation to German nationalism. Particularly influential is Susan McClary's critique of organicism, which focused on music analytical comparisons of musical forms with biological life.[213] Noting Schenker's reference to "procreative urges" throughout his influential text *Harmony*, McClary views his organicism as analogous to psychotherapy's rationalizing of madness. Like the psychoanalysts "whose business it was to detect the logic hidden behind aberrant behaviors" music analysts aimed to show "that moments of apparent madness are, in fact, ultrarational.[214] McClary sees Schenker's project as one of distinguishing between the "*responsible* excess" of the nineteenth century repertoire from

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[213] Susan McClary, *Feminine Endings: Music, Gender, and Sexuality* (University of Minnesota Press, 2002), https://hdl.handle.net/2027/heb06265.0001.001.
[214] McClary, 104.

the "genuinely deviant" chromaticism of early modernist compositions.[215] Schenker's organicism, for McClary, is thus intimately related to a patriarchal German romanticism and its offshoot in late-nineteenth century rationalism.

In recent years, however, musicology's prevailing interest in romanticism has evolved into a revival of organicism, expressed in a curiosity about the musicality of the non-human world. Musicologist Holly Watkins has applied posthumanist theory to look at moments in the histories of music, philosophy, and science where music was considered less a human phenomenon alone and more a phenomenon that mediates between the lives of human species (singular) and nonhuman species (plural).[216] She points to numerous examples throughout the nineteenth century where music was used to determine the presence or absence of living entities' sentience, moral worth, and their relationship to other living entities. Conversely, she shows how music during this period was both "brought to life" and "denied life" through attempts to compare or contrast it to living entities, human and nonhuman.

Watkins' integration of posthumanist theory with musicology prompted her to ask a broad question concerning the "life"—or "vitality"—of music. What constitutes music's vitality? And is the vitality of music comparable to the vitalities of humans and nonhumans? To answer this question Watkins turns to the philosophical issue of music's ontology. Quoting philosopher Kathleen Marie Higgins, Watkins promotes the view that "[w]e hear music as a manifestation of vitality…and part of our enjoyment is empathy with its liveliness."[217] Empathy is commonly assumed to be a human capacity to imagine the experience of other humans or sentient beings more broadly; to say that the listeners of music "empathize" with an aspect of its nature—it's

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[215] McClary, 105.
[216] Holly Watkins, *Musical Vitalities: Ventures in a Biotic Aesthetics of Music* (University of Chicago Press, 2018).
[217] Watkins, 1.

liveliness—implies that music's listeners share something essentially vital with the music being listened to. However, this liveliness, or what Watkins calls "animation" is "not biological, but not merely illusory either."[218] It is emergent, a whole that cannot be reduced to parts, an enigmatic entity whose essence exists beyond part-whole relationships. The being of music cannot be reduced in the same way that modern science is inclined to reduce the lives of most living entities. Yet, it can be used to *imagine* these reducible lives. Music can provoke its listener to imagine the lives of others just as it can allow listeners to imagine their own lives. Thus, for Watkins, music has two ontological "vital" capacities: "to stimulate and simulate life."[219] Accordingly, music effects and affects life but it does not possess life. Rather, its vitality lies in its capacity to *mediate*.

While attentive to the connotations of organicism as "a relic of Austro-German chauvinism,"[220] Watkins nonetheless wants to revive an element of this romantic organicist aesthetic. Less interested in thematic unity and teleology, she sees in organicism a potential for a renewed theoretical and critical engagement with the aspects of music that exhibit certain organic qualities. Watkins' aim is thus to develop a "critical organicism" that develops conceptions of music as a facilitator of relationships between various living organisms, human and nonhuman.

