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Into the Ecoregion: Robert Sullivan's *The Meadowlands* and the  
Nature/Culture Divide

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## Abstract

This thesis interrogates the role of nature/culture dualism in ecological and environmental creative nonfiction through a critical analysis of Robert Sullivan's *The Meadowlands: Wilderness Adventures on the Edge of New York City* and a creative component titled *The Knitted Sheep*. Both the critical and creative sections take the view that the concept of nature/culture dualism in creative nonfiction must first be problematized through a locally scaled, ecoregional lens to truly comprehend ecological and environmental issues at a global scale.

Through my reading of *The Meadowlands* in the critical portion of this thesis, I explore how Sullivan's attention to the overlap between the natural and the human-cultural aspects of the Meadowlands problematises the commonly accepted nature/culture dualism inherent in the natural world and how this problematization aids new ways of understanding the nature/culture relationships in our urban environments. I examine the problematization of nature/culture dualism in *The Meadowlands* through a dispute brought about by the work of two critical theorists: Timothy Morton's *Ecology Without Nature: Rethinking Environmental Aesthetics* and Christien L. Marran's *Ecology Without Culture: Aesthetics for a Toxic World*. Morton argues that extant Romantic ideas of nature must be abolished in favour of ecocriticism that embraces cultural forms of ecology. Marran counters Morton's view, calling instead for more binding, trophic forms of ecocriticism that favour aesthetic perspectives of the human and the more-than-human world. I argue that by problematising the nature/culture dualism found at the urban fringe, rather than leaning too heavily on either cultural or nature tropes, ecological and environmental creative nonfiction can open new, imaginative spaces for understanding the nature/culture relationships in our urban environments.

In the creative portion of my thesis, *The Knitted Sheep* probes the broader question of nature/culture relationships in ecological and environmental creative nonfiction by exploring my personal story of learning to make my clothes over the past twelve years. *The Knitted Sheep* is specifically focused on the moral and environmental concerns surrounding the use of wool and cotton. I problematize the concept of nature/culture dualism and local/global perspectives surrounding these contentious materials by focusing on my experiences with crafting in local settings

while maintaining a critical perspective on the textile and fashion industries in a more generalized and global sense.

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This thesis is for the animals, including my dad, who taught me so much.

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## Part One: Critical Component

# Into the Ecoregion: Robert Sullivan's *The Meadowlands* and the Nature/Culture Divide

## Introduction: The Nature/Culture Debate

A few minutes' drive from New York City, there is a tract of wetland known as the New Jersey Meadowlands. Once, the Meadowlands was a landscape bristling with wildlife and glinting with the flow of rivers and streams. More recently, however, European colonisation and the growth of New York City saw the Meadowlands become a dumping ground for the detritus of civilisation. The Meadowlands is centred in one of America's most densely populated metropolitan areas. The site has been drained, farmed and harvested of its natural resources, bestowed the former title of the world's largest garbage dump and been a disposal site for sewage, mercury and even rubble from the London Blitz. Despite this abuse, the Meadowlands has primarily defied the attempts made to tame it, remaining a refuge for both wildlife and those who still wish to connect with it. Robert Sullivan, an American journalist, author and urban explorer, is one such person.

In his nonfiction book *The Meadowlands: Wilderness Adventures on the Edge of New York City* (1998), Sullivan indulges his fascination for this remarkable piece of landscape, exploring its swamps and creeks on foot and in canoe, sleeping in its hotels and driving its lonely roads as he documents its people and places; its natural and cultural history—and, of course, its pollution — that he encounters along the way. In *The Meadowlands*, Sullivan uses a unique blend of attention to both the human and the nonhuman, as well as the pollution and the landscape, to connect readers to a place they may not have visited. In his *New York Times* book review of *The Meadowlands*, Robert Pinsky describes Sullivan's unique form of attention as "looking observantly, without trite moralizing, at the natural world as well as at the disposable world we build, and at the great overlap between the two" (7). For Pinsky, *The Meadowlands* "suggests a challenging new model for how we ought to pay attention to the world" (7). It is Sullivan's unique form of attention that has driven the central questions of this thesis: how does Sullivan's attention to the overlap between the natural and the human-cultural aspects of the Meadowlands problematise the

commonly accepted nature/culture dualism inherent in the modern world, and how does this problematisation aid new ways of understanding the nature/culture relationship in our urban environments?

This line of investigation has arisen from a dispute between two key texts: Timothy Morton's *Ecology Without Nature: Rethinking Environmental Aesthetics* (2007) and Christine L. Marran's *Ecology Without Culture: Aesthetics for a Toxic World* (2017). Morton argues that the transcendental idea of 'nature' (the dualistic view of nature as somehow separate from humanity) was established primarily in the Romantic period and "still influences the ways in which the ecological imaginary works" (1). As the ecological imaginary concerns our ability to think and act—through such techniques as narratives, metaphors, images, symbols and semantic figures—on the ecological systems around us (Fesmire 183), how writers of creative nonfiction approach the ecological imaginary within their texts impacts helps shape the way we understand and perceive the environment. Morton's solution is to do away with the idea of 'nature':

[T]he very idea of "nature" which so many hold dear will have to wither away in an "ecological" state of human society. Strange as it may sound, the idea of nature is getting in the way of properly ecological forms of culture. (1)

Morton argues that:

Due to the properties of the rhetoric that evokes the idea of a surrounding medium [nature as separate from humanity], ecological writing can never properly establish that this is nature and thus provide a compelling and consistent aesthetic basis for the new worldview that is meant to change society. (4-5)

Marran's *Ecology Without Culture* is a riff on the title of Morton's earlier book (*Ecology Without Nature*). Marran, a professor of Japanese literature and cultural studies at the University of Minnesota, examines forms of Japanese literature and film to argue that "[p]erhaps the chief stumbling block of ecological thought is not the image of nature, but the image of culture" (4). This thesis explores where Morton and

Marran's arguments overlap, examining *The Meadowlands* as a piece of ecoregional writing that refuses to lean too heavily toward either cultural or nature tropes. While, in a scientific context, disagreement persists over the precise definition of an ecoregion, it is generally agreed that an ecoregion comprises an area of relative homogeneity in regards "to ecological systems involving interrelationships among organisms and their environment" (Omernik 35). Other considerations within ecoregional mapping include hydrological, climatical and geological characteristics. The United States Environmental Protection Agency classifies the Meadowlands as a level IV ecoregion, the most minor subdivision in US ecoregional classification. A significant contention over ecoregional definition is whether and how consideration should be given to the unique forms of human cultures in ecoregional spaces.

Morton uses the term *ecomimesis* to describe the type of "extraordinarily common" (33) ecological writing "that generates a fantasy of nature as a surrounding atmosphere" (77). By definition, ecomimesis seeks to dissolve the nature/culture dualism seen as responsible for humanity's destruction of the natural environment (Morton 63-64) by writing an "unmediated [...] view of nature" (Carducci 633), however, this form of rhetoric ultimately contradicts itself. As Bridget Keegan, in her review of *Ecology Without Culture* elucidates:

[A] subject who is utterly immersed in nature can't very well still retain sufficient subjectivity to also write about that experience which would, necessarily, require a dissolution of subjectivity into the object. (582)

Therefore, as Morton explains:

The more I try to evoke where I am—the "I" who is writing this text—the more phrases and figures of speech I must employ. [...] the more of a fictional "I" I have-splitting "me" into the one who is writing and the one who is being written about [...] the less convincing I sound. (30)

As the fictional 'I' tries to evoke the surrounding world in which the writer is immersed, the writer feeds the reader "a potentially interminable stream of opaque scribbles, figures, and tropes" (Morton 30), reinforcing the subject/object

(nature/culture) dualism that ecomimesis aims to disrupt, while simultaneously holding the reader in an ecomimetic spell from which the text does not allow a break.

Morton outlines the functions of ecomimesis through a theory of 'ambient poetics' through which ecological writing attempts to animate an external, ethereal sense of nature. Morton lays out the six essential elements that make up ambient poetics: rendering, the medial, the timbral, the Aeolian, tone, and, most fundamentally, the re-mark. These elements deconstruct how writers of ecomimesis attempt to conjure up a transparent view of nature. I focus on the re-mark in this thesis as this concept deals most distinctly with objective and subjective perception. At its peak, ecomimesis creates a form of 'ecological subjectivity' that Morton, after Hegel, terms 'beautiful soul syndrome' (13). Here, the subject/object dualism inadvertently propagated by ecomimesis drives the subject—the 'I'—on an endless pursuit of pure environmental vision. As Morton notes:

Even if "I" could be immersed in nature, and still exist as an *I*, there would remain the *I* who is telling you this, as opposed to the *I* who is immersed. If we are even able to achieve ecology without nature, it will be difficult, if not impossible, and even undesirable, to achieve ecology without a subject. (182)

No matter how much the subject tries, complete immersion in nature will always be wishful thinking, turning the desire for the concept of a pure, natural environment into a form of consumerism, which, Morton argues, has its roots in Romantic thought: "Romantic consumerism," Morton makes clear, "is practically a tautology" (112). Morton considers even more critical forms of ecological writing, such as deep ecology and ecofeminism, to be still caught in consumerist approaches toward the natural world, approaches Morton argues to be "forms of refusal, the negation of current ways of consuming the world and the advocacy of something else" (115). However, Morton distinguishes between *positive* ambience—those devices that refuse limited models of localization or subjectification, thereby reinforcing subject/object separation—and *negative* ambience, which, as the German philosopher Theodore Adorno puts it, "destroys the actuality of nature as [...] an object of poetic celebration" (qtd. in Morton 124). Morton points out that this ambience sets "fingers wagging, strongly or weakly, at modern society" (114).

Morton asks that “[i]f all forms of positive ecological poetry are compromised by setting up an idea of nature ‘over there,’ how about trying a negative path?” (160). However, such a negative path is equally problematic because, as Morton notes, “[c]laiming that valid ecological art falls short of a nature that necessarily cannot be included within it makes a success of failure” (160). Morton points out the heavily thematic limitations of current forms of ecocriticism, arguing instead for the need for *ecocritique*, which “fearlessly employs the ideas of deconstruction in the service of ecology”—ecocritique is “not afraid of nonidentity” (13). Morton believes that to engage with ecological issues truly, we must reject the conceit of ‘nature’ that ecomimesis fosters and instead embrace an ecological thinking that politicises both the negative and positive dimensions of ambient poetics. Morton terms this form of ecological thought ‘dark ecology’, a concept “based on negative desire rather than positive fulfilment. It is saturated with unrequited longing. It maintains duality, if not dualism. Dark ecology is a politicized version of deconstructive hesitation or aporia” (186). Morton goes on to argue that, “To truly love nature would be to love what is non-identical with us [...] Instead of trying endlessly to get rid of the subject-object dualism, dark ecology dances with the subject-object duality” (185).

Countering Morton’s argument for an ecology without culture, Marran argues that, historically, cultural humanism has used the material world to create a wide range of metaphors that benefit human interest. When such human-centric metaphors are used as the primary frame of environmental analysis, it complicates attempts to confront “the biological, geophysical, and atmospheric aspects of our world which,” Marran points out, “fit far less neatly into cultural humanistic analysis” (4). Marran argues that “[c]ultural claims can impede ecocritical thinking when we consider that the material world exceeds culture” (5). Marran addresses the vast ecological imaginaries that lie outside the limiting realm of cultural humanism that maintains the dualism between the protective enclosure of humanistic thinking—that, Marran claims, tends to perpetuate *ethnos* and *anthropos* as the endgame—and the natural world (5-6). Rather, Marran argues, ecocriticism must engage with culture in a way that “enable[’s] an expansive ecological imaginary that represents transcorporeal and trophic ties that bind” (6). Marran suggests that such an ecological imaginary must shun ecocritical encounters that rely on the tired tropes of cultural humanism advocated by Timothy Morton (25). Rather, Marran proposes that we must favour aesthetic perspectives of the human and the more-than-human world

that allow us to engage with environmental issues “in ways that account for the affinities produced by industrial modernity” (23-24).

Marran introduces the concept of the ‘biotope’ to address how representations of the material world are often manipulated to work in favour of humanistic interests. Biotopes emphasise “the point that representations of the biological world inherently indicate both the material and the semiotic” (6). Marran provides several examples of how biotopes serve humanistic interests by enfolding the symbolical power of nature into humanistic metaphor. One is the image of the cherry blossom, which was used in a Japanese nationalist speech following the 2011 Japanese tsunami and nuclear meltdown at Fukushima “to claim Japan as an ethnic national collectivity that would inevitably recover from the catastrophic experience of tsunami flooding and nuclear meltdown” (7). What this “ethnic nationalist biotope” created, Marran argues, were “images of recovery that were incommensurable with the varied experiences of people and animals in the wake of nuclear contamination” (7). Biotopes, however, are not restricted to the lauding of humanistic concerns. Marran lays out the ways that the material and semiotic aspects of creative biotopes can be refocused in “texts [that] demand an approach that accounts for things smaller and greater than a selective humanist ‘we’” (5). Central to such a refocusing is the concept of ‘obligate storytelling’. As “a mode of storytelling that foregrounds material relations as fundamental to narrative” (27), obligate storytelling accounts for modes of expression among diverse nonhuman subjects. To foster such a profound sense of obligation among both human and nonhuman subjects, obligate storytelling engages “an aesthetic ontology that refuses humanistic writing traditions, eschews authorial flourish, and rejects institutionally privileged language” (Marran 27-28).

Despite both Morton and Marran’s clear-cut lines of criticism on either side of the ecological nature/culture debate, as Christopher Schliephake points out in his review of *Ecology Without Culture*, both author’s polarised positions are problematic. For Morton, “‘nature’ as a signifier keeps reappearing in multiple places [...] time and again undermining his argument,” while for Marran, “‘culture’ keeps popping up everywhere, like a ghost that is haunting her argument and surviving the attempt of its rhetorical exorcism” (630). This thesis explores the tension between Morton and Marran’s polarised positions, examining *The Meadowlands* as a piece of ecoregional writing that balances a perspective between cultural and nature tropes and how this positioning leads to new ecological imaginings of urban wilderness areas.

First published in 1998, *The Meadowlands* is part of the changing face of the long-standing genre of environmental nature writing. Tracing the evolution of this genre back to the mid-nineteenth century reveals the extent to which the Romantic period still held sway over the ecological imaginary. Here, writers such as Henry David Thoreau, considered one of America's earliest environmental writers, addressed emerging environmental issues by appealing to the concept of nature as a distinct entity separate from human civilization. In the opening paragraph of his canonical work, *Walden*, first published in 1854, Thoreau states that:

When I wrote the following pages, or rather the bulk of them, I lived alone, in the woods, a mile from any neighbor, in a house which I had built myself, on the shore of Walden Pond, in Concord, Massachusetts.  
(5)

However, despite the portrait that *Walden* paints of Thoreau as a hermit living on the edge of a wooded pond, attempting to grasp hold of the last vestige of a pure American nature as it is cut, burned and converted into cities and industry all around him, Sullivan himself offers a reconsideration of Thoreau in his book *The Thoreau You Don't know* (2009). While the Thoreau we *do* know "managed to separate himself from the hustle, the rat race" (Sullivan, *Walden* 2), Sullivan shows that there is another side to Thoreau who lived in the city centre of Concord and busied himself with civic pursuits. In this way, Sullivan unveils the misconceptions surrounding Thoreau as a reclusive forest dweller living outside of society, revealing instead a man as much in touch with 'nature' as he was with urban and human-centred concerns. *The Thoreau You Don't Know* attests to Sullivan's acute insight toward the form of attention necessary to recognise the overlap between both sides of the nature/culture debate and to explore ways of stitching together our increasingly ingrained sense of nature/culture dualism.

As William Cronon points out in his essay 'The Trouble with Wilderness; or, Getting Back to the Wrong Nature':

It is not the things we label as wilderness that are the problem—for nonhuman nature and large tracts of the natural world do deserve

protection—but rather what we ourselves mean when we use the label.  
(81)

Cronon goes on to expound his argument in depth, but his central tenet is that:

To the extent that we celebrate wilderness as the measure with which we judge civilization, we reproduce the dualism that sets humanity and nature at opposite poles. We thereby leave ourselves little hope of discovering what an ethical, sustainable, honorable human place in nature might actually look like. (81)

How we bridge that gap between our lived environments and the perceived 'wilderness' is essential. "*Wilderness*," as Gary Snyder defines it in his seminal collection of essays, *The Practice of the Wild* (1990), is "the last little places where intrinsic nature totally wails, blooms, nests, glints away" (15), while the "*wild* is like a grey fox trotting off through the forest, ducking behind bushes, going in and out of sight" (9). However, for Snyder, *wildness* is a distinct category,

not limited to the 2 percent formal wilderness areas [...] it is everywhere: ineradicable populations of fungi, moss, mold, yeasts, and such that surround and inhabit us. Deer mice on the back porch, deer bounding across the freeway, pigeons in the park, spiders in the corners. (15)

The New Jersey Meadowlands, then, is brimming with wildness. Finding a way to write this wildness can lead us to new understandings of—and connections to—our most jeopardised landscapes. Sullivan problematises the concept of nature/culture dualism by juxtaposing the seemingly dualistic elements found at the urban fringe. Such juxtaposition allows Sullivan to focus on the Meadowlands as a local, ecoregional landscape that counters globalist perspectives toward environmental issues, revealing an imaginative space between the poles of nature and culture where new, regenerative forms of otherwise dualised relationships can be imagined.