Watkins' reformulation of organicism offers an interesting way to begin engaging with the problematic I note above regarding the subtle yet vital relationship between a conservation ethic and classical music aesthetic embodied by many of Bushy Park's volunteers. It would seem that music facilitated some kind of relationship between the work of caring for nature in the

[218] Watkins, 1.
[219] Watkins, 2.
[220] Watkins, 11.

sanctuary and supporting culture in local concert halls. Yet for many of these volunteers, appreciation and care for the vitality of a native bird and the vitality of a musical composition, while complimentary, existed fundamentally in disparate spheres: inside and outside the sanctuary. Exceptions to the rule were unanticipated (Mandy's surprise comment that "the birds were singing to us"), if not oddly synchronous (the recording of Steve Miller Band's "Fly Like an Eagle" playing on the visitor's phone).

Clearly, however, for two things to exist in two discrete places doesn't preclude their interactions. Bushy Park was where the volunteers travelled to and from, entering through the two sets of gates that provided an "airlock" between the outside and the inside of the sanctuary. Like the mice stowed away in camper vans, soon to be running free, feeding and procreating once escaped into the sanctuary, perhaps the vitality of the musical lives the volunteers lived outside Bushy Park were also able to creep in on their own accord. It is an appreciation for vitality more than anything else, that seemed to buoy the volunteers—whether birds, plants, or the community that emerged from the work itself. If we can look at soundscapes as places that emerge from the activity and experience of human labor—the soundscape of Bushy Park standing as a salient example—then maybe we can follow Watkins and consider where the revival of certain outdated concepts like organicism could direct our attention as ethnomusicologists. Perhaps the work concept, long historicized and denuded of its explanatory potential, may now have something to add to conversations within music and sound studies that in their earnestness to account for pressing global issues like climate change and biodiversity loss have forgotten what affordances music can bring to our collective cultural and political projects. To quote musicologist James Currie's "temporary conclusion about music in a time of ecological disaster: when one's place is threatened with destruction, one of the places that one can take up

residence is in the oddly displaced place that is musical performance itself."[221] To search for a home in the work concept and its historical effect need not manifest as a form of cultural chauvinism but offer a route into the imaginative potential afforded by musical practice, appreciation and pleasure: to walk in Bushy Park AND listen *unashamedly* to Steve Miller band; to host classical music performances in the forest, [222] or as I speculated in my notes near the end of my field research *"to host a Bob Marley tribute concert on the lawn of the homestead"*[223]— these could be the routes that lead us to a place of restoration, where the vitalities of nature and culture would be free to converse; blazing these paths is work I would support.

With larger historical forces continuing to constrain nature conservation in New Zealand (as I discuss in the section below) like other nations still shrouded by the trauma of colonialism, scholars and artists who feel constrained by the cultural tradition they happen to have inherited may want to start scavenging amongst the debris around them to find the resources they most urgently require. Indigenous scholars are forever telling settler researchers that most of the solutions to decolonization will not be found in the worldviews of the cultural other. Rather they should be turning also to their own histories and narratives for some of the answers to questions they may not yet know how to ask. Life can flourish beyond the boundary fence of the sanctuary and the walls of the concert hall, but it might not yet be waiting at the gate ready for an official welcome.

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[221] Currie, "There's No Place."
[222] "Sounds of the Sanctuary Concert at Bushy Park, Whanganui," NZ Herald, December 17, 2024, https://www.nzherald.co.nz/whanganui-chronicle/whanganui-midweek/sounds-of-the-sanctuary-concert-at-bushy-park/VFF2IIMPNRBDFE5LOBJTSNNGNE/.
[223] Matthew Bannister, "Come a Long Way: Bob Marley, Reggae, and Aotearoa / New Zealand Popular Culture," *Rock Music Studies* 6, no. 2 (May 4, 2019): 87–97.