## Space, Place and Juxtaposition

*The Meadowlands* begins by grounding itself in a geographical location. Robert L. Thayer Jr describes 'grounding' in both a physical and emotional sense as "just what it implies: a sense of the ground—and of the space defining and defined by it" (31). Robert Root, in the introduction to his book *Landscapes with Figures: The Nonfiction of Place* (2007), adds depth to Thayer's sense of place by pointing out that "the [most successful] nonfiction of place is never about generic locations" (2), but rather that the setting in which events take place is often the work's central focus (1). To achieve the image of such a specific location within a nonfiction text, the author would first have to define their place as distinctly separate from the surrounding area. Sullivan begins to establish this spatial contrast between the Meadowlands and the surrounding urban environment in the book's opening pages, describing his journey from the Port Authority Bus Terminal in the centre of New York City on a:

bus [that] winds down the terminal's three-story ramp and dives into the mouth of the Lincoln Tunnel, which surrounds the bus with darkness and thick grey exhaust until it spits us out on the other side. (13)

Then, moments later:

The leaves of the scraggy ailanthus trees wave in the wind of traffic as the bus passes through the cut in the red rocks that separate New York from New Jersey and the Meadowlands from the rest of the world. (13)

This initial scene appears to be falling into the trap of Morton's concept of ecomimesis by "crystallizing a vast and complex ideological network of beliefs, practices, and processes in and around the idea of the natural world" (33), turning the Meadowlands into a "pressure point" (33) where Sullivan has to leave the cultural tropes of New York City in order to enter the nature tropes we habitually associate with swamps and wetland areas.

However, Sullivan moves on quickly to describe how:

[T]hen, in just a few minutes, as we drop down the other side of Bergen Hill and cruise into a low, flat land of lush grays and greens and pockets of rust and more circles of concrete, the bus seems to genuflect at the landscape before us. When the sky is clear, the water in the far-off creeks and rivers shines through the reeds like a sheet of aluminum foil that has been crumpled and then spread out again. (*The Meadowlands* 13-14)

Wendy Harding, in her book *The Myth of Emptiness and the New American Literature of Place* (2014), points out that this scene is twofold, with Sullivan's aim being "to undo the split between natural and artificial elements by questioning 'which is which'" (173). Harding notes the polysyndetic coordination that merges the vegetal—Sullivan's 'lush grays and greens'—with the industrial images of concrete and rust, and how Sullivan's 'circles of concrete' both alludes to and mocks a Transcendentalist perspective of the landscape (*The Meadowlands* 173-174). By identifying this scene's twofold nature, Harding highlights how "Sullivan's descriptions remind us of the unholy mixedness of contemporary peri-urban landscapes" (174). However, the use of figurative language and the juxtaposition of disparate objects that Sullivan observes as he moves between urban and wetland areas also breaks the spell of ecomimesis that tries to render a sense of nature as a separate, solid reality. As Morton notes of ecological texts that fall into the rhetorical trap of ecomimesis:

The more I try to evoke where I am—the "I" who is writing this text—the more phrases and figures of speech I must employ. I must get involved in a process of writing, the very writing that I am not describing when I evoke the environment in which writing is taking place. The more convincingly I render my surroundings, the more figurative language I end up with. The more I try to show you what lies beyond this page, the more of a page I have. And the more of a fictional "I" I have—splitting "me" into the one who is writing and the one who is being written about—the less convincing I sound. (30)

I argue that, by juxtaposing the seemingly dualistic elements of nature and culture as he moves between urban and wetland environments, Sullivan's figurative language *does* call to attention the process of his own writing, a technique that simultaneously recognises and deconstructs the concept of nature/culture dualism while grounding—rather than splitting—the sense of Sullivan as the narratorial subject. In this way, Sullivan begins to problematise the overlap between the natural and the human-cultural world by asking us to question which is which. This problematisation breaks the spell of ecomimesis, which threatens to maintain the sense of nature/culture dualism and instead grounds Sullivan as the narratorial subject, not split between a voice on and off the page but actively grounded in the landscape he is writing. Before probing whether such positioning aids or diminishes new ways of understanding nature/culture relationships in our urban environments, examining the conflict between local and global perspectives within ecological literature is necessary.

## Ecoregional and Bioregional Thought: The Local/Global Debate

Despite Sullivan's subtle shift in narratorial perspective that helps dissolve the dualism between the Meadowlands and the surrounding urban environment, he persists in entering an area visually and aesthetically distinct from the predominantly concrete, glass and steel habitat that fringes it. The Meadowlands is still a place where:

At the base of Snake Hill, the leaves of aspen trees quiver nervously in the breeze of the Hackensack River. The landscape is like something out of Arizona or the South Dakota Badlands; in the summer, squadrons of dragonflies and mosquitoes patrol the dry land over waves of heat. (Sullivan, *The Meadowlands* 15)

As such, the Meadowlands, with its clearly defined ecological boundaries within which a relative ecological homogeneity exists, can be regarded as an ecoregion.

Ecoregions are the smaller blocks that make up bioregions. A bioregion is generally defined as a complete watershed and capable, within itself, “of supporting unique human and nonhuman living communities” (Thayer Jr 3). Bioregions, and therefore, to a greater degree, ecoregions, are known as local ecological perspectives. Therefore, reading *The Meadowlands* as an ecoregional text means joining an established debate over the role of the local versus the global perspective within ecological literature.

Ursula K. Heise, in her 2008 book *Sense of Place and Sense of Planet: The Environmental Imagination of the Global*—a seminal text within this local/global debate—analyses the connections between local and global ecological imaginings. Heise proposes the term ‘eco-cosmopolitanism’ as a framework for how localised ecological and cultural thoughts are connected at the global scale. Heise formulates her argument around the concept of ‘deterritorialization’, a term now commonly used within theories of globalisation to describe the process of the growing interconnectedness among societies around the world that is driving the development of new cultural structures that are no longer tied to a specific geographical place (10). By amalgamating the relationship between a local culture and its geographical territory, deterritorialisation is antithetical to Sullivan’s grounded, narratorial position in his local geographical territory. While Heise recognises that deterritorialization, particularly when it is forced from the outside, can sometimes lead to a sense “of loss, deprivation, and disenfranchisement” (10), the term also suggests, as Heise notes:

[P]ossibilities for new cultural encounters and a broadening of horizons that environmentalists as well as other politically progressive movements have welcomed, sometimes without fully acknowledging the entanglements of such cultural unfolding with globalization processes that they otherwise reject. (10)

Heise shines a light on these sometimes-unacknowledged entanglements through her framework of eco-cosmopolitanism, ultimately contending that:

In the context of rapidly increasing connections around the globe, what is crucial for ecological awareness and environmental ethics is

arguably not so much a sense of place as a sense of planet—a sense of how political, economic, technological, social, cultural, and ecological networks shape daily routines. (55)

While it is crucial to maintain sight of ecological and environmental issues at a global scale, holding the view that the local human inhabitants of a given area will be able to maintain a sense of what their local geographical territory feels like by looking through the lens of a global, deterritorialised perspective—may be wishful thinking. Such broad approaches are problematic even when applied to localised regions. When looking at Richard Bailey’s detailed ecoregional map of North America, Robert L. Thayer Jr, in his book *LifePlace: Bioregional Thought and Practice* (2003), wonders whether the local human inhabitants would find their designated topographical regions to feel natural or coaxed (18-19). “One way to answer these questions,” Thayer states, “is by appealing to direct experience: What does an ecological region or bioregion *feel like* to a person inhabiting it? How do we know or sense what natural region we live in?” (19). Surely, knowing what a local ecoregion feels like is preliminary to developing the type of ecological awareness necessary to perceive new ways of understanding nature/culture relationships. This ecological awareness around nature/culture relationships is what Sullivan’s localised narratorial positioning aids: his adventures into the Meadowlands blend the region’s geographical and human cultural characteristics. Kayaking into Walden Pond with his friend Dave, Sullivan describes a landscape continually in contrast with itself: “[When w]e pushed off from the shore of reeds and into the river...we felt like intruders, as if we had broken into an industrial landscape where bright colors weren’t allowed” (*The Meadowlands* 78). Then later into their trip:

The water was chocolate milk brown; I saw bits of wood and Styrofoam, two juice bottles, and clump after clump of broken reeds. Apropos of all the garbage and the broken reeds in the river, Dave asked, “Which is flotsam and which is jetsam?” and I couldn’t say. (79)

And again:

A few minutes later, in a spot far from roads and highways, we discovered little islands, composed wholly of reeds. One island was surrounded by bright yellow police emergency tape: CAUTION, the tape said. (81)

Sullivan's localised positioning also allows him to shift subtly from depicting such nature/culture mixedness in the Meadowlands landscape to momentary encounters of bucolic wonders, such as when paddling with Dave into the mouth of Sawmill Creek on their first adventure into Walden Pond, Sullivan describes how:

The mouth was decorated with gentle green strands of spartina, the last relatives of the Meadowlands' original meadow. The area was so starkly different from all that we had seen that day that we were leery of entering; we were shocked by its pristineness, by the absence of the tall, obnoxious [phragmite] reeds. When we finally moved into it, it was as if we had just come out of a trance. The water was shallow now, at low tide, the floor of the marsh a creamy gray, dotted with the boorings of little creatures. A shiver ran down my spine. It all seemed strangely natural. (85)

Rather than perceiving, through a global, deterritorialised perspective, a detailed sense of what a local geographical territory feels like, Sullivan uses his intimate, localised perspective to describe the feeling of his ecoregion. In this way, Sullivan builds an intimate understanding of localised nature/culture relationships that are not coaxed but help provide, instead, profound insight into ecological and environmental issues at a global scale.

However, in *Ecology Without Culture: Aesthetics for a Toxic World*, Marran echoes a similar sentiment to Heise, critiquing the "bioregional bias" (20) of ecocriticism, arguing that bioregionalism perpetuates geopolitical regions as "imagined exceptions unto themselves" (20) where "shared characteristics under industrial modernity are put on the back burner" (20). Even if a sense of connected cultural diversity was pursued within a bioregional frame, ultimately, Marran points out, this would be "beholden to cultural difference as the final word on ecocritical thought" (20) at the expense of "the more-than-human world" (21).

Morton takes a similar view to both Heise and Marran, arguing that much of ecological literature dealing with local place is “[s]imply lauding location in the abstract or the aesthetic” (11) and that to see beyond the dualism that places ‘nature’ on a pedestal, localist views that counter the sense of globalisation must explore the dimensions of local place beyond what bioregionalism and its associated Romantic localisms can achieve (171). Here, echoing Heise’s perspective, Morton contends that we need to look first at the global to understand our sense of local place:

Globalization compels us to rethink the idea of place, not in order to discard it, but to strengthen it, and to use it in a more thorough critique of the world that brought about mass hunger, monocultures, nuclear radiation, global warming, mass extinction, pollution, and other harmful ecological phenomena. (170)

Jennifer Case, however, in her essay on the theory and practice of place studies in environmental nonfiction, throws the doors of this local/global debate wide open, questioning the role of local/global perspectives by tracing a linear trajectory of place-based thought within a range of nonfiction ecological/place-based texts from such authors as Henry David Thoreau to Wendell Berry, Gary Snyder and Scott Russell Sanders, to four more contemporary, demographically diverse place-based writers: David Gessner, Greta Gaard, David Mas Masumoto and J. Drew Lanham. Case notes that the earlier, ‘first wave’ of place-based writers such as Thoreau, Berry, Snyder and Sanders “established a foundational appreciation for and value of the role of place attachment,” writing about ‘staying put’ and privileging local identity and knowledge. Case then highlights how the ‘second wave’ of place-based writers, Gessner, Gaard, Masumoto and Lanham—a white male American, a queer white American woman, a third-generation Japanese American farmer and a black male African biologist, respectively—explore gender, sexual identity, class and ethnicity. Case points out that, while such identities offer (to varying degrees) alternative understandings of how sense of place contributes to broader discussions of globalisation, these authors remain grounded in a strong sense of place attachment. While for Case, this raises a central issue around “how...such writing lead[s] to “a systemic sense of planet?”—the kind that will propel global environmental citizenship and global environmental activism,” she still leans toward the view that “place studies

have long discussed the powerful effects that story, whether in oral or written form, have on our senses of place, and thus the need for story to craft relationships to the environment.” Far from nullifying the role of the global outlook, Case flips this dominant perspective of the local/global debate around, suggesting, instead, the need to look to the local to truly understand the breadth of environmental issues at the global level. In summing up the central question posed by Heise in *Sense of Place and Sense of Planet*: “can environmental nonfiction establish a politically activating sense of planet without relying, to some degree, on individual senses of place,” Case poses an alternative view:

It seems more likely that, by offering glimpses of individual locations and the ways in which they connect, environmental nonfiction as a whole can perhaps develop a sense of planet large enough and diverse enough that its readers will feel compelled to care not only for their own hometowns, but also the entire earth. Indeed, calling on the subgenre to let go of its individual stories and instead to focus on global imaginings would in fact diminish the subgenre’s greatest strength: the ability to dramatize stories of people and place, with all the complications that result.

Such complications resulting from the dramatization of the stories of individual people and places is precisely what Sullivan’s localised narratorial perspective allows him to achieve. On one occasion out in the Meadowlands, Sullivan encountered a man (Big John) fishing for blue crabs off the old Hackensack River pier. Stopping to ask how they tasted, Big John responded:

“Right now, they’re mating so they don’t feel like crawling in the traps, but when they’re not mating I usually go home with about a dozen [...] At one time, there used to be black oil on top of the water and the crabs would come out covered with oil. We called ’em tar babies. We’d boil them in water and they were damn good’.” (*The Meadowlands* 149)

Such encounters enable Sullivan to layer deeper interactions between the local human culture and the wildlife that lives in the Meadowlands while also

recognising—through the description of black oil on the water—the implications of broader global and political influences. Similarly, Sullivan’s localised narratorial perspective enables him to complicate the widespread cultural attitudes of local inhabitants toward the Meadowlands. When out on a Meadowlands boat tour, Sullivan recounts a fellow passenger whispering to him that “[t]his is beautiful down here, and nobody knows [...] You tell people you’re going out on the Hackensack and they laugh and say, Oh *sure!*” (190). Then again, on another tour, the guide told Sullivan that:

‘I was out with this scientist and she was told that Mill Creek in Secaucus was a dead creek. So I brought her out here and there were lots of birds happening. And she says to me, ‘I was told this was a dead creek.’ So basically after she went out with me, she knew that she had been bullshitted.’ (194)

By layering localised stories of people and place, such as the interactions between local human culture and the cultural attitudes local inhabitants hold toward the Meadowlands, Sullivan is accumulating a store of nature/culture interactions within the Meadowlands that deepen our understanding of nature/culture dualism in our urban environments and enriches our ability to problematise this dualism. Wendy Harding provides another way of appreciating the importance of such layering in her book *The Myth of Emptiness and the New American Literature of Place*:

Getting to know a place means acknowledging that it is not a blank page but a palimpsest, shaped by successive layers, folds, and intersections of historical activity. As geographers and historians have come to recognize, land is not simply spatial; it is spatiotemporal. The markings inscribed on its imbricated strata are not effaced after each inscription; instead, they produce accretions of meaning that demand a new conception of fullness. (47)

This focus on place attachment is a crucial feature of *The Meadowlands*. As I show in the following sections, it is Sullivan’s focus on the localised, place-based aspects of the Meadowlands, both in the broader bioregional sense and his more

focused observations on specific locations, that helps break down the perpetuation of geopolitical thinking, opening space instead for the creation of imaginative connections between local and the global perspectives.

## Writing Between the Borders

Sullivan begins to deconstruct any sense of the Meadowlands as a geopolitical region immediately after his bus trip out of New York City: “As often as not, when I head for the Meadowlands, I head for Snake Hill, which is a one-hundred-and-fifty-foot-tall rock that sticks up out of the very middle of the Meadowlands like a geological mistake” (*The Meadowlands* 15), from the top of which Sullivan can:

see for miles. To the north and west, a low ridge contains the area like a bowl with a lip made of little cities and towns. To the east, I can still see the Manhattan skyline, only now it is not shouting but whispering from behind another ridge. (15-16)

In this passage, Sullivan marks out a distinct ecoregional space for the Meadowlands by “looking back” at New York City and the other “little cities and towns that border the wetland. Sullivan “looks back” in this way again throughout the book: When paddling through Walden Swamp with his friend Dave, they were able to “catch a quick glimpse of the New York City skyline, which from Walden Swamp looked less like New York and more like Oz” (87), and again, standing at Valley Model Aerodrome “watching the model planes take off over Losen Slote” (63), an area Sullivan describes as “one of the least developed portions of the meadows, a tiny biosphere for old Meadowlands flora and fauna” (62), Sullivan describes looking up at “the other planes high in the sky and the sunset and futuristic-looking skyline of New York City” (63). While these passages may initially appear to be reinforcing the sense of nature/culture dualism between ecoregional and urban environments, it is, again, Sullivan’s unique use of figurative language—the personification of a city “not shouting but whispering” (16) and the simile of comparing New York City to “Oz” (87) with its “futuristic-looking skyline” (63)—that creates a sense of new spatial

relationships. By reimagining the cityscape that borders the Meadowlands, Sullivan helps loosen the bonds that shackle us to our understanding of the urban landscape. Moreover, if we can reimagine the cityscape, couldn't we reimagine our perception of "nature" within the Meadowlands, too? In his book *Literature as Cultural Ecology*, Hubert Zapf analyses how 'imaginative ecological texts' work as a "liminal phenomenon on the boundary between culture and nature, self and other, anthropocentric and biocentric dimensions of existence" (91). Zapf describes the formation of such liminal phenomenon as a 'tension', where the multiple meanings embedded in the aesthetics of ecological texts help defy simple ideological meaning and instead create an "imaginative space for otherness" (92). The sense of new spatial relationships Sullivan constructs between the Meadowlands and the surrounding cityscape creates such 'tension' and, therefore, an 'imaginative space for otherness' that defies the simple ideological meaning of city and wilderness, of nature/culture dualism. This 'imaginative space for otherness' falls between the gaps of ambient poetics' most fundamental property, the element that Morton, after Jacques Derrida, calls the 're-mark'. "The re-mark," Morton notes, "is a kind of echo. It is a special mark (or a series of them) that makes us aware that we are in the presence of (significant) marks" (48). The re-mark allows us to discriminate between the objective and the subjective, between ideas of space and place. Morton's concept of the re-mark troubles Zapf's idea of 'tension' formed in the dynamic space between various forms of seemingly contradictory expressions of nature/culture relationships. The re-mark, then, troubles the notion of Sullivan being able to imagine anything beyond the simple ideology that views the Meadowlands merely as an area of nature surrounded by a city. The re-mark is at play all around us, allowing us to distinguish between immediate objects, such as "between the letters on this page and random patches of dirt," to more significant concepts of geographical space and place (48-49). As Morton explains:

Every time I teach a class on ecological language, at least one student asserts that "place" is what a person makes of "space," without reference to an outside. Even when it is external, place has become something that people do or construct; a space that, as it were, happens to someone. Despite the rigidity of the student response, I am suggesting here that subjectivity and objectivity are just a hair's breadth

(if that) away from each other. The illusive play of the re-mark establishes their difference out of an undifferentiated ground. (49)

However, as Morton points out, “[t]he brilliance of ambient rhetoric is to make it appear as if, for a fleeting second, there *is* something in between” (50). This ‘space in between’ is where ecomimesis, through the illusion of the re-mark, crystallises the ideological image of such fragile ecosystems as—Morton offers by way of example—coral reefs. However, Morton argues that such spaces really exist on the border or the edge of human society (51). The re-mark, Morton maintains, “embod[ies...] what is, at bottom, illusory” (51). Morton urges the importance of supporting these margins:

As a matter of urgency, we just *cannot* go on thinking of them as “in between.” We must choose to include them on this side of human social practices, to factor them into our political and ethical decisions. (51)

While Morton makes an important point, arguing against the reified order of nature that materialises like a phantom from this in-between space—a reified order that, as Marran points out, is all too often used to assert moral authority and intellectual certainty (3)—the preservation of such distinct borders still appears to limit our possibilities in imagining new relationships with the more-than-human-world. In this way, it becomes challenging to problematise the sense of nature/culture dualism that Morton’s borders may serve to strengthen.

On the other hand, Sullivan frequently problematises the sense of Morton’s ‘borders’ between human society and the rest of the world that fringes it through his avid use of similes that blur the boundaries between the human and the more-than-human world. Paddling through Walden Swamp, Sullivan’s friend, Dave, “spotted an egret, its long curved white neck the shape of a highway off-ramp, its white feathers the colour of Styrofoam” (*The Meadowlands* 80); while later, Sullivan describes the appearance of the carp they see splashing in the water beneath the New Jersey Turnpike as having “scales on their backs [that] were gross and course in the pattern of worn-down radial tyres” (81). Working these similes the opposite way, Sullivan describes “[a] big piece of plastic” he saw while driving through the Meadowlands

that “blew across the road like a tumbleweed” (60). In Walden Swamp, he spotted “waterlogged cigarette butts [that] were bloated and curled as if impersonating shrimp” and “a three-inch-thick rusted cable sticking up out of the water like a water snake” (80). Later, near Kearny, Sullivan observed “a British Airways jet [as it] swooped out from the clouds over us on its way to Newark as if it were an anxious bird protecting her nest” (154). Robert Pinsky, in his New York Times Book Review of *The Meadowlands*, makes a similar point on Sullivan’s use of simile, noting that:

This self-conscious little stylistic gesture is more than a trick, because it points us toward reality. Living creatures survive in this environment, and the exact habits and adaptations [of this wildlife] deserve close attention because, like it or not, they are part of a matrix that includes [our human detritus].

Sullivan’s use of simile opens up new and surprising ways of understanding the wetland and its environmental issues. Sullivan’s use of simile is similar to what Nicole Walker describes as the purpose of metaphor in her essay “The Inclusiveness of Metaphor” (2013) Walker describes metaphor as “a different kind of nonfiction ethic than the truth and nothing but the truth,” pointing out that “[t]his alternative ethics suggests that inclusiveness creates a bigger net into which more readers can tumble. Through metaphorical connections, readers find entry points and invite themselves right in” (203). Such inclusiveness may appear similar to Morton’s assertion to “include [the nonhuman aspects of our world...] on this side of human social practices, to factor them into our political and ethical decisions” (51). Yet, as Walker sums up about Edward Hoagland’s essay ‘The Courage of Turtles’—an essay Walker describes as a vast analogy “linking animal with animal, creating a kind of ecology...drawing a map of connectedness that returns to the turtle and the turtle is always put in relation to the human” (203)—Hoagland’s metaphor, Walker points out, allows us to see the interconnectedness of a “dramatic ecosystem” (204) and that through the turtle “we see ourselves” (205). Therefore, Sullivan’s metaphor goes beyond Morton’s inclusiveness, which only aims to factor the nonhuman into the human dimension. Sullivan transgresses the borders entirely to see the roles between humans and nonhumans swapped, problematising the very notion of what nature/culture dualism is.

In maintaining the human/nonhuman borders that keep us from falling into the ecomimetic illusion within the re-mark, Morton risks falling into his own trap. Critiquing Morton's 'contradictory' view toward "properly ecological forms of culture" (Morton 1), Marran argues that:

If the biological world is analyzed with a view toward culture, even a "properly ecological" one, then ecocriticism privileges the cultivation of the human world as its subject. [...] When human culture is the primary frame of analysis, as it has been for Enlightenment modernity, it becomes difficult to address the biological, geophysical, and atmospheric aspects of our world, which fit far less neatly into cultural humanistic analysis. (4)

Thinking within Morton's 'borders' may also assist the sense of the ecoregion as a geopolitical identity as we never learn to look beyond the taut bubble that the restrictions of cultural humanism impose.

Perhaps the answer, after all, *is* to let ourselves slip between the borders of the re-mark, to enter this illusory space where, for all its inherent danger of generating a mirage of nature that serves to perpetuate, rather than dismantle, nature/culture divide, it is also a space for generating new visions within our nature/culture relationships. Zapf's 'imaginative space for otherness' is a place within literature created from "the indeterminacies, the gaps and polysemic processes of signification, which are characteristic of aesthetic texts and which resist straightforward ideological messages" (92). Morton claims that "you will never be able to find some "thing" in between [the boundaries of the re-mark], however close to the boundary line you get" (52), though perhaps it is not so much a thing to *find* but, rather, a thing to *imagine*.

Morton's concept of the re-mark can be seen at work in *The Meadowlands*, where Sullivan 'looks back' at the urban fringe from his various narratorial perspectives throughout the wetland. The background mark can be distinguished as the broader sense of objective, geographical and atmospheric *space* within which the city and the wetland (the foreground marks working as subjectively labelled senses of *place*) are differentiated. Morton would argue that this is the end of reasoning, that the city and the wetland, as *marks*, lie at the edge of a margin

separated by 'just a hair's breadth' from the objective sense of *space* in which they sit, to discern any other sense of 'nature' lying *between* this inside/outside distinction would be an illusion. While Morton deems his students incorrect in forming their sense of place as something that people *construct*, "a space that, as it were, happens to someone" (49), and therefore a murky conception lacking distinction between objective and subjective borders, the rigidity of this view does not allow for the creation of new conceptions of place that break through human-centric ways of viewing the more-than-human world in which we are immersed. Indeed, the very role of ecological literature *is* to help us break beyond these rigid borders. As Zapf notes:

[A] central assumption of a cultural ecology of literature is that in its aesthetic transformation of experience, literature acts like an ecological force within the larger system of cultural discourses. Literary texts have staged and explored the complex interactions between culture and nature in ever new scenarios and have derived their specific power of innovation and cultural self-renewal from the creative exploration of this boundary. (89-90)

By identifying Morton's concept of the re-mark within *The Meadowlands* as an area of imaginative tension existing *between* the Meadowlands landscape and the urban space that borders it, we can see how Sullivan creates the potential for finding a secondary space *in between* Morton's distinct borders. One could easily slip between these borders into the illusion of ecomimesis, writing a text on the Meadowlands that falls into the conventional tropes of 'nature writing' by chasing an illusory vision of a preconceived natural landscape. However, Sullivan re-conceptualises the potential of this in-between space as an 'imaginative space for otherness' in which new forms of nature/culture relationships can be imagined by questioning preconceived notions of what urban and natural landscapes are.

## Into the Ecoregion

At first, Sullivan does nod toward the classical, illusive sense of 'nature' that ecological texts often discern when they shine a light between the 'borders'. Standing once again on top of Snake Hill, Sullivan reminisces that:

I am where European landscape painters once set up their easels to paint the quiet tidal estuaries and old cedar swamps and where now commuters in their cars on their way from New Jersey and Pennsylvania to New York City attempt to avoid being run down by trucks. (*The Meadowlands* 20)

Sullivan goes on to reflect that the old cedar forests are "[t]he most tantalizing former natural feature of the Meadowlands" (39) and that:

A cedar forest covered a stretch of land as big as midtown Manhattan in Kearny, and a forest ran across the desert-like area where the Meadowlands Sports Complex is today. It is estimated that cedars once covered between a third and a half of the Meadowlands. They grew in dense, dark stands. They were forty to sixty feet tall and lived to be two hundred years old. (39)

However, in both passages, Sullivan refers to this idea of pure, untouched nature in the past tense as something he can only imagine. Also, Sullivan never reflects on the old cedar forests in a segregated, distinct sense but instead always refers to them in the context of the modern Meadowlands landscape, setting the image of the cedar swamps against cars and trucks or the desert-like sports complex. In this way, Sullivan identifies what our imaginations conjure up as an idea of a pure, untouched wilderness while simultaneously recognising that this idea does not realistically exist; the fact that we have descriptions of the Meadowlands' former natural landscape in the first place means that landscape was already tangled with our human presence. The writer and naturalist Matt Gaw reiterates this point in his book *The Pull of the River* (2018), a travelogue of Gaw's adventures canoeing some of the UK's most

cherished rivers. While paddling through the “untampered-with oldness” (237) of Scotland’s Loch Lochy, Gaw notes that:

I’ve always thought the idea of wilderness was just that: an idea. The landscape is always farmed, tarmacked, developed or managed. There is also the sense that every wilderness is destroyed as soon as its light hits the back of the human eye, the landscape turned cultural just by our presence. (240)

Sullivan refuses to get caught in the nostalgia of a bucolic Meadowlands environment that no longer exists, slipping past the melancholy that would leave the text bogged down in a one-sided, standardised structure of ecological understanding. Instead, Sullivan reimagines what the Meadowlands can be.

For Sullivan, the Meadowlands is a place “that the forces of progress have perennially targeted but have never managed to completely control” (*The Meadowlands* 20). There is still a wildness here, not made entirely from a sense of the bucolic, but rather the landscape’s potential for ecosystem regeneration. Here, Sullivan begins to work again on the initial ‘tension’ that Zapf identifies at work in imaginative ecological texts: the tension that arises as a “liminal phenomenon on the boundary between culture and nature, self and other, anthropocentric and biocentric dimensions of existence,” where, as discussed earlier, the multiple meanings embedded in the aesthetic relationships within ecological texts help defy simple ideological meaning and instead create an “imaginative space for otherness” (Zapf 92). By recognising both the bucolic and the cultural aspects of the Meadowlands yet refusing to lean too heavily toward either of those nature or cultural tropes, Sullivan reveals instead a regenerative vision of the Meadowlands. This new imaginative space can be seen, for instance, when Sullivan meets Jeanette Abels, a landfill manager who drives him out to an old dump site that “had been capped with clay, sand, and soil; [and where] the vents of a gas ventilation system dotted the surface of the rolling hill like periscopes” (*The Meadowlands* 151). Abels tells Sullivan, “[t]hey took out thousands of drums and those were just the ones that weren’t consumed or spilled” (151-152). From this, Sullivan chooses not to linger on the past, pointing out instead that “[n]ow, though, the PJP landfill is practically bucolic: a field of grass rolls down to the river, with woodland separating it from the road” (152).

Don Smith, a naturalist working in the Meadowlands, provides another way of understanding Zapf's argument of a "'counter space' or an 'in-between space' of discourses as a paradoxical form of writing which constantly transgresses and shifts the boundaries of what can be known" (92-93). When walking with Sullivan one morning out over a landfill that is undergoing ecological restoration, Smith points out that:

[I]f I had it in my power to restore the Meadowlands to what it was three hundred years ago—as interesting as that would be and as much as I would like to walk through a cedar forest here—that land would not be as important to society as what we're doing with this land today.  
(Sullivan, *The Meadowlands* 200)

By finding complex spaces of imaginative tension between the bucolic and urban, the human and the nonhuman, the pollution and the landscape polluted, Sullivan is constantly balancing what Zapf identifies as the potential of ecological literature to create awareness in the liminal space between "what goes wrong for a society, for the biophobic, life-paralyzing implication of one-sided forms of consciousness and civilizational uniformity," while also working as "a medium of constant self-renewal, in which the neglected, biophilic energies can find a symbolic space of expression and (re-) integration into the larger ecology of cultural discourses" (91). Rather than reminiscing solely on what aspects of the once bucolic Meadowlands landscape have been lost and therefore widening the rift in our ecological grief, Sullivan instead helps foster an imaginative mindset of cultural and ecological reintegration by constantly writing toward an open, regenerative vision of the Meadowlands ecological and cultural aspects.

## Conclusion

In *The Meadowlands*, Robert Sullivan engages with the complex, defiled ecosystem of a jeopardised ecoregion where the ecologically and environmentally impeding concept of nature/culture dualism could easily be fostered. Sullivan achieves this

engagement through a unique blend of attention to the human and the nonhuman world and the pollution and landscape.

Sullivan problematises the concept of nature/culture dualism in the Meadowlands by grounding himself as a narratorial subject in space and place through the juxtaposition of disparate objects in the Meadowlands landscape. Sullivan further problematises the concept of nature/culture dualism by using his grounded narratorial position to layer a complex local cultural and ecological palimpsest that deepens our understanding of the nature/culture interrelationships existing in the Meadowlands landscape. This complex problematisation of the Meadowland's nature/culture relationships is then used to reveal spaces of imaginative tension where new nature/culture relationships can be explored within the Meadowland's peri-urban environment. Ultimately, Sullivan's problematisation of nature/culture dualism in the Meadowlands reveals new nature/culture relationships where classical notions of bucolic wilderness are balanced alongside imaginative, regenerative visions for the future of the Meadowlands landscape and the human and nonhuman animals that call it home.

By removing this dualism, Sullivan helps build a new understanding of 'wildness' within our urban landscapes. This understanding recreates our sense of place in nature not as entities separate from the nonhuman world but as social and cultural creatures whose very existence shapes and is shaped by the natural world in which we live. Imagining new forms of nature/culture relationships by focusing on ecological issues at the scale of a local ecoregion is essential in an increasingly globalised world where the media frequently draws our attention to environmental and ecological issues such as deforestation, plastic pollution, biodiversity loss, water pollution and climate change at a global scale. While it is crucial to maintain sight of the broader political significance of these global environmental systems, without the bedrock of a localised, genuine sense of understanding and connection with this natural, wild world we live in, meaningful human engagement at a broader, globalised scale will only slip further from our grasp.

The ecoregional lens identified in my reading of *The Meadowlands* might be applied to future readings of ecological and environmental creative nonfiction texts to identify the extent to which they problematise nature/culture dualism. One way of gauging the extent of this problematisation is the degree to which the narrator grounds themselves in the sense of local geographical place through figurative

language and the juxtaposition of diverse cultural and natural environmental phenomena without splitting the narratorial 'I'. Additionally, this ecoregional lens might be used to identify the accumulation of recorded local stories, interactions, histories and other forms of cultural and natural knowledge and experiences. This palimpsest of accumulated local insight could further gauge the narrator's problematisation of nature/culture dualism. Finally, this ecoregional lens might determine where the 're-mark' is at work within environmental and ecological texts and whether the narrator is writing into the imaginative tension found there: the potential for ecological and environmental self-renewal.