Crossing the sanctuary's border

On a mild spring morning I squeezed into Mandy's Nissan Leaf along with three other researchers who had been doing work at Bushy Park. Mandy was about to drive us to meet the CEO of Te Kaahui o Rauru and some of his staff. Te Kaahui o Rauru is the iwi organization that represented the people of Ngā Rauru Kiitahi and was involved in the kawakawa harvesting around the boundary of the sanctuary. We were all at various stages of research projects that included studies of aspects of the sanctuary. One of the researchers was a senior scientist who had been involved in work at Bushy Park since the late 1990s, playing an important role in supporting the translocation of various native bird species into the sanctuary. He had been based at a university south of Whanganui for several years. From here he regularly brought his students into Bushy Park for class visits and various research projects. The senior scientist was not born in New Zealand, but had live here for most of his life and was married to a Māori woman. On this day he was supporting a younger Māori scientist, a former student, who was in the process of applying for a scholarship that sponsored emerging Māori researchers with early-career projects. Joining us was Emma, who also wanted to share some of her work to date with the iwi. I was excited but nervous to be formally introducing my research to members of an organization that the Bushy Park Trust considered one of the sanctuary's key Māori stakeholders. The CEO of Te Kaahui o Rauru sat on the sanctuary's Board, representing the local Māori people in its governance and strategy. I had met him several months earlier at Bushy Park where Mandy had introduced me. He showed interest in my research when I had the opportunity to mention it in conversation, so I was looking forward to providing more detail about the direction it was headed.

On our short drive to the iwi office, we chatted about some of the recent conservation work happening at Bushy Park. I asked the senior scientist about the work he had done during the translocation of toutouwai into the sanctuary around a decade earlier. Referring to the birds by their common English name, I mistakenly called them “black” robin, not North Island robin as they are properly known. The scientists in the car giggled at my mistake, correcting me. Black robin is the common English name for karure, which are now extremely rare, only surviving on a small uninhabited island several hundred miles off the coast of New Zealand’s South Island. I felt embarrassed by my novice mistake, sitting in a car of conservation scientists who knew much more than me about the species of birds that lived in Bushy Park. It was a small slip up, but it seemed to indicate my outsiderness as a social researcher amongst a group of natural scientists.

We soon arrived at the office. It was a small bungalow that had been converted into an office space, surrounded by modest homes, blinds closed, no cars in the driveways. Mandy, who had been to the office previously, led us to the front door where we were greeted warmly by the incorporation’s CEO. Mandy new him well, having worked on the Board with him for the last few years, gave him a hug. The senior scientist introduced himself, leaned into hongi (the pressing of noses that is a common formal greeting in Māori culture). I shook the CEO’s hand and smiled awkwardly. He didn’t seem to remember me, so I introduced myself again. We filed into a small meeting room and sat down around the board table to wait for the rest of the staff to join us. I noticed a whiteboard to the side of the room, with financial data scrawled across it. I could hear laughter coming down the hallway as the rest of the staff made their way into the meeting room.

After an opening karakia (prayer) and some brief introductions, we researchers were given the chance to introduce the work we had been doing at Bushy Park. It seemed like most of the iwi staff had been to the sanctuary before—they all nodded along as the scientists described the various birds and areas of the sanctuary, they were focusing their research on. When it came time for me to introduce my work, I felt a bit out of place amongst the scientists in the room, yet still confident I had some work to share that would if nothing else spark some curiosity. I described my role as a PhD student, my interest in the ways the volunteers who presently work in the sanctuary engage with the sounds of the forest, and how I spent much of my time as an ethnographic researcher working alongside the volunteers. The CEO smiled politely as I explained my work, but quickly moved on to discussing the research funding the younger scientist was seeking to acquire. He wanted to know more about where she was from and who she knew. The iwi seemed keen to support the young scientist, but it was crucial that they understood her background and possible connections to the area and local people. She expanded on her links to the neighboring iwi, who Ngā Rauru had worked closely with on various economic and environmental projects. The office staff seemed interested and supportive of the young scientist's work and were keen to speak with her again for an update once she had begun her work at Bushy Park.

The CEO quickly closed the meeting with another karakia and then invited us into the kitchen to share some kai (food). As I stood awkwardly in corner of the kitchen, nibbling a biscuit while the scientists chatted and sipped on their mugs of tea, one of the iwi staff approached me. "Did you say you were an ethnomusicologist?" He was a younger man with long dreadlocks and a serious face. "That's right! Not many people are familiar with it" I said. "Well, I'd heard of it before" he replied. "My cousin is studying ethnomusicology. She works with our

people and their waiata [song] along the Whanganui River." I was thrilled to chat with him about his cousin's work and share some more of mine. He wasn't quite sure how it related to ethnomusicology, but we were able to discuss some of the various bird calls we had each heard at Bushy Park.