## Bridging Statement: *The Knitted Sheep*

*The Knitted Sheep* is a 30,000-word excerpt from a more extended nonfictional essay of 50,000 words that explores the personal story, the crafting challenges and the ethical and environmental dilemmas I have faced while learning to make my clothes over the past twelve years. *The Knitted Sheep* is specifically focused on the ethical and environmental concerns surrounding the use of wool and cotton. My critical analysis of ecoregional writing in Robert Sullivan's *The Meadowlands* has served as a stepping stone into the broader question of the nature/culture relationships in environmental and ecological creative nonfiction. While this excerpt of *The Knitted Sheep* would not be explicitly considered ecoregional, the creative work actively addresses the concerns of dualism in the nature/culture divide I have examined in my research, particularly considering the clothing industry. The problematisation of nature/culture dualism and local/global perspectives, more generally, has been a central concept through my writing of *The Knitted Sheep*, where I focus more specifically on my personal experiences with crafting in a local setting while maintaining a critical perspective on the environmental implications of the textile industry at a global scale.

*The Knitted Sheep* is part of a larger collection of essays exploring my relationships with more-than-human animals from childhood to the present, from hunter and meat eater to vegan to a more complex position between these two morally defined poles. *The Knitted Sheep* is intended to be the central essay within this collection. As such, it documents my ethical and moral conflict in turning away from animal products and how my decisions impacted my relationships with human and nonhuman animals—specifically those, like sheep, that are domesticated and farmed.

Throughout the second half of this excerpt of *The Knitted Sheep*, I begin to explore my relationship with my dad. While the probing of this relationship may appear unexpected, it is one of the more significant themes within my larger essay collection. Similarly, where reference has been made to previous hunting experiences, these exploits will have already been recounted in the preceding essays.

Having been both a hunter and a vegan, I often feel as though I've lived two lives, yet throughout both lifestyles, I had unwittingly created a sense of dualism between the concepts of nature and culture. As a hunter, 'nature' was a place to which I escaped, making me feel wilder than in urban areas. When I took up a vegan lifestyle, the same dualism persisted, but this time from a different perspective, where ideal nature was a pristine wilderness, which our human presence only served to diminish.

In both views, 'nature' was set on a pedestal. If I had written this essay two years ago, 'nature' would have appeared in a different cloak. An earlier version of this essay would have stumbled repeatedly into the claws of ecomimesis, parading the concept of nature as a more noble, surrounding atmosphere to human culture, a concept that would have remained continuously out of my reach.

My understanding of 'nature' and the broader debate around nature/culture dualism has constantly transformed over the past three years, particularly throughout the third year of my BA in Creative Writing at Massey University. I was introduced to William Cronon's essay 'The Trouble with Wilderness; or, Getting Back to the Wrong Nature,' which influenced my views. As Cronon summarises at the end of his essay:

If wilderness can stop being (just) out there and start being (also) in here, if it can start being as humane as it is natural, then perhaps we can get on with the unending task of struggling to live rightly in the world—not just in the garden, not just in the wilderness, but in the home that encompasses them both. (90)

While I have drawn from academic influences, my views toward the concepts of nature and culture have been shaped mainly by the pathways I have turned down in learning to make my clothes, which, as *The Knitted Sheep* reveals, are intimately connected to the animals and the landscapes around me.

In this way, I have worked in tandem on the three approaches—crafting, academic and creative writing—that I have engaged with to explore nature/culture dualism. Nothing has remained static. While my critical and creative components have informed one another in a continually evolving conversation, I have also continued my practical explorations and dilemmas, such as purchasing raw fleece and reflecting on the implications of my decisions considering the animal industrial

complex. While these most recent reflections are not directly present in this excerpt of *The Knitted Sheep*, which covers a period beginning in my childhood and ending six years ago, they have still influenced my perception and portrayal of these earlier memories.

*The Knitted Sheep* is an essay that explores our complex cultural connections and relationships with the more-than-human world. I aim to probe the complex and diverse range of understandings and beliefs on either side of these morally and culturally defined views as I explore possibilities of moving forward both culturally and ethically in the face of critical environmental issues.

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## Part Two: Creative Component

## The Knitted Sheep

It was late on Friday at the end of a school week, and I was already in bed. I wasn't quite asleep but wallowing in that warm half-slumber, a comfort that made my eyelids too heavy to open out of sheer will. As a boy, I was a deep enough sleeper, so I barely stirred when the phone rang in the hallway just outside my bedroom door. Through the haze of half-sleep, I heard the living room door open, the low muffle of the TV, my dad's woollen socks treading softly across the floorboards, and the phone's click as it was picked up off the hook.

"Hello?" I heard my dad ask, clearing his throat with a cough.

There was a pause, just long enough that a small part of my brain woke up. I lifted my head slightly off the pillow, trying to catch who was calling at that hour of the night.

"Ah, hello, Boots," my dad said. "How are you?"

'Boots' was the nickname for Neil Goodson, a silver-haired, barrel-chested truck driver in his late sixties and one of my dad's most dependable pig-hunting mates. Hearing his name, I pulled back my duvet and crawled to the end of my bed, turning my ear in the dark toward my bedroom door.

"Tonight?" my dad asked. "Yeah, sure, that sounds good."

By now, my heart was racing; I could hear my pulse beating inside my head, hanging on every word my dad spoke.

"Okay," my dad said, "I'll see you in a bit."

The phone clicked softly back down on its holder. I waited. I heard my mum out in the hallway then, whispering. A moment later, there was a knock on my door, and I flung myself back under the covers just as my dad walked in and sat down on the side of my bed.

It was a routine I looked forward to: the countless mornings my dad had woken me in the dark, shaking my shoulder softly until I woke to the sound of the kettle coming to boil out in the kitchen and the smell of eggs frying on the stove. My dad would tell me it was time to get up, then walk out, leaving my bedroom door open as I peeled back the duvet and sat up, shivering on the edge of my bed. Glancing out into the hallway I would see our bulging packs sitting next to the phone table with the old .303 rifle leaning up against the wall.

“Hey, are you awake?” my dad asked.

I mumbled, rolling over and squinting as my eyes adjusted to the light.

“That was Boots,” my dad said. “He’s heading out with Allan for a night hunt down Paritu Station.”

I stared up at my dad as one-half of his bristly face came into focus, trying my hardest not to smile.

“They’re going to stay down there for the weekend,” he said. “If you want, Mum says you can get up and come along.”

Paritu Station, an hour’s drive down the coast from Gisborne, was one of my favourite places in the world, and staying the night meant sleeping in the old shearer’s quarters at the top of the farm. You could see a large part of the farm from the kitchen window. The hills to the left were scarred in a patchwork of clear-fell forestry—pig hunting country. But out beyond the woolshed, the steep green gullies were spotted with sheep and scrub, the farm sloping down into a deep valley that climbed with one last effort to a high ridgeline on the other side. Looking out beyond the ridgeline could leave you feeling dizzy—the long, wide strip of the Pacific Ocean lying hazy and sun-speckled against the horizon.

I loved everything about the shearer’s quarters: the squeaky spring mattresses, the mice that scuttled through the kitchen at night and the sea wind that howled through the pines on the back ridge. But what I loved most of all was the woolshed across the paddock—its red, corrugated iron walls tucked up against a row of ancient macrocarpa.

Sometimes the large sliding door at the front of the wool shed was left unlocked, and—in the afternoon, when we had returned from a day of crashing through gorse and pine forest; after the dogs had been chained up behind the water tank with a handful of biscuits and a thick slice of dog roll each; after my dad and his mates had sat down inside for the evening with their cold beers—I’d slide the woolshed door open a little way and step inside.

The air was always warm inside the shed, the corrugated iron still creaking and clicking after a day in the sun. If the wind got up, the shed would shift and groan, but inside, the tiny dust particles suspended in the shafts of light from the windows would barely stir. Years of hooves and boots had worn the wooden floorboards smooth, the timber polished to a deep golden sheen from the waxy lanolin off the sheeps’ fleeces, filling the warm shed with the fatty smell of sheep herded in from the

paddocks. The rich, heady scent inside the shed made the sides of my tongue salivate.

There was an old wooden wool press in the centre of the shed, and sometimes, a wool fadge half filled with old fleece sitting beside it on the floor. The fleece was always a creamy, off-white colour, caught up here and there with grass seeds and pieces of dried thistle from out in the paddocks. I'd pull a handful of wool out of the bag and hold it under my nose to smell it. The scent was sharp and sour at first, sharper than the smell inside the wool shed, but there was also a hint of something sweet and comforting.

I'd wander about inside the shed for a while, running my hand over the rough wooden railings and the steel shearing poles hanging down from motors bolted up near the rafters. Whenever I found a few stray pieces of wool caught in a split or a joint in the timber, I picked them out to tease the fibres between my fingers. Something about the wool fascinated me: the fibres slipped apart into thin, airy tufts when I pulled on them, then sprung back into their natural, wavy crimp when I let them go. I always felt an instinctive urge to make something with these tufts of wool that I collected in a soft, downy pile in the palm of my hand, though I had no idea what. All I knew was that sheep were strange, remote creatures, and holding their wool felt oddly intimate, almost mystical.

After my dad had left my room that night to start getting ready, all I could think about was the farm. We'd be pulling up in Neil's truck into the yards outside the shearer's quarters in a couple of hours. I could already see the headlight beams swinging in a pool of bright light over the pitch-black paddocks, the grass along the fence lines sparkling with beads of unbroken dew. But then I remembered my clothes.

For most of my childhood, my mum had done all my shopping for me at the old DEKA department store in Gisborne. But for the past few weeks, I'd been complaining about the clothes she brought home, growing fussy over colours and fabrics. It was a sudden change, and I didn't have any way to explain it. While puberty had a part to play, there was something else gnawing away inside me, something that seemed always just outside of my grasp. I wanted to explain how I felt about my clothes to my parents, but I could never find the right words.

That night, my mum had just put on a load of weekly laundry, the washing machine swishing and chugging in the bathroom on the other side of my bedroom

wall. The only shorts and t-shirt I had left to wear out hunting was the red Chicago Bulls uniform in my drawer.

I took off my pyjamas, put the matching uniform set on, then glanced up into the small mirror on my wall. A typical-looking eleven-year-old boy stared back at me—skinny with scruffy brown hair and a dusting of freckles across the bridge of his nose—but the Chicago Bulls uniform made me angry. I hated the bright red crimson colour and the angry bull's face that stared back at me with bloodshot eyes from the front of the shirt; I hated the strange, silky feel of the polyester fabric against my skin, the way the shorts and shirt clung to the fine blond hairs on my arms and legs. Everything about the uniform felt wrong on my body.

I stripped the uniform off, threw it on the ground, then dressed back in my pyjamas and sat down on my bed, burying my face in the palms of my hands. Out in the hallway, I could hear my dad rummaging around in his pack. I didn't know what to do. I couldn't go out into the living room; I didn't want to talk or try to explain anything to my parents.

Instead, I flicked my bedroom light off and slunk back into bed, curling up in a ball under the duvet, facing the wall. The crumpling plastic stopped, and a moment later, my dad walked back into my room.

"Hey, what's going on?" he asked, sitting back on my bed.

"I don't want to go anymore," I muttered under my duvet.

"What's happened?"

"I've got nothing to wear," I said, swallowing the lump growing in my throat. "All I have left is that stupid Chicago Bulls uniform."

My dad spent a moment trying to coax me out of bed, but I buried myself deeper under my duvet without replying.

"Well, I have to get going," he said, pushing himself up with a sigh. "If you change your mind, there's still a few minutes to get yourself ready. Otherwise, I'll see you in a day or two."

I was awake five minutes later when I heard the garage door roll open and the car baking down the gravel driveway along the side of the house. As it passed my window and the white headlight beams swung in over my bedroom wall, I pulled the blanket over my head and cried into my pillow.

\* \* \*

Both of my nanas were knitters; they both kept cane baskets in their clean, cozy living rooms, the baskets piled with balls of coloured yarn and clusters of white and grey knitting needles sticking up out of glass jars. Both of my nanas—Nana Denham (my mum's mum) and Nana Gilbert (my dad's mum)—always had a knitting project on the go: a tiny pair of booties or a half-finished baby's sweater still mysteriously attached to a pair of needles.

Nana Denham would sometimes knit when my mum and I visited. I would sit next to Mum on the long couch in the living room, sipping hot cocoa while Nana knitted in the armchair opposite us, the tips of her needles working continuously between her hands, a comforting, clicking rhythm that pulled the long tail of yarn inch by inch up out of the basket. Nana would sit and knit and talk, occasionally glancing up at Mum or down at the pattern spread out on the table at her side.

I'd always been interested in the strange tools in my nana's knitting jars—the needles, pins, clips and rulers. Still, Nana Denham was a fussy, ordered knitter, her yarn and needles always packed neatly in the basket at the side of the couch. I only ever observed her knitting from a distance.

Nana Gilbert—who lived on the city boundary and owned a few acres of the land behind her house—was a different sort of knitter. She didn't mind when I ran in from the little orchard behind the shed and started digging through her knitting basket, searching for scraps of wool to play Cat's Cradle or to sit braiding into long, pointless pieces of rope. I rarely saw Nana Gilbert knitting, though. Sometimes, when my parents, my brother and I visited on the weekends, I'd catch her sitting on the couch next to the fire, knitting away at some small, woolly, unidentifiable object, but as soon as we walked into the room, she'd fold her needles together and put the knitting away.

Although I'd always been intrigued by both of my nanas' knitting, by the strange, half-finished projects they left lying in their baskets, I never asked them anything about it. My mum didn't knit. Sometimes at home on a Saturday afternoon, my dad would come in from mowing the lawns and sit down with a glass of beer to stitch loose buttons back onto our pants and t-shirts with a needle and thread. To my eleven-year-old brain, knitting was something that only grandmothers did.

But one afternoon, when I was lying on the floor in Nana Gilbert's living room, I caught sight of the needles and yarn in the basket at the side of the couch, and a new kind of curiosity came over me.

"Nana," I said, rolling onto my knees, "can you show me how to start a piece of knitting?"

Sitting in her blue skirt and pink cardigan at one end of the couch, Nana looked up from her crossword book and stared at me for a moment over the top of her wide-rimmed glasses.

"Sure," she said, nodding her head slowly. "Why don't you pull the basket out, and I'll get you started."

I shuffled over the carpet on my knees and placed the basket beside her on the couch. It was packed full of familiar-looking balls of yarn, some half-used and some still sealed up brand new in their cardboard wrappers. Nana pulled two long plastic needles from the jar, then picked a half-used ball of yellow-coloured wool off the top of the basket, unravelling an arm's length of yarn onto her lap.

Nana was a practical teacher. Without fuss, she showed me how to tie the yarn into a slipknot and then loop on the first row of cast-on stitches. I leaned further back along the armrest to watch Nana knit the first stitch, inserting the right-hand needle into the back of the first cast-on loop, wrapping the yarn around the needle tip, and then pulling the new stitch through. At the end of the row, Nana swapped the needles between her hands and then worked in purl stitch, this time inserting the needle into the backs of the loops.

After several rows had been completed and the knitting had grown a couple of centimetres beneath the needle, Nana handed me the work and watched as I slipped the needle tip into the first loop, then wrapped and pulled the yarn back through. The piece of knitting had just grown by one stitch—my stitch—the very first stitch I'd ever knitted in my life.

"That's good," Nana said, craning her neck forward. "Do you think you can carry on from there?"

I nodded, picking up the ball of yarn and carrying the knitting back down to the living room floor. I sat comfortably for the next half an hour, my fingers familiarizing themselves with the needles as I knitted and purled back and forth. Everything I needed was right in front of me: my hands, the needles, the yarn.

I stopped and laid my little yellow square flat on the carpet, using one hand to hold down the bottom edge that kept wanting to roll up on itself. My knitting was far from perfect. I found maintaining an even tension on the yarn challenging, which left a scattering of small holes where my stitches were too loose.

I looked at my square of knitting and tried to imagine it as something more, perhaps a sock or a mitten, but the vision kept slipping. It seemed like a puzzle I couldn't quite solve. Where was I supposed to begin? I glanced up at Nana, but she was absorbed in her crossword, tapping the pen on the page as she read the clues quietly to herself.

The afternoon was slipping away, the sun already low and bright outside the big bay window at the front of the living room. I was starting to feel too hot and stuffy sitting inside. I wanted to go back out into the orchard and play; I still wanted to climb the giant walnut tree in the backyard.

I held the yellow square up and studied the mysterious piece of fabric that I'd just created. There was something about the knitting that fascinated me; something about the yarn coiled up on the carpet that I couldn't shake. But I felt like I had to choose: the knitting in the living room or the rustling, chirping, buzzing world that I knew best out beyond the back door, a world that didn't seem to have anything to do with the yellow knitting clutched in my hands.

I let go of the bottom edge of my square, which rolled up on itself along the needle, then shuffled back over the carpet and tucked the needles and the knitting down the side of the basket—I could pick it up again at another time, I told myself.

"Nana," I said, standing up at the side of the couch. "I'm going outside to play."

"Okay," Nana said, looking up from her crossword, "but come back in before it's dark."

I ran out of the house and into the orchard. The shadows under the fruit trees were long and cool, but the sun was still warm on my back. All around the paddock, crickets were starting up sleepily in the unmown grass. That was the world that I chose. I didn't pick a pair of knitting needles up again for another fifteen years.

\* \* \*

It was late autumn by the time my partner Rebbecca and I moved into the caravan at the Clive Motor Camp in Hawkes Bay. I was twenty-six years old and still struggling with my clothes, still plagued by the sense of something gnawing away inside me.

Over the past couple of years, I'd started to buy more of my clothes from second-hand stores. I loved the simplicity of SaveMart, the SPCA and the Salvation Army op-shops—there was no advertising, no brand persuasion, and it felt like an important, sustainable decision. But something still seemed to be missing; some part of the process of clothing myself still felt broken—my clothes never quite felt like they belonged on my body. Although I hadn't picked up a pair of knitting needles since that afternoon when I ran out into my nana's orchard, I'd never forgotten the little yellow-coloured square I'd tucked down the side of nana's knitting basket.

We didn't plan on staying in the caravan for long. After leaving our last WOOFing host, Rebbecca picked up a part-time shift at a café in Napier, while I searched, half-heartedly, for vineyard pruning work. One Friday morning, after Rebbecca had gone into the cafe, I borrowed a bike from the campground manager and then cycled the forty-minute ride to the Napier library. I located the knitting section down one end of the craft aisle, three short rows of books wedged between Chinese knotting and crochet. I stood in front of the shelf and noted the titles that caught my attention: *Head-to-Toe Winter Knits*, *New Directions in Sock Knitting*, *Seasonal Slow Knitting* and *Knitting From Fair Isle*. I flicked through the books quickly, passing through glossy photos of scarves and jumpers, socks and beanies, then checked out a pile of the books I liked the most, which, because we didn't own a computer, included an inch-thick encyclopaedia of knitting techniques.

Back outside, I waited for Rebbecca to finish work, then walked with her to the hospice shop just around the corner from the cafe. It was a cold, cloudy day, and the city centre felt grey and gloomy, but when we opened the hospice shop door, a little bell tinkled, and a pocket of warm air wrapped around us as we stepped inside. I immediately spotted the knitting supplies, a wooden table in the middle of the store spread with needles, yarn and other miscellaneous tools arranged in baskets and small plastic buckets.

Rebecca and I walked around the table together, trying to figure out where to begin as we picked through these remnants of so many grandmothers' lives. The yarn was disappointing. Expecting to find something like the elegant, rustic-coloured knitting I'd seen in some of the books at the library, the yarn in the hospice shop was

mangy, just leftover scraps of wool pre-packaged into clear cellophane bags. The colours were horrid—jet black, baby pink, acid yellow. Under the bright shop lights, the dyes were dense, plasticky, and artificial. I'd clearly set my expectations of the op-shop too high; I had to remember I was a bottom feeder, scavenging at the base of the knitting food chain.

"Hey," I said to Rebbecca as I crumpled one of the plastic packets of yarn around in my hands, "can you ask one of those women if this is real wool or synthetic?"

Rebecca took the packet and returned with one of the two elderly women sitting behind the counter.

"Yes," the woman said, putting on her glasses and examining the packet Rebecca had given her, "I believe this is real wool."

She picked another packet out of the basket and looked at it closely, adjusting her glasses on the bridge of her nose.

"In fact," she said, "most of the yarn dropped off here is pure wool; we don't see much polyester come through."

I didn't know how she distinguished between woollen and synthetic yarn, but I took her word for it, not wanting to push it any further.

Rebecca and I had been thinking a lot about plastics over the past few months. We'd recently changed our toothbrushes to bamboo; we were looking for plant-based floss—tiny decisions that had started shifting our perception of the world. We now rarely moved faster than our legs could carry us. Living in the slow lane, every action we made felt amplified. Now that we no longer owned a car, any time we were given a lift or even hopped on a bus felt jarring, as though we'd been picked up and placed back down just slightly outside the timeline of our own lives.

Later that afternoon, I sat on the couch in the caravan with my new needles and yarn spread out on the little blue table in front of me. I'd bought a cellophane bag with three balls of yarn in it—one white, one black and one brown—the most neutral colours the op-shop had pre-packaged, along with a selection of different-sized steel knitting needles tied together in pairs with rubber bands.

I had my knitting encyclopaedia spread from the library open on the couch beside me. I had to brush up on my cast on technique and the knit and purl stitches, the details of which had eroded from the memory of knitting in my nana's living room. Following the advice in one of my knitting books, I started with a scarf. I worked in

stockinette stitch—short, simple rows knitted and purled back and forth as Nana had taught me.

Rebecca thought it was great that I wanted to knit. She was a singer and didn't have a crafting bone in her body. She looked up occasionally from the book she was reading on the bed at the other end of the caravan and smiled at me curiously, as though partly relieved I didn't spend my Friday nights watching rugby and partly relieved that it wasn't her knitting the very first rows of a very long scarf. She also must have thought I was batshit crazy.

It had started to rain—fat, slanting drops that tapped against the window behind me. I turned the fan heater on beneath the table and pointed it at my feet. I was knitting my scarf in stripes, alternating between the white, brown and black yarn. By early evening, the scarf had grown to the length of my arm, but things were already starting to go wrong. The edges of my knitting had begun to curl, rolling in on themselves toward the centre of the scarf. I looked the issue up in the encyclopaedia and found that stockinette stitch curls because of the difference in tension between the knit and the purl stitches on either side of the work. My scarf also had a lot of tassels along the sides where I'd broken the yarn and joined a new ball to change between colours.

I unrolled the edges and stretched the scarf over my leg. It was ghastly. The white clashed with the black, the black clashed with the brown and the tassels dangled off the edges like some sort of mutant tea cosy. I'd have to die before I was seen with that wrapped around my neck. Furiously, I unravelled the entire thing, slipping my scarf off the needle and tugging at the yarn row by row until all my work lay beside me in a tangled mess.

"What's wrong?" Rebecca asked, looking up from the bed.

"Nothing," I said, leaning forward on my knees and rubbing my face in the palms of my hands.

I was exhausted. Though tranquil at first, the rain pounding on the tin roof had gotten inside my head. I leaned back on the couch with my pile of knitting books and brooding for a moment as I flicked idly through the pages. That's when I came across the idea of recycling the yarn from a second-hand jersey, an idea so evident I was astonished I hadn't thought of it myself.

When I woke the following day, the rain had cleared. After breakfast, I jumped back on my borrowed bike and cycled to the Salvation Army store in Hastings, thirty minutes west of Clive.

The men's clothing racks—lined up along the left-hand wall as soon as I entered the door—were close to overflowing: brown dress pants; dark blue, shoulder-padded blazers; bright, polychromatic puffer jackets from the 90s that looked like they'd been sewn out of sleeping bags.

At first, I felt disheartened; it was just the same appalling fashion I'd come to expect since I started buying my clothes from second-hand stores. But near the far end of the rack, I found a grey, knitted jersey— "100% undyed, natural New Zealand wool, XXL," the neck tag read. I bought the jersey for five dollars. When I returned to the caravan, I snipped apart the seams and unravelled the knitting. The sheer amount of yarn that unravelled was disconcerting; this would take a lifetime to knit back into a jersey, I thought, watching the yarn collect in piles all around the caravan. I snipped the yarn strategically and wound it into fourteen large grey balls. All I needed now was a project to work on.

I still liked the idea of a warm neck; I also wanted a project to teach me more about how knitting worked, and I hoped to solve the problem of the curling edges. In one of my books I found a scarf with a twisted cable and garter-stitched edges, the garter stitch created by knitting on both the front and the back of the work to avoid the uneven tension brought about by purling.

It was midday by the time I cast on to knit the first few rows in the pattern. As the scarf lengthened, the gartered edges, though thicker and springier than the stockinette stitch that made up the bulk of the scarf, stayed flat. The rhythm of the needles was hypnotic. As I settled deeper into the repetitive nature of my knitting, watching the two thin strands of the cable pattern twist around one another like a hologram lifting— row by slow row— from the surface of the knitting, my thoughts began to loosen from their usual high-strung ways. Each stitch tore open its tiny space of contemplation.

I continued to work on my scarf over the next few days, sitting in front of the fan heater with my cup of morning coffee after Rebbecca had gone into work at the cafe. On clear mornings, the rugby field in Farndon Park, next door to the motor camp, would be dusted with frost, which, around eight-thirty, would start to sparkle and steam as the sun rose behind the oak trees on the other side of the field.

As soon as the frost had melted, I'd put my knitting away, then head out to the Ngaruroro River, a five-minute bike ride north along the highway out of Clive. After my walk along the stopbank, I'd sit down with my thermos of tea at the edge of the field nearest the highway bridge where the grass was tall and yellow, collapsing down slowly after the long summer. I thought a lot about my knitting while I sat in the grass sipping my Earl Grey. *What is it all for?* the traffic flying over the bridge downriver seemed to ask. Ignoring the cars, I would sip my tea, watching the cobwebs billow between the blades of grass. Beyond the field, the river slipped by quietly on its way to the sea.

\* \* \*

The spinning wheel was listed on Trade Me:

An Ashford Traditional Wheel. A great buy for a beginner. Has all necessary parts in good order. This is an old wheel which is in excellent condition for its age. The wheel runs true and easily. Minimum dents and one (fairly unnoticeable) chip to the treadle. No wobbles.

I won the auction two days later for \$80. I was the only bidder.

By then, we were back living in the South Island, sharing a house with another young couple in Brightwater, an hour's bike ride west of Nelson. Winter was hitting us hard. To the west of Brightwater, a fresh blanket of snow had fallen on the Wharepapa/Arthur Range, dropping the overnight temperature below freezing and icing up the puddles in the mud at the edge of the road outside our house.

I'd finished knitting my scarf in Clive. Now I was dreaming up an entire wardrobe of knitted clothes—hooded jerseys, mittens, socks, beanies. I still had seven balls of grey yarn from the jersey I'd unravelled in Clive. But whenever I picked them up, wondering what use to put them to, they always left me feeling unsatisfied.

Coming across the book on spinning at the Nelson Library a couple of weeks after moving back to the South Island, I thought immediately of the little yellow square I'd knitted at my Nana's house all those years before, how I couldn't shake that mysterious feeling about the yarn coiled up on the carpet in front of me. When I

looked at the photographs of the spinning wheels in the book, at the hand-spun yarn wound up on wooden bobbins, I felt a part of that mystery begin to clarify itself, a gut feeling that some missing link with my clothes had just been discovered.

The spinning wheel I bought on Trade Me was located conveniently in Brightwater. Rebecca and I biked over to see it the next day. The address I was given on Mount Heslington Road was rural, just across the highway from the main township. When we pulled up on a gravel driveway in front of a white shed, an older couple came out to meet us: Anne, a well-built woman wearing jeans and a blue knitted jumper, and Gareth, a shorter, weathered-looking man dressed in a similar but greasier pair of jeans and a battered oil-skin vest.

“Hello,” they both said, smiling and shaking our hands, glancing between Rebecca and me as though trying to figure us out.

We must have been a puzzling sight, this young couple who had cycled into the countryside to buy a spinning wheel and were now standing on their driveway with our helmets on, catching our breaths.

Anne and Gareth were dealers for Ashford Wheels and Looms, a New Zealand-owned and operated business based in Ashburton, Canterbury. We followed them into the white shed, a studio space crowded with Ashford spinning wheels, spinning wheel accessories, table looms and a large shelf of hand-spun yarns in what seemed to be every colour and style imaginable.

“This was my very first spinning wheel, an Ashford Traditional from 1965,” Anne said, leading us over to a red-stained, wooden wheel that bore the scuffs of its many years of use.

Realising this was the first time I’d ever touched a spinning wheel, Anne briefly explained how the wheel worked, sitting down on a small stool and pumping the treadle a few times.

Gareth had been watching from the doorway.

“I suppose you’ll want some fleece to get you started?” he asked.

We walked with Anne and Gareth to a larger green shed behind the studio. Two long wooden tables stood in the centre of the shed, and a raised shearing board on steel stilts ran along the back wall. Anne and Gareth used the shed to shear the small flock of Corriedale sheep they bred on their own property and to sort the fleeces they were frequently sent from other breeders. The whole set-up was

incredibly clean and, I noticed, sniffing at the air disappointedly, lacked that distinct woolshed smell.

Gareth carried over five large boxes from a shelf of cubby holes on the wall and opened them on one of the tables. Inside each box was a tangled mass of raw fleece. Two of the fleeces were creamy, off-white; the other three were dark brown, shorn from Anne and Gareth's Corriedales.

I knew right away that I wanted a brown fleece. I lifted each one part way out of its box and held it up to the light coming in through the front window. I was surprised to discover that the fleeces weren't monotonously brown all over; I saw chestnut and amber, walnut and caramel, the colours shifting subtly between the wavy, curly, crimped-up wool locks.

I'd never held a coloured fleece before. I'd only seen brown or black-coloured sheep standing in their paddocks as I'd passed by on the road. The only wool I'd held in my hands was the kind of familiar, white wool packed into the other boxes, the same kind of wool in the woolshed at Paritu Station. But the brown fleeces fascinated me with the self-sufficiency of their colour.

The fleeces in the boxes were raw and greasy on my fingers, and for a moment, I wondered how I would turn it into the clean, sleek wool I knew was needed for spinning. However, Gareth had brought over another box containing a brown fleece that had been commercially prepared, the wool cleaned and processed into a continuous, rope-like length of fibre known as a sliver.

I carried the box of sliver as we crossed the lawn back to the studio. Passing a break in the trees that grew along the boundary fence, Gareth stopped and looked out over the paddock next door.

"Those are the Corriedales we're breeding at the moment," he said, pointing toward a flock of fifteen or so brown sheep mustered together in a large, grassy pen in the far corner of the paddock.

"We don't have a lot of sheep, just the few we can manage. We look after them well; they're part of the family."

Watching the sheep move slowly about their pen, nibbling at the grass, I felt strangely anxious about working the fleece into a piece of clothing. Taking sheep's wool, I realised, was a form of sharing, and in this way, it held a unique sense of responsibility.

We arranged for Gareth to drive the wheel and fleece to our house. Later that afternoon, I sat on the edge of our bed with my new spinning wheel positioned in front of me on the wooden floor. I'd tried sitting on one of the chairs from the kitchen table but found that my hands were too high above the flyer wheel. Our bed, although bad for my back, was the perfect height.

Besides, I only wanted to use the wheel in our room; I felt self-conscious about using it in front of our flatmates. Even though my spinning wheel was relatively modern, with straighter, cleaner-cut lines than the more ornate devices you might find in a colonial museum, there was still something unavoidably ancient about its lathed spokes and foot-powered treadle—Rumpelstiltskin came to mind. When Cammie caught me lugging the wheel inside after Gareth had dropped it off, she stopped at one end of the hallway and grinned.

"Hey," I said, caught off guard, "what do you think of my new spinning wheel?"

Cammie raised her eyebrows and laughed. "Wow, that's a real blast from the past."

With one of my spinning books open to a page of step-by-step instructions beside me on the bed, I took the threading hook from the drive band adjustment knob and threaded the leader line along the flyer hooks and out through the flyer orifice. With the leader gripped firmly in my hand, I positioned my foot on the treadle and began to pump the wheel clockwise. I'd read in my book that all the singles (the single strands of yarn spun before plying) had to be spun in one direction, ideally adding extra twist to the yarn that was removed when the singles were plied together anticlockwise.

Still treadling, I picked up one end of the sliver coiled up beside me in a pile on the bed and joined the fibres to the leader line, allowing a small amount of twist into the spot where they joined. Carefully, I eased my grip on the line, allowing the leader to inch forward into the orifice and wrap a couple of times around the spinning bobbin. Glancing back and forth at the instructions in my book, I pinched the sliver nearest the flyer. Then, pulling my right hand back toward my stomach, I drafted a length of the fibre out, drawing my right hand back along the sliver toward my stomach. The brown wool drafting out between my hands slipped apart, thinner and thinner, until light could be seen between the fibres. I didn't know how thin I should go; I didn't even know what kind of yarn I was trying to spin. When it seemed about

right, I slid my left hand back toward my right, allowing the twist into the newly drafted fibre, then, with a smug sense of satisfaction, I fed the first ten centimetres of yarn I'd ever spun into the orifice—too easy. Treadling at full speed, I pinched the front of the sliver again with my left hand and worked back through the steps—pinch, draft, slide, fuck! The fibre broke apart, sucked at the speed of light through the orifice and onto the bobbin.