Soon after our shared kai, we were one our way back to Bushy Park in Mandy's Nissan Leaf. The car ride was quieter on our way back. I wondered how the meeting had gone and what would come of it in the future. Was this just a formality? Or was it a shared effort to build stronger links between the work happening within Bushy Park, and the local Māori iwi? I recalled a volunteer musing several months earlier about why more Māori did not seem interested in conservation. It was true that the group of volunteers who worked at Bushy Park were mostly Pākehā, and to my knowledge none of the regular volunteers I worked with had Māori ancestry. I was always hopeful that I would be volunteering on a day when the kaimahi (workers) from Te Kaahui o Rauru were on site to harvest the kawakawa, but the timing never aligned. Why wasn't this considered a part of nature conservation, I wondered. And what would it take for this cultural practice to find acceptance in the mainstream of New Zealand conservation?

Conservation reform in New Zealand has sought to better recognize the relationships Māori have with their tribal land and the cultural values they attribute to nature.[224] Living in the town of Whanganui, which is named after the river that runs through its center, it is hard not to know about legal innovations that assert to recognize indigenous world views and ontologies.[225]

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[224] Jacinta Ruru et al., "Reversing the Decline in New Zealand's Biodiversity: Empowering Māori within Reformed Conservation Law," *Policy Quarterly* 13, no. 2 (May 1, 2017), https://doi.org/10.26686/pq.v13i2.4657.
[225] Christopher Rodgers, "A New Approach to Protecting Ecosystems: The Te Awa Tupua (Whanganui River Claims Settlement) Act 2017," *Environmental Law Review* 19, no. 4 (December 1, 2017): 266–79,

The Whanganui river was the second natural entity in New Zealand (after Te Urewera National Park) to be attributed legal personhood in 2014. As a novel form of environmental legislation drafted in extensive consultation with the local Indigenous people, it quickly gained academic attention around the planet. As innovative as this legislation was, it seemed to have barely caused a ripple to the mainstream of conservation practice across the country, not even somewhere as close as Bushy Park, only a 30-minute drive from the banks of the Whanganui River. While proponents of the legislation see it as an opportunity to spark changes in environmental management that reflect a Māori world view, critics of the legislation see it as a state-driven effort to maintain power over land that was forcibly taken from local people by a colonial government. As geographer Brad Coombes writes, describing a similar legislative change that occurred with Te Urewera National Park: "Biased expectations that Indigenous communities will support conservation have triumphed over an Indigenous right-to-development in the past, so some are skeptical that recognition of nature's rights can also address their own rights."[226] Coombes sees such legislation as building on a model of "rights to recognition," which along with numerous other Indigenous scholars he considers "an identity politics that fails to reauthorize Indigenous polities and may mis/recognize the causes of Indigenous circumstances."[227] With mainstream conservation methods remaining fixed in place, the earlier legislation that banned the harvest of native species (legislation couched in modern Western

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https://doi.org/10.1177/1461452917744909; Liz Charpleix, "The Whanganui River as Te Awa Tupua: Place-Based Law in a Legally Pluralistic Society," *The Geographical Journal* 184, no. 1 (2018): 19–30, https://doi.org/10.1111/geoj.12238.

[226] Brad Coombes, "Nature's Rights as Indigenous Rights? Mis/Recognition through Personhood for Te Urewera," *Espace Populations Sociétés. Space Populations Societies*, no. 2020/1-2 (June 15, 2020), https://doi.org/10.4000/eps.9857.