I lifted the leader line back up along the fly hooks, then threaded it through the orifice again, discarding the short piece of broken yarn still attached to the end. When I started treadling this time, I realised there was too much pull on the yarn. I eased the tension brake, cracking the peg back with the slightest adjustment possible. The drag on the yarn reduced instantly, but removing my left hand allowed the twist to travel up into the undrafted fibre, leaving a long, ugly, bulbous section of unspun wool just in front of my right hand that was still holding onto the sliver.

The unwanted twist was nearly impossible to draft apart, so I broke the yarn, teased the fibres open, and then joined them back onto the sliver as I treadled. The join held, but now there was so much twist that the thinner sections of the yarn started to kink and ply themselves together. I slowed my treadling while trying to draft faster to take up the excess twist. Still, it was all too much, balancing the treadle, the draft and the rate of twist simultaneously—that skill set belonged to a part of my brain that had not yet been unlocked.

I gave up, broke the yarn where it joined the sliver, pulled out the leader line, and then dropped the tangled length of yarn onto the floor next to the first piece. I started over again, but my draft pulled apart. I lifted the leader line back along the flyer hooks and threaded it through the orifice. Now, the bobbin was too loose. I adjusted the knob on the tension brake, but my yarn tangled. I dug deep, trying to harness my inner patience, but it happened again and again, repeatedly breaking, twisting, and snapping. By now, a little pile of failures was building up next to my feet.

I practiced on my wheel for the next two weeks, working my way through the box of brown Corriedale sliver until I'd mainly resolved the issue of my yarn pulling apart. Rebecca and I had found part-time work together, potting up plants at a local nursery. With so much time to practice, my yarn grew smoother and more even each day. Within a fortnight, I could spin almost continuously without interruption, watching, with newfound pleasure, the yarn pooling up along the bobbin.

When I finally filled two bobbins with a yarn worthy of plying, I returned to my books and studied the next steps. I needed a lazy kate—a rack for holding and unwinding the bobbins while plying the yarn. I didn't have a lazy kate, so I improvised by cutting a cardboard box in half and poking through two knitting needles that acted as axles, holding the bobbins in the centre of the box and allowing them to unwind freely.

I plied the yarn in one sitting. Plying was much the same as drafting the singles, the main difference being the wheel spinning in the opposite direction, taking out the excess twist as the singles spiralled around one another to form the familiar double helix of finished yarn.

By the time I finished plying, my completed yarn had filled up another three bobbins. The yarn was not perfectly balanced; while spinning the singles together, extra twist had built up in the ply before it had time to wrap around the bobbin. When I doubled my yarn over, the imbalance caused the finished pieces of yarn to ply around one another. This imbalance was easily fixed by 'setting the twist' in hot water. However, I was too impatient; the wet wool would take two or three days to dry, and the excess twist wasn't significant.

I'd picked up more knitting books from the library and decided to knit a pair of gloves. But unlike the cable pattern I'd followed for my scarf, I was going to design my gloves from scratch from the instructions I found in one of my books detailing how to design custom-fitting gloves.

First, I had to calculate the sizing of my gloves. To do this, I needed to knit a ten-centimetre square swatch to determine my gauge: the number of stitches and rows counted over ten centimetres on a small square knitted with my intended stitch pattern and needle size. My stitch pattern was a simple stockinette. I used 3.5mm double-pointed bamboo needles, thin bamboo sticks, each about the length of a pen, and pointed at either end, which allowed the gloves to be knit in a continuous loop without a seam. I'd bought my double-pointed needles of Trade Me, a seventy-two-piece pack of fifteen different sizes that I had tipped out beside me on our bed like a pile of Pickup Sticks.

When my swatch had been knit, I held it up close and tipped it side to side, examining the stitches in the morning sunlight shining in behind me through the bedroom window. Rolled up in a ball, the yarn's detail was lost, but now, stitched up in a sizeable square of knitting, I could appreciate the subtle colour variation that ran

through the fleece, every few rows shifting the tone or shade of the chestnut-like base colour, while here and there a stitch or two flickered in delicious caramel, like tiny nuggets of gold.

After my swatch was knit, I had to measure my hand. The measurements were taken in three places: the widest circumference of my hand around my thumb knuckle, the distance from my wrist to the crook of my thumb and the narrowest circumference of my hand just below the base of my fingers. After drawing the rough shape of my hand on a piece of paper and noting my measurements down inside it, I scribbled out a couple of calculations: dividing the number of stitches in the swatch by the swatch's length gave me my number of stitches per centimeter. Multiplying the stitches per centimetre by the narrowest circumference of my hand gave me the correct number of stitches to begin the glove's cuff. Finally, I could cast my stitches on.

I had enjoyed the warmth of the low winter sun shining through our bedroom window as I calculated the size of my gloves. But now, the sun had passed behind the bare branches of the jacaranda tree that grew next to the letterbox out the front of our house, casting a web of shadow across our polished floorboards and up the far bedroom wall. The room had grown cold, and my hands had started to ache. I got off the bed, flicked the oil heater on, then sat beside it on a cushion with my knitting.

Setting up the double-pointed needles was more difficult than casting my scarf onto the long, straight needles I used in the caravan in Clive. Now, my stitches had to be distributed evenly between three of my four needles, and then the first and last stitches on the outer needles had to be joined in the round.

My knitting book convinced me that I wanted my join to be invisible, rather than the ugly stepped stitch that would appear if I simply joined in the round with a single knit stitch. To make an invisible join, I had to work through three steps. First, I had to cast on one extra stitch, then slip over the first stitch from the opposite needle, which linked my two needles together. Next, I lifted the extra cast-on stitch over the top of the slipped stitch and dropped it clean off the needle, coupling the two stitches together and physically joining my knitting in the round. To finish, I passed the slipped stitch back over to its original needle, rebalancing the distribution of stitches. All the while, I had to take care that the rest of my cast-on stitches didn't twist, a feat of dexterity that appeared to require more than ten fingers.

From here, I used my fourth needle to continue knitting in a two-by-two rib stitch until my cuff measured four centimetres. When it was complete, I transferred the live stitches off the needles and onto a piece of yarn to try the cuff on, slipping it over my hand and onto my wrist; it with a perfect fit.

I needed a rest. I wasn't designed to sit on the floor for extended periods. By now, my lower back was aching, and the toes on my left foot had gone numb. I walked with Rebbecca to the end of our road, which stopped abruptly at the pile of rocks lining the bank of the Wairoa River just a few hundred metres from our house. The winter air, already settling for the afternoon between the vineyard rows on either side of the road, was damp and cold in my nostrils. I ran ahead halfway down the road, trying to warm up, then jogged back and took hold of Rebbecca's hand.

"Jesus, your hands are cold," she said, pressing my fingers against her cheek.

She was right. They were bloody freezing. I blamed my mum for that. We both had poor circulation, gritting our way through winter with pale fingers and red, chillblained toes. Rebbecca's hands were always naturally warm. I was jealous; her fingers were like little grills that I used to warm my own fingers up.

I needed gloves. I only owned one pair of thick, mountaineering-style mittens I'd bought a couple of years before I met Rebbecca, but they were showing the wear of years of abuse; campfire flames had already half melted the outer polyester shell on one of the hands. They weren't the kind of gloves to wear casually, either. I bought them when I was pruning vineyards through winter in Central Otago when we had days off because the snow was too thick on the ground. They were black and wide as paddles and hung absurdly at the ends of my arms like bear's paws. Now I wanted nice gloves. I wanted gloves Rebbecca would like to hold when she took my hand on winter walks.

I returned to my measurements and sheet of paper with my sketched-out hand and ran more calculations. I multiplied my stitch gauge by the circumference of my hand at its widest point, then subtracted my number of cast-on stitches; this gave me the number of stitches I needed to increase. Using my swatch, I calculated my row gauge and multiplied this by the distance from my wrist to the crook of my thumb; this gave me the number of stitches I needed to knit for my gusset to reach the top of my thumb knuckle. To work the gusset, I had to place stitch markers to show me when to make my increases; the increase stitches themselves knit in a particular way

so that the stitches leaned to the left or the right of the gusset edges, allowing the new stitches to follow the angle the gusset was pointing.

By the time I joined the gap on either side of the gusset—securing the gusset stitches to a piece of scrap yarn—and knit the remainder of the palm up to the crook between the pinkie and the ring finger, the first half of the afternoon had passed by. The shadow from the jacaranda tree had slipped off the wall, casting our bedroom in a dusky afternoon light. I'd been knitting on and off for four hours, and considering the time I'd already spent spinning the yarn, the work I'd put into my half-a-glove was staggering.

I picked up a knitting book and flicked through its glossy photos of gloves. Some appeared as plain as mine, but others were knit in delicate lacework or braided cable patterns that flowed over the back of the hands like Celtic wood carvings; the kinds of gloves you'd be too scared to wear, just taking them out occasionally and pulling them on to pet them. Another knitting book contained several patterns for Fair Isle gloves, a traditional knitting technique using multiple strands of coloured yarn carried on the back of the knitting to create complex patterns in layers and stripes. In the photos, there were diamonds and dashes and triangles and dots stitched in colours sprinkled out over the knitting like confetti. On some of the gloves, the coloured patterns continued into the fingers with an intricacy that made my head swirl. Those projects, I thought, must be a form of devotion. And if that was a religion, I wanted to convert.

I hadn't tried my glove back on since I'd finished the cuff. When I did try it on again after I'd reached the first finger, I was disappointed. I now found the palm was tighter at the base of the fingers than just above the cuff where the gusset began. I rolled my hand from side to side; the discrepancy between the stitches frustrated me. I wondered if my stitches had tightened as I moved up the hand, but I couldn't tell. However, my yarn had become chunkier as it unravelled from the ball. My singles, I realised, had not been spun evenly, causing my knitted fabric to thicken.

I thought the issues with the glove might somehow resolve themselves, so I carried on. But here, I'd reached the glove's most delicate stage. Now, at step five, I had to measure the circumference and the width of each finger at its base. Now, my remaining stitches had to be divided, distributed and placed on scraps of yarn. Each finger had to be joined at the gap; extra stitches had to be cast on; fingertips had to be decreased; yarn had to be broken; tails had to be tucked in.

Each finger turned out worse than the next—too loose, too long, too tight. There was little hope by the time I moved on to finish the thumb. When I finally put the glove on, the joins between the knitted fingers didn't fit snugly between the fingers on my hand, causing the join in the crook of my thumb to sit too high and tight. I should have stopped earlier and put the glove away. It was late evening when I started the fingers, the trees outside our bedroom window already melting into the half-light of dusk. By the time I finished, it was pushing toward midnight. Rebecca was lying on the bed next to me, reading. She kept telling me I needed to stop; we had to work the next day.

I didn't have the stomach to unravel the fingers and start again. Now, the whole glove seemed tainted. Besides, I'd already used two of my three balls of brown yarn. I wouldn't have enough to complete a second glove, and trying to spin more yarn while maintaining an even gauge was out of the question. Tired, with my eyes feeling raw and washed out, I folded the glove in half, put it away out of sight in the wardrobe, and climbed into bed.

By now, Rebecca and I had been on and off with our vegetarian diet for the past seven months. Yet for seven months, I'd fought against these vegetarian ideas, trying not to let them grow too large in my mind. I hadn't been on a hunt for two years. The last animal I'd shot was a chamois in the mountains behind Molesworth Station. I missed everything about hunting. I missed the sound of a pig crashing through the scrub and dogs barking at the bottom of a gully. I missed the greasy, metallic smell of the rifle. How was I supposed to tear myself away from the only life I'd ever known? Wouldn't there always be a part of me missing?

Most days, I didn't quite understand what Rebecca and I were trying to achieve. Apparently, we wanted to hold higher morals. We wanted to think we were above the need to kill animals to live our own lives. But I was constantly conflicted by my thoughts. Biking into Nelson on the weekends, I had to pass the Richmond abattoir, that long, white industrial building across the highway from the Waimea Estuary. If the breeze was coming from the south, I could smell the abattoir from the bike path, a warm, metallic smell of blood mixed with bleach. Sometimes, the holding pens across the road were crammed full of waiting sheep. I would hold my breath and screw my nose up angrily at that mass, industrial slaughter, pumping my pedals fast for a good minute until I got clear of the fetid airstream. Yet a moment later,

passing a glassy, sun-reflected stretch of the estuary, I would be smacked by a sense of nostalgia, a sudden longing to be standing at the beach with a surf caster, waiting for the strike of a fish to pull through the line, the rush of reeling it to the shore, the slice of my filleting knife beneath its gills as the fish bleed out onto the sand. A part of my ego wanted to sever my dependence on animals completely. Still, another, deeper, more rational part of me refused.

Moving to Brightwater felt like a fresh start. There, we drew our line in the sand. We would keep eating eggs, butter and milk, but meat was off the menu. This new status quo held for several weeks but it balanced on a knife edge.

The Saturday after my failed glove, Rebecca and I were biking home with our milk—a ten-litre bucket that we picked up fortnightly from Wangapeka Family Dairy, a local dairy that sold raw milk out of its own gourmet cheese shop only ten kilometres bike ride from Brightwater—when we passed a small herd of calves standing on the far side of the paddock. We stopped to admire the calves. The grass in the paddock was tall and shiny; the calves were new and long-legged, impeccably white with black and gingery-brown spots on their sides. Inquisitive, the calves looked up and galloped halfway across the paddock, where they stopped in a tight herd to stare at us with their huge black eyes glinting in the sunlight.

It wasn't until later that evening when Rebecca and I were talking back at the house, that we started questioning our milk. A few months after we'd met, Rebecca had picked up work over the calving season on a small dairy farm outside Blenheim. Part of Rebecca's job was to wean the calves off milk, tricking them a little further each day to eat dried pellets from a bucket instead. I had work in a vineyard, but I went to the farm some mornings to help. Arriving before sunrise, we could hear the mothers bellowing out through the dark from the paddocks, calling out—the farm manager told us—for their calves that had been taken away for weaning. Most of the calves that had been separated were bobbies, the unwanted byproduct of the dairy industry. Bobbies are predominantly male calves that are surplus to herd replacement or to grow on for beef production and are sent to slaughter within ten days of being born. One morning, a single trailer stock truck pulled up and took all the bobby calves away. I watched as they were herded out of their straw-lined pens and staggered up the truck's metal ramp on their wobbly legs. Neither Rebecca nor I held any particular feelings of injustice then; the farm was a business, and the calves were part of its trade stock. But now, in Brightwater, we were thinking

differently. Now, we didn't want to be part of the cycle of industrial slaughter and death. That was the reality of the milk in our bucket. To have that milk so readily, the bobby calves had to die.

We knew that milk could be sustained in our lives in other ways. Only the year before we arrived in Brightwater, we'd WOOFed with Monica and Scott at their homestead farm in Murchison. There, we brought the cows into the hay barn in the evenings and took turns to milk them by hand, sitting on a block of wood with a stainless-steel bucket at our feet, squeezing our fingers down the cow's greased-up teats. The calves sniffed through the grass close by, keeping their mothers calm. Monica and Scott didn't take the calves from their mothers. Instead, the cows enjoyed life in a sizeable scrubby paddock at the back of the property. One afternoon, we found a fresh, bloody placenta in a small clearing among the blackberry at the side of the paddock and nearby, a tiny, slimy calf folded up in the grass. When we tried to get closer, the mother came charging out from behind the blackberry and chased us away.

Our milk from the dairy in Brightwater contradicted the sort of individuals Rebecca and I were trying to be. The more we talked about it over the next few days, the more glaringly our inconsistencies struck us. And then it started to spread. We began questioning every aspect of our lives—everything we owned, bought and ate. It was inevitable that we began to question wool.

I'd gone back to my spinning wheel after the glove had failed. I needed to practice and perfect my yarn. Slowly, I spun my way through the box of brown Corriedale sliver. Those long, solitary hours sitting in a state of ponderous, semi-meditation as I worked the treadle, listening to the purr of the flywheel, gave me a lot of time to think. Not that it got me any closer to resolving my dilemma. I sat spinning with constant inner conflict: This wool belongs to another animal—I would reason with myself—it's not mine to take. Yet simultaneously, the wool in my hands was so natural, so ideally suited for everything I wanted to make. What was I going to do without it?

Other reasons beyond slaughter made me question my use of wool. Though mulesing—the removal, using steel shears, of strips of wool-bearing skin from the buttocks of a sheep to prevent flystrike—was soon to become an illegal practice in New Zealand, there was still the tail docking and ear tagging, both forms of physical interference with the sheep's body, yet necessary for the care of sheep in wool

production. It bothered me that sheep's bodies needed to be encroached this way. I was also frustrated by the scale of wool production: The size of the farms, the volume, and the speed at which sheep were shorn—it was an industry like any other; the sheep were a number, the wool was a commodity, a raw agricultural product to be bartered at the highest price.

My thoughts about sheep and wool were idyllic. The instinctive part of me that wanted to use wool needed to be close to the sheep, to help care for the sheep, to know the sheep. I needed to be able to look into the sheep's eyes daily. Anne and Gareth's sheep came close to the kind of connection I felt I needed, but already, I seemed to have sunken too deep into my torment. I'd weighed too much balance between the good and the bad, between the rights and the wrongs. Eventually, the conflict was too much to bear, and I started to feel that other, instinctive part of myself being buried.

Rebecca and I were at a tipping point. We talked about animals at work, on our bike rides to Nelson, and at home in the evening. Sometimes, we argued; that often seemed like the only way to express ourselves. Our flatmates probably thought we were crazy. By the time the bucket of milk was finished, we'd overbalanced and tipped. At the end of that week, we returned the bucket to the store and pronounced ourselves vegan. But God, I hated that name. It felt like swallowing a big plastic pill that promised to solve all of my problems. It was too simple, too clean, too cut off from the complex array of understanding and connection with animals that all of my years on this Earth had fostered. How could my entire life now be defined by a single word?

It was a crisp, bright Saturday morning when we dropped the bucket back. I stepped out of the cheese shop and squinted up at the weak winter sun, but I couldn't quite place the feeling—part of me felt self-righteous; part of me felt like a freshly torn wound.

We were still living in Brightwater a few months later, adapting our diet and dealing with the shock of weaning ourselves off butter, honey, and milk. The seasons had turned. After the spring had melted the snow off the mountains, summer had slipped into its place, warm and dry. My box of fleece had run out, but we hadn't returned to Anne and Gareth's house. My spinning wheel now sat unused in the corner of our room. One evening, I was walking alone alongside the Wai-iti River just

outside town. The shallow riverbed was dry, and the smooth round stones were white and dusty. On both sides of the river were vineyards and small, empty paddocks, the grass mostly coarse and yellow at that time of the year.

A few minutes before the track ended at the main road, I passed a paddock hemmed in by a block of native bush. The low sun was behind the trees, casting the paddock in shadow, and the few white sheep on the other side of the fence stood about contentedly, tearing at the grass. The lower fence wires, where the sheep had rubbed, were hooked up with messy, tangled pieces of wool. As I walked along, I picked the wool off, twisting it between my fingers and plying them over into short lengths of rough, wild yarn. The lanolin on the wool left my fingertips slippery. I lifted my fingers up to my nose and smelt them. There was the sharp, sour smell at first and then that hint of something sweet, something comforting; nothing had changed since those early days in the woolshed at Paritu Station. When I walked back into Brightwater, the sun had just dipped behind the hills, streaking the sky orange and pink. I was still holding the piece of wool, rubbing it between my fingers in my pocket. Just before our driveway, I pulled the wool out and dropped it on the grass by the side of the road.

We stayed in Brightwater for another year. My spinning wheel remained in the corner of our room that whole time. I wanted to make my clothes so desperately. All the clothes I owned now were from a second-hand store. I bought plain dress shirts and trousers, then cut the arms and legs off to make t-shirts and pairs of shorts, sewing the hems up as tidily as I could with a needle and thread.

I wanted to sew my clothes from scratch. Inspired by my now dormant spinning wheel, I found an old treadle Singer sewing machine for sale in Nelson. Rebecca and I stopped by to see it one weekend. A woman in her forties led us to the shed behind her house. The sewing machine was sitting behind a pile of boxes in the back of the shed. The machine itself was black, forged from cast iron, and decorated with golden filigree flowers and vines—delicate and brutish at the same time; the wheels and dials at the back end had that robust, Victorian look about them, the sort of mechanical parts capable of taking off fingers. The sewing machine was mounted on a polished wooden desk supported by ornate cast iron legs and a foot treadle.

“This was my mother’s sewing machine,” the woman told us. “She was given it by her mother, who brought it new in the 1920s. It’s over ninety years old.”

The woman's husband dropped the sewing machine off at our house a few days later. It took all three of us to lift it from the back of the van. We placed it in the other corner of our room, across from the spinning wheel. Unfortunately, the sewing machine needed a part replaced before being used to sew. I found an online forum for Singer sewing machine enthusiasts where parts were regularly traded and bought. Still, the complicated part the machine needed was a rarity, selling for upwards of three hundred dollars—an extravagance that potting up plants three days a week couldn't buy—so we flipped the sewing machine upside down into its built-in box and used the table as an elaborate book stand.

Why didn't I buy an ordinary, modern sewing machine, one made of plastic that plugged into the wall, the sensible, normal thing to do? There was something about these devices' raw, mechanical workings that drew me in. It wasn't just from an engineering perspective, but the personal connection they offered in the crafting process, where I could witness the entire link between my body and the item I was making.

With no wool to spin or clothes to sew, I delved into research. I was consumed by a need to know more about fabrics; to understand this material that I'd been wrapped in since the day I was born.

We still didn't own a computer, so I stopped at the library one Saturday morning and sat down with my login ticket on a public computer. On my left, a scruffy man smelling faintly of rancid oil sat slumped in his chair playing online pokies; to my right, a skinny boy wearing headphones was playing a first-person shooting game. I watched his screen from the corner of my eye: A scope magnified the war-torn city that lay all around in rubble and burnt-out cars. Suddenly, an animated man in military clothing and holding a machine gun appeared from behind the corner of a building in the distance. The boy next to me jerked his mouse, the scope on the screen jumped, and the soldier in the distance threw up his arms and dropped to the ground in a splash of animated blood.

I brought my eyes back to my computer. I tried to concentrate as I typed in the first keywords that came to mind—clothing, cotton, environment, pollution, chemicals and synthetics. The search results were overwhelming, an infinite stream of foreboding scientific research, blog posts and environmental campaign networks. I clicked and scrolled and read. I learned about fast fashion, the mass production of the latest clothing trends at high speeds using low-cost materials and labour to

maximize profits. I discovered that ninety-two million tons of used clothing go to landfills yearly. I found that eight thousand litres of water are required to grow the cotton for a single t-shirt. And that cotton farming accounted for ten percent of the world's insecticide production.

I learned about plastic microfibres, those tiny polyester particles that get stripped from clothing in the washing machine. They were filling up the oceans fast—globally, five hundred thousand tonnes were being flushed through our sewers and into the world's oceans yearly. These plastic microfibres accumulated and concentrated other toxic chemicals like heavy metals and pesticides already in the sea. It all seemed so simple. The little fish swallow the microfibres and become polluted. The medium-sized fish eat the little fish, and the bigger fish, in turn, devoured the medium-sized ones. On and on it went, biomagnifying the pollutants up through the food chain, all the way to us when we eat the fish. Plastic pollution had also recently been detected at the bottom of the Mariana Trench. In that study, a new species was discovered, too: a tiny, armour-plated crustacean that, when dissected under a microscope, was found to have a piece of plastic microfibre in its stomach. The scientists called this new species *Eurythenes plasticus*.

Staring at my computer screen, I conjured up images of pale, prehistoric fish—those huge black eyes and rows of rugged teeth erupting from misaligned jaws—floating in dark chasms at the bottom of the ocean. I thought of killer whales breaching in black water between icebergs in Antarctica and belugas migrating through the blue-tinted Arctic Sea. These animals weren't supposed to have anything to do with us, but now they were filtering the plastic fluff from our puffer jackets.

Exhausted, I sat up and straightened myself in my chair, surprised, as I glanced around the library, that everything was still functioning in one piece; there was a limit to how much ecological crisis you could take on board in a single morning.

I replayed these facts in my mind for the next week, thinking about the whales and the prehistoric fish as I stood at the nursery's workbench, potting up Buxus and pittosporums. It wasn't until my trip to the library the following weekend that I began to probe possible clothing alternatives.

There was organic cotton. The internet raved about it. Organic cotton was free of synthetic pesticides and artificial fertilisers, though it still generally required significant quantities of water. Most significantly, though, it lacked the character I

craved in fabric. As I sat at my computer, my eyes fell on my green cotton shorts and white shirt. They'd both been cut from longer trousers and a dress shirt, and the fabric was too smooth and perfect. They felt lifeless. I wanted a fabric that felt alive, fabric that suggested a story.

Linen and hemp took me by surprise. I'd heard both terms before, of course, though it turned out I had them a little confused. The linen closet when I was a boy had been full of cotton sheets, while my idea of hemp had been mixed up with marijuana, with the weed I'd smoked occasionally as a teenager.

Sitting at my computer in the library, a new world of terminology opened before me. Technically, linen was not the name for my cotton bed sheets but for the fabric produced from the flax plant—not New Zealand harakeke with its broad, sword-shaped leaves, but true flax (*Linum usitatissimum*) native to Northern Europe, a slender, knee-high plant topped with delicate, purple-blue flowers. Hemp surprised me in the same way. As a Cannabis cultivar grown primarily for its fibre, hemp lacked the levels of THC necessary to get high.

However, without a functioning sewing machine, I was stumped. But then I discovered I could buy linen and hemp before the fibres were woven into fabric, the raw fibre after it was stripped from the plant and processed into a sliver like my box of Corriedale fleece. If I could spin this, I thought, perhaps I could start knitting again.

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Our time in Brightwater ended, and a few weeks later, we found ourselves living out on Banks Peninsula. I'd lugged my spinning wheel there, its wooden parts disassembled and wrapped in cardboard cut from banana boxes. Both Flax and hemp sliver had proven to be elusive in New Zealand. Unable to track down a larger, cheaper quantity, I'd bought three hundred grams of hemp sliver on Trade Me. The parcel arrived a few days before we left Brightwater—a pale bundle of fibres packed into a Bell Tea box and smelling faintly of straw.

I couldn't spin the hemp fibre until we were on Banks Peninsula. We'd found work out there in Little Akaloa, a remote cluster of baches and farmhouses at the top end of Little Akaloa Bay, a place neither Rebecca nor I knew existed until we saw an ad seeking daffodil pickers in a Christchurch newspaper. We placed our own ad for accommodation and found a bach to rent a little way up the hill behind the flower

farm. The daffodils we picked were Soleil d'Or, backbreaking work in a paddock with an exquisite, spicy-vanilla-like aroma that scented the air.

Winter had returned, and after a day out in the clear, cold sunshine, Rebecca and I would bunker down in the bach for the night. I assembled my spinning wheel and spun the hemp using the techniques I'd learned with the Corriedale sliver. Traditionally, hemp and flax would be spun from a distaff, a long pole designed to hold the fibre in a cage or tied to the top with string. The spinner drew the fibre down from the distaff before spinning it onto the wheel. The distaff enabled very long fibres to be managed much more efficiently. Also, it limited the time the fibre was held in the spinner's hand, preventing the natural pectin from becoming sticky and tangling the fibre.

My fibres, only measuring about thirty centimetres and relatively unresponsive to the moisture in my hands, didn't require a distaff. I spent the next few nights sitting beside the oil heater, content to see my wheel spinning again, listening to the flyer whistling softly as it twisted the thread out between my fingers and onto the bobbin. Outside in the dark, the sea crashed and washed over the rocks at the bottom of the bay.

I'd come across the backstrap loom in a book I'd picked up from the Christchurch Library. Basically, two sticks joined with a warp—the lengths of yarn that run vertically up and down a piece of fabric—then tied between the weaver and a solid object like a tree, the backstrap loom was one of the world's most ancient forms of weaving. I wanted to make a backstrap loom to weave my finished hemp yarn. I sat down in the bach with two driftwood sticks I'd collected from the beach and tied one stick to the brass knob on a kitchen draw and the other to a cord that wrapped around my back. The warp took me two hours to set up, wrapping the warp yarn and then tying on the heddle stick, a rod that alternately lifted the warps over and under the perpendicular rows of the weft, creating the fabric's weave.

My little square of fabric, woven over two nights, was about the size of my outstretched hand. I cut the fabric off the sticks, wove in the warp tassels dangling from either end, then stitched up the sides to make a small pouch, leaving a flap to close it at the top. I lay back on the couch and admired it. It still smelled like straw. I had no idea what to do with my pouch, but that hardly mattered. The process of spinning, weaving and stitching the raw plant fibre into a practical object seemed like a feat of human engineering, it was undeniably a work of art.

\* \* \*

After the daffodils had been picked, we packed up. We headed north, crossing back over straight and, via a stint of WOOFing on a vegetable farm in Kerikeri, wound up in Coatesville, a wealthy, rural community thirty minutes west of Auckland. We picked up part-time work with Tanya, a local Coatesvillian who managed her own gardening business.

We'd moved into a small flat out the back of a larger house on a lifestyle block, and now we could see sheep in the tidy paddocks outside our windows. The fence line running past our bathroom was so close we could hear the sheep tearing at the grass when we lay in the bath. I tried to ignore them, but it didn't work; my spinning wheel sat too conspicuously in the living room next to the couch. Unlike the antique Singer sewing machine that could function as a bookshelf, the spinning wheel refused to be put to any other use. Everything about the wheel suggested motion. It was made for one task only; it wasn't supposed to sit around gathering dust.

Desperate to work on my clothes again, I decided to buy a sewing machine—an ordinary, modern plastic one that plugged into the wall; the sensible, normal thing to do. At first, I looked for a second-hand machine but quickly felt daunted by the possibility of mechanical faults. I had no idea how a sewing machine worked, so I wouldn't know if anything was missing or had gone astray.

Two days later, I stood across the road from a sewing shop on the other side of Auckland. I'd gone alone and felt nervous the whole trip, unsure what to expect. I couldn't remember having been to a sewing shop before, let alone to buy a sewing machine. The two women I could see through the shop's front window looked intimidating.

Inside, I found it wasn't so bad. One of the women showed me about the shop, pointing out several models and asking questions about my intended sewing and the price range. Eventually, we stopped in front of a modest-looking machine: a white Janome with blue flowers printed beneath a small digital screen with three square buttons. The Janome had fifty percent off. Even though the blue flowers irritated me, at five hundred dollars, it was a sewing machine I could afford.

"This is a great wee machine," she said, dragging a seat over and sitting down at the display table with a small square of fabric in her hands. "I often recommend

this Janome to those starting with their sewing; it has just the right balance of features.”

The sewing machine flicked into life, emitting a soft humming sound from somewhere inside like a tiny mechanical heart. She slid the piece of fabric onto the metal plate. *TokaTokaTokaTokaToka*, the needle whizzed up and down, tugging the fabric through with a line of precise stitches.

After the demonstration, the woman switched the machine off and left to retrieve a newly boxed one from the back of the shop. I stood patiently with my hands in my pockets, staring at those blue flowers. They still annoyed me. Perhaps at home, I could scratch them off with a knife.

I was relieved to return to the street with the brand-new box tucked under my arm. Back at our flat that evening, I learned how to use my sewing machine man-style, reading as much of the user manual as was necessary to get the machine running. Then, sacrificing one of my second-hand t-shirts to the kitchen scissors, I sat down and flicked on the power switch. I sat at the machine late into the night, driving through pieces of fabric until I'd tried all the ninety-nine stitches and pushed the machine through its mechanical limits, once catching my finger under the needle clamp screw, which nicked a flap of skin off my knuckle and christened the sewing machine bed with a few drops of blood.

I dreaded purchasing new, expensive linen or hemp fabric for my first sewing project. So, inspired by the idea of recycling the yarn from the jersey in Clive, I went to SaveMart in search of clothing made from these unique fabrics. I didn't find hemp, but I did find linen in the woman's section: a pair of dark brown pants and a lighter, fawn-coloured blouse. The linen was easy to spot with my newly trained eye—I immediately noticed its distinctive, crumpled appearance and, on closer inspection, those rustic, bumpy slubs that ran through the fabric's individual threads.

I was down to my last two pairs of second-hand shorts that I'd cut from trousers, so making a pair of shorts was a good idea. I didn't have a pattern. Instead, I cut up my favourite fitting pair of shorts from the two that I had left, following carefully along the seams, then traced the pieces out onto a sheet of paper, adding a couple of centimetres for a seam allowance, one of the only technical sewing terms I'd learned.

After cutting the brown pants open, I discovered they weren't wide enough to fit my pattern. I considered solving this problem by adding a strip of fabric from the fawn-coloured blouse down both sides of the shorts. I thought blending the two shades of brown and cutting the new pieces to fit the circumference of my waist would be easy, but it took me all week. After that, I still had to figure out the waistband, the fly, the length of the shorts, the hems, the belt loops and the buttons—I didn't bother getting into pockets.

I bussed through Auckland to another sewing shop and bought tailor's chalk, measuring tape, thread, needles and pins. I worked in our bedroom, spreading my patterns and fabric over the bed and the floor. Rebbecca checked on me occasionally. She even cooked scones and brought me cups of tea.

We'd bought a second-hand laptop, so now I could delve into sewing research from the comfort of our flat. I thought it would help, but, for the most part, it made everything more complicated. Each technical term led to another, and I found myself devoting hours at a time to YouTube tutorials.

My shorts took a month to put together. I carved my own buttons from the wild thicket of bamboo I found growing at the side of the road not far from our flat. The day after they were finished, I wore them out gardening, somewhat weary of showing myself to the world.

"Did you make those shorts?" Tanya, who knew I'd bought a sewing machine, asked as she watched me weeding a steep, landscaped bank of cutty grass behind a client's house.

"Yes, I've been working on them for a month."

"Great job," she said. "They look fantastic."

I wasn't entirely convinced. I realized the fabric was too thin once the shorts were sewn together. My legs were skinny, and my shorts, which lacked weight, flapped in the back when I walked. I was tired of upcycling. Despite lacking confidence in my skills, I decided to buy a piece of fabric.