[227] *Ibid.*

conservation values) is as effective now as it was in the early 1900s. The rights of the nation's "public" trump the rights of local Indigenous communities. As Coombes boldly puts it:

> public rights are also saturated with culturally distinct, non-Maori discourses of recreation and preservation. The national interest, the public domain and the alleged rights of all New Zealanders – the country's adolescent conceptions of equality – have long triumphed over Indigenous rights. In that context, application of person rights to conflict-ridden national parks embeds further the discourses that delimit Maori development and serve White privilege.[228]

The celebration of legislative change that sees more and more land being attributed to personhood, may thus express a double standard regarding land ownership in New Zealand. As one of Coombe's interviewees put it: "If a Pakeha is inclined to own some land, they're applauded…but if a Māori wants to own their ancestors' lands, they're insulted as greedy pariahs, selfish developers or traitors to the national good."[229]

It should be clear that if Māori are to contribute to conservation projects in New Zealand that openly account for their histories, worldviews, and aspirations, then the issue of ownership will have to be placed at the center of these discussions.[230] For projects undertaken on conservation land currently held by the New Zealand Government (which makes up approximately 30% of the country's territory) and the numerous other parcels of land held in trusts, like Bushy Park, any generative form of decolonization will likely have to return to the issue of ownership, which has been contested by Māori since at least 1840 when the Treaty of Waitangi was signed.[231] Until Māori achieve equitable ownership of land in New Zealand, and

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[228] *Ibid.*
[229] *Ibid.*
[230] Flora Lu Holt, "The Catch-22 of Conservation: Indigenous Peoples, Biologists, and Cultural Change," *Human Ecology* 33, no. 2 (April 1, 2005): 199–215, https://doi.org/10.1007/s10745-005-2432-X.
[231] Maria Bargh and Ellen Tapsell, "For a Tika Transition: Strengthen Rangatiratanga," *Policy Quarterly* 17, no. 3 (September 23, 2021), https://doi.org/10.26686/pq.v17i3.7126; David J. Jefferson, "Treasured Relations: Towards Partnership and the Protection of Māori Relationships with Taonga Plants in Aotearoa New Zealand," *The Journal of World Intellectual Property* 25, no. 2 (2022): 347–74, https://doi.org/10.1111/jwip.12226.

land on which they are granted the same kinds of rights and opportunities most of their pākehā neighbors are afforded, it is likely nature conservation will remain well down the list of political priorities for many Māori communities.

Conclusion

Late one winter afternoon, I travelled north from Whanganui about two hours by car to Rotokare Scenic Reserve. Joining me was James, a young Bushy Park volunteer. On our trip north in South Taranaki, we chatted about some of our recent work together at the sanctuary and bonded over our shared musical-passion for progressive rock band Tool. Our efforts to listen to the band's early catalogue was regularly interrupted by my phone's reception dropping in and out as we passed through the rural Taranaki backroads.

Rotokare is the nearest eco-sanctuary to Bushy Park, and similar in size and organization. The Rotokare Trust was well connected with Bushy Park, and they had previously collaborated on bird translocations. They also shared updates on work and calls for help on various projects. On this occasion James and I had responded to their request for help in undertaking an evening kiwi count. This involved spending a couple of hours sitting in the Lake Rotokare forest just after dusk listening for calls of resident kiwi birds and noting anything we heard.

When James and I arrived at Rotokare the volunteers and sanctuary staff warmly welcomed us, glad to have some extra help. Everyone I spoke to knew something about Bushy Park and were interested in how things were going, particularly in terms of pest control. While I was not officially attending on "research" business, I could not help being particularly attentive to the evening's work.

The kiwi count itself was enjoyable. I had not heard kiwi call before. Despite being one of New Zealand's best recognized native birds, they are also one of the most elusive. As nocturnal birds, they are rarely seen during daylight hours, and their habitats tend to be isolated

locations. Mark and Elly[232], the two volunteers I worked with, were both very friendly. I felt well supported throughout the kiwi count, each of them helping me identify the different calls and noting the differences between kiwi and one of New Zealand's other nocturnal birds, the ruru. Both volunteers had previously been involved in kiwi translocations from Rotokare and demonstrated expertise in tracking and handling kiwi. Mark was particularly keen to explain to me how telemetry trackers work, a process that involved using radio transmitters to locate kiwi within the sanctuary. Elly seemed to know a lot about Rotokare's ongoing efforts to translocate its resident birds out into the surrounding farms and forests—an undertaking Bushy Park was looking to develop far in the future.