My frustration grew as I continued my search for organic fabric. Organic flax and hemp fabric was a rarity in New Zealand. But I was determined. I expanded my search until I found Rawganique, an organic cotton, linen, and hemp shop in Canada. Rawganique was a treasure trove, offering various products, including a DIY section with organic fabric sold by the yard.

I chose a piece of linen. The parcel arrived two weeks later: one yard of 6 oz organic European-grown linen, packed in a biodegradable plastic bag tucked flat inside a cardboard box. I laid the fabric on the living room floor and stared at it.

The fabric was undyed, the linen fibres having a dark, natural, flaxen grey resembling river pebbles, which Rawganiquehad had nicknamed 'Evening Sand Dunes'. In one corner, there was a little knot in the weave. The online shop mentioned that the fabric was woven in-house and that, occasionally, there may be inconsistencies where breakage occurs on the loom. I stared at the little knot and thought about the hands that must have tied it. I thought about the plants that the fibres had come from, the farmers in their tractors who had harvested them, the field on the other side of the world that I would never visit where the plants had struggled up through the soil night and day—I was down on my hands and knees by then, lifting a handful of the grey, crumpled linen up under my nose to smell it. Holy shit, I thought, pulling in a drag of its musty, meadowy aroma, I've fallen in love with a piece of fabric.

This time, I was going to make a shirt. I was working without a pattern once again, hoping to follow a style I'd found on Pinterest: a shirt with a thin, vertical collar and three buttons running down a short Popover placket.

I picked a sleeve off one of my three remaining second-hand t-shirts and laid it flat on the kitchen table to study the shape, but I couldn't get my head around it. If you remember mathematics from school, the sleeve cap—the name for the shape at the top of the sleeve—looks like a bell curve, a smooth, rounded peak that tapers away at each end to the desired width of the arm. The higher the peak, the steeper the angle of the finished sleeve. This complex, wobbly line that formed the sleeve cap was supposed to match up and fit within the shirt's armhole.

The armhole itself was formed by two arm scythes, a scoop cut out under the shoulder on both the front and back bodice pieces of the main shirt, with the back bodice following a slightly shallower curve to allow for the extra flexibility needed in the back. The trick was determining the sleeve's width while perfecting the sleeve cap's height and calculating the bell curve's length to match the armhole's overall circumference once the front and back bodice pieces were joined.

The night I began researching the sleeve cap might've been the point that I started losing my hair. I'd come across some sort of French tailor's equation for perfecting this sleeve cap/armhole conundrum and had studied the web page from

top to bottom; was this the realm of algebra or geometry? I wasn't sure. I began to draw with my pencil and ruler: measuring, adding, multiplying, subtracting, dividing. A little after midnight, I was still at it, pushing myself onto my knees and blinking at the light bulb to bring moisture to my bloodshot eyes. In front of me, my half-crumpled sheets of mathematical calculations were spread all over the living room floor.

A couple of days later, my block pattern was complete, although buckled and full of holes because (not having a big enough piece of paper) I'd had to tape together the cardboard sheets salvaged from the bottom of banana boxes. I traced the pattern onto the linen with my tailor's chalk, then, picking up the kitchen scissors amid a cloud of self-doubt and uncertainty, I cut my fabric into pieces.

I tried the shirt on when the front and back were sewn together. Carefully, mindful of the unsewn armholes, I slid my arms into the shirt and lifted it above my head. What was supposed to happen next didn't—the shirt dropped to my armpits but wouldn't go any further.

"Babe, quick, come!" I shouted, taking a few blind steps toward the hallway.

Rebecca came running into the living room.

"What the hell are you doing?" she asked, laughing.

"I'm stuck," I said, trying to stifle a laugh, which would only stretch the unsewn edges. "Can you give me a hand to pull the shirt down?"

We managed to get the shirt on, but it was a snug fit—too snug. I took a deep breath, and my ribs pushed against the fabric. I considered ways I might alter it. Perhaps, like my shorts, I could open the shirt with extra strips sewn down the side seams. But then the sleeve caps wouldn't fit in the armholes, and I didn't have enough fabric to cut them new. I convinced myself it was just a matter of breaking the shirt in.

I finished the shirt as it was, sewing on the sleeves and finishing the hemlines, the placket and the thin vertical collar. I didn't want to use bamboo to make the buttons for my shirt; they were too light-coloured and didn't suit the dark grey linen fabric. I took out the coconut shell I'd saved a few weeks earlier, knowing it would one day be useful for something. I carved my buttons from it with a hacksaw blade and a rasp, then drilled the holes using a Stanley hand drill. When finished, the detail in my coconut buttons was startling: dark, chocolaty brown flecked with cream. They matched the dark grey linen perfectly.

I wore my shirt gardening the following week, walking with a slight stoop to hide my nipples that pressed against the tight fabric. After Tanya picked Rebecca and me up in her truck, she glanced back at me in the rearview mirror.

"Did you make that shirt, too?" she asked.

"Yeah," I said, nodding at the mirror.

"That's bloody amazing, Adam. I love that mandarin collar."

"A mandarin collar?" I asked, trying to look down at the neckline. "I didn't know it was called that."

"You know, it's an Asian design. I've been looking for a shirt like that for a while."

Sensing she wanted to say something else, I waited quietly in the back. I was frustrated with Tanya. Just a couple of weeks earlier, she'd told us about her son, who'd started his first year of university in Wellington.

"He's studying for a Bachelor of Commerce," she said as she drove us home that day.

"I've given him two thousand dollars. I want him to learn a real-life example of how capitalism works. He can keep the two thousand if he can double the money over the next six months. If he can't, he has to give the two thousand back. I told him, for example, if you buy two thousand pairs of socks for a dollar each, then re-sell each pair for two dollars, you can double your money quickly."

Rebecca and I sat in a tense silence. Inside, I felt myself simmering. Now, back in the truck wearing my new shirt, I fidgeted with my fingers on my lap, glancing awkwardly around the cab as I tried to avoid Tanya's eyes.

"I came across one a few weeks ago in an Auckland store," Tanya finally said. "But God," she added, rolling her eyes in the mirror, "they wanted three hundred and fifty dollars for it!"

I raised my eyes in mock surprise.

"Far out," I said, trying to sound shocked. I wished Rebecca, sitting in the front seat, would say something.

"Could you make me a shirt like that?" Tanya asked, her eyes fixed on me in the mirror. "I'll pay you." The air in the truck suddenly felt heavy with expectation.

I mumbled politely, hoping she'd let the idea pass and change the subject. My mind was racing. *Three hundred and fifty dollars was too expensive?* I pondered,

staring out the window at the paddocks flashing by. *I don't know, Tanya, that sounds like a bloody steal to me.*

Up in Coatesville, spring chirped, rustled, and buzzed its way seamlessly into summer. Flowers bloomed in a riot of colour, butterflies bobbed and fluttered through waves of heat, and bees, heavy with pollen, hit me in the face when I went biking. Every day, the branches on the trees around Coatesville grew a little longer as the leaves thickened and cast darker puddles of shade on the ground.

Despite having no fibre to spin, a new, plant-based spinning mentality emerged inside me, almost like a sixth sense after purchasing the hemp sliver and the piece of linen fabric. Suddenly, plants I'd scarcely paid attention to in the past seemed to shout at me from the side of the road, to leap out from the edges of footpaths. Every stalk seemed loaded with potential. Every stem had to be picked and snapped, its layers stripped back and analysed—was that a fibre that could be dried and spun? I had stirred a dormant instinct. A primal, caveman-like curiosity.

Suddenly, the familiar landscapes I passed through daily—the rural back roads into Albany, the designer gardens Rebecca and I crawled through, pulling up weeds—had become a bewildering, almost alien-like place charged with possibilities. Every stalk, every fibrous leaf, deserved close examination: picking, stripping, twisting, plying. It was like learning to read again, with the world as my book.

Walking up in Riverhead Forest, a pine plantation twenty minutes bike ride from our flat, I picked the fluffy down from the seed heads of thistles that grew rampant at the side of the gravel roads and tried to twist the pappus hairs into thread.

Tumbling irreversibly into this new thinking, I deepened my study of plant fibres. I lay on the living room floor watching YouTube videos of seventeenth-century reenactment museums, where women wearing bonnets and corded petticoats demonstrated making linen fabric from flax. It looked like hard work, the kind of labour that would break backs or at least slowly deteriorate them. But the process was fascinating: drying, threshing, retting, breaking, scutching and heckling, each step revealing more of the grey or golden fibres trapped within the stalks.

Through my research, I was pleased to discover that the sheet of organic linen I bought had been dew-retted, laying the flax stalks out in the field for moisture, fungi, sunlight and air to break down the unwanted plant pectin surrounding the fibre. This was opposed to being water-retted, where the plants are immersed in large water

tanks, and the pectin is broken down by waterborne bacteria rather than open-air fungi, leading to waterway pollution. Or, the evil of evils, chemical retting.

Watching the extraction of the long flax fibres reminded me of harakeke, the New Zealand flax, that misnamed member of the lily family. Those leaves were packed full of fibre. We had a harakeke plant growing on our front lawn when I was a kid, and my dad used to run the dried leaves over with the lawn mower on the weekends. Hearing the engine stop, you'd look out the window and see the lawnmower flipped on its side; my dad crouched agonizingly on his hands and knees, yanking at the fibre tangled around the blades.

I remembered weaving kete with harakeke at primary school. Still, it wasn't until I looked up harakeke in Coatesville that I learned the muka—the harakeke fibre—could be stripped out of the leaves too. The traditional Māori technique for this was using a mussel shell. I didn't have a mussel shell, so I took a paring knife from the kitchen and biked back up into Riverhead Forest. Founding a swamp-like hollow at the bottom of a valley where the harakeke was growing in profusion, I got to work gathering some leaves.

When I sat down on the side of the track to strip it, I discovered it was more complicated than the YouTube video I'd watched had made it appear. I cut my leaf, buckled it over and ran the paring knife blade along the underside while my thumb held the exposed muka at one end, but my muka kept snapping. I tried repeatedly, sitting on a pine stump while giant dragonflies roared by over the muddy puddles like miniature planes. Eventually, the pile of harakeke scraps at my feet grew so large that I felt guilty about wasting the plants.

Wondering if I could water rett them, I bundled the remaining fresh leaves into my pannier and biked them out of the forest. Back at the flat, I filled a large pot with cold water, placed the leaves inside with a stone on top to submerge them, and began to wait. After a week, the clear water had taken on a brown tint. The brown had darkened enough at two weeks to hide the leaves beneath. When a month had passed, I drained the water onto the lawn and tipped the harakeke out. The leaves slithered from the pot like eels. When I grabbed the hose and rinsed them off, I found the leaves were nearly brand new; they'd scarcely retted. I was disappointed. The flesh of the leaves seemed to be made of something more closely related to plastic than living plant material; they looked like the retting would take months if it worked at all.

In the meantime, I started to dream of growing my own flax. I'd read somewhere that a metre-by-metre square of broadcast linen seed was enough to grow a tea towel. I calculated how many tea towels I'd need to make a shirt and how many square metres I'd need to make my clothes for a year. I was so excited I forgot, for a moment, that we didn't have our own garden. And besides, we weren't staying in Coatesville forever. Another three more months, and we'd likely move on.

As the summer passed in Coatesville, I found myself growing increasingly frustrated looking at the sheep in the paddocks around our flat. Some afternoons, I would walk into the paddock beyond the back lawn with a cup of tea, deep in rumination. The land there, nestled at the base of a hill, sloped up into mānuka and scrubby native bush. I would sit with my tea near a slight dip in the paddock, picking the scrappy pieces of wool off a mānuka trunk the sheep had used as a rubbing post.

I was desperate for something to spin, something I could knit. Linen or hemp wasn't going to work. After spinning and weaving the tea box of hemp, I realised the plant fibres were still too coarse; they didn't have enough loft to create the soft, knitted garments I dreamed of.

A chink began to open in my thoughts around cotton. Perhaps it would work as a substitute for wool—organic cotton fibre, straight off the plant, that I could spin. I spent the next few nights on Google Images, scrolling through an endless stream of cotton fields. In the photos, the fields stretched away to the horizon in wide, dusty rows; thousands upon thousands of hectares covered in shrub-like plants speckled with those unbelievably white fluffy balls. Most of this was *Gossypium hirsutum*, the white cotton species that accounts for ninety percent of the world's cotton fabric. The photos made me feel dizzy. When I blurred my eyes, I couldn't get over how the fields had the uncanny appearance of garbage dumps, like millions of pieces of windblown rubbish tangled up in a landscape of shrubs and bushes.

Organic cotton fibre, prepared in a sliver and ready for spinning, was not easy to find on the internet. By the end of my first night of searching, I'd only managed to locate a gift website selling wooden novelty boxes that contained a dried twig from a cotton plant with three or four of its bolls—the hard seed head that splits open to reveal the cotton fibre—still attached. From my limited experience spinning and knitting wool, I knew I needed vast quantities of cotton fibre if I was going to spin and knit it into clothing.

This white cotton also looked so monotonous. Hemp and linen straight from the field had subtle texture and colour variation, not just in a single piece of fabric but between plants grown in different locations in different years—from ivory to grey to beige to oatmeal to pale gold—the colour dependent on seasonal variations and the techniques used to grow and process the fibre.

I slumped back in the dining room chair, my finger circling the laptop touchpad disinterestedly as I tried to find the motivation to figure out what to do next. Then I stumbled upon a surprising fact: not all cotton was white. I leaned forward in my chair and stared goggle-eyed at the images on the screen.

There were creamy, latte whites, light mauves, cinnamon browns, deep, rusty reds, and even an odd, lichen-like shade of green. Cotton, I also learned, was native to tropical and subtropical regions all over the world—Central and South America, India, Africa, Australia—all of which are home to various species of coloured cotton as well as rich cultural traditions associated with the spinning and weaving of coloured cotton fibres and fabrics. Also, these older colour-grown varieties, with their greater natural resilience to pests, tended to get along fine without pesticides.

I came across the *Native Cotton Project*, a venture started in Peru—the country with some of the wealthiest colour cotton traditions in the world. This project was focused growing and marketing naturally coloured cotton under the brand name *Pakucho*, meaning ‘brown cotton’ in the ancient Inca language.

At first, I imagined buying this cotton straight from the Peruvian farms where it was picked. I pictured raw cotton bolls stuffed into a burlap sack shipped directly from a lowland village, the cotton still tangled with dried leaves and pieces of twig. I’d been looking up techniques for carding, the process of brushing out and straightening plant and animal fibres. The Corriedale fleece and the tea box of hemp fibre had been carded mechanically into sliver. But this could also be done using hand carders—large, paddle-like combs covered in wire teeth that were used to brush the fibre into manageable-sized squares called batts.

Ordering straight from Peru turned out to be an idyllic thought. There was no way of avoiding the middleman in the cotton world. The best source of Pakucho cotton I could find was another Canadian store selling this coloured cotton in one-hundred-gram quantities of carded sliver. The price was based on a hierarchy of colour; the

cheapest, a creamy, near-white, was an eye-watering fourteen New Zealand dollars per 100 grams.

I took out the only thick pair of socks I owned—grey, synthetic hiking socks that were thinning in the heels—and weighed them on the kitchen scales. The digital readout settled at two hundred and eighty-five grams. My fingers ran the math. A decent pair of socks would cost me around forty dollars, not to mention international postage. After that, the socks still had to be spun and knit.

I stepped back from the kitchen bench and released the breath I was holding. In a slow, sloth-like manner, I rubbed a hand over my beard as I stared up at the ceiling, struggling to justify the price. Cotton seemed weak. What if the heels gave out after six months? Could I repair them?

Then I reminded myself that Pakucho cotton was organic and Fairtrade. I thought of those lowland villagers hiking to their cotton fields in the morning, working all day under the hot Peruvian sun, poked and scratched by the sharp, dry bolls on the cotton bushes. I knew what it was like. I'd worked in horticulture most of my adult life. Once, I'd walked off a vineyard after pruning half a row because the contract rate was too low. I had to hitchhike forty-five minutes back into town. Having been brought up shopping at DEKA, I'd never confronted the reality of the clothes I wore. I never looked beyond the t-shirt folded on the shelf to see that it had started life as a simple, humble commodity that had to be harvested and processed like any other. Weren't our shirts, pants, socks and jerseys always supposed to be cheap, instant and readily available? Quality products and people's labour needed to be appreciated; I respected that. Still, my knitted cotton socks would have to be kept a secret; if I told anyone, they'd think I was crazy.

I ordered my cotton that afternoon. Two weeks later it arrived, a small, pillow-shaped parcel wrapped in brown paper. I thought, at worst, my cotton would be weighed and placed in a single plastic package for international postage. However, when I tore the package open in the living room, a pile of plastic Ziplock bags tumbled out onto the floor, each labelled with its one hundred grams of cotton—the brown paper on the outside had been a ruse. The Ziplock bags frustrated me. I was trying to avoid using plastic, but now my fiber, already grown in Peru and shipped from Canada, was packaged in it. I wanted to be able to walk outside and pick my

fibre myself, straight off the plant that grew straight out of the earth, but I didn't have a choice.

I'd bought two colours of Pakucho cotton: six bags