Walking back to the sanctuary office after the two hours spent in the forest together, Elly inquired about my PhD research, which I had mentioned earlier. We had quite an engaging conversation on the thirty-minute walk. This was at a point in my field research when the notion of making a conservation soundscape as an artistic or creative practice was just starting to interest me. However, my attempt to explain this to her seemed to confuse my earlier effort to summarize my research as a cultural study of conservation work. "So, by the 'cultural' aspects of nature conservation, you're meaning the artistic aspects?" Elly asked me. I avoided explaining the influence of soundscape composition on my thinking and instead tried to reframe the idea in terms of conservationists' general appreciation of bird calls. Elly responded by saying she was not a "birder" but could appreciate why some of them were "so obsessed with birdsong."

As our conversation moved to pest control and the various efforts underway at Rotokare and Bushy Park, Elly made a comment that caught me by surprise. I had just mentioned Bushy Park's education program and the influence it might have on the Whanganui community's own

[232] These names have been substituted for the volunteers' real names.

efforts to undertake pest control work in homes, schools, and workplaces. She responded by mentioning a local Taranaki school that had recently "got in trouble" for one of its pest-control projects. Seemingly in an effort inspire the trapping of possums, the school had run a competition in which the students were encouraged to dress up the carcasses of dead possums in infants clothing with best dressed winning the top prize. Apparently animal rights activists were critical of the competition, and it soon gained media attention. "It's PC gone mad!" was Elly's indignant response.

At the time I was not aware of the school's possum-trapping competition, which I later learnt had become infamous amongst local conservationists, so I was taken aback, finding the competition rather crude. I tried to redirect the conversation saying how I thought if education on pest control was done right, it was an important way to teach children about ecological relationships. Elly, as if still overcome by her indignation at the media's response to the possum-trapping competition, interrupted me in a raised voice saying: "*they have no right to be here!*" I was not sure whether she was responding in support of my previous comment (whether positively or negatively) or was just feeling animated about the topic in general. However, our conversation soon petered out. We continued the walk back to the sanctuary office in relative silence, a couple of kiwi still calling in the dark forest behind us.

Questions of belonging are never far away when it comes to nature conservation in New Zealand. The work itself is tinged with tragedy, given that the taking of many animal lives to save a few has surfaced as its fundamental task. Hiding behind some of its uglier forms (like the gallows humor of a dead possum dress-up competition) is a nation of settler descendants struggling to find a place to stand—on land still recovering from colonial devastation and yet unable to fully live up to Treaty promises made. Battles often start with noble intentions, but

their endings are always ugly. If there is a way to avoid the slippery slope of an antagonistic approach to caring for this country surely it will be a relational one.

Giving nature a voice means giving something up. The voice that speaks as a result—a small island of flourishing native forest in a sea of agriculture and plantation forestry—may sound all the more beautiful, but it won't by default speak in a restorative tenor. This voice—or voices—will be uttered in dialogue, which a knee-jerk antagonism makes all but impossible. Perhaps other metaphors may be more useful here. Of the many enlivening tasks I participated in during the course of my field research, the restoration projects at Bushy Park inspired me the most. These were projects with potentially long lifetimes, beginning with propagation of seeds gathered in the forest, leading to the raising of seedlings and their eventual planting in retired pasture within the sanctuary's border. Some of trees, if nurtured sufficiently, will survive well beyond their human propagators. The oldest tree in Bushy Park, named Ratanui—thought to be over 800 years old—is a powerful reminder of this potential. These seeds also bear the potential to support conviviality. This much needed conviviality may be evidenced in the ethics of care that volunteers manifest in the sanctuary. The convivial work of restoration may lead to new conversations, and new songs—beginning again the task of negotiating better ways of living together.

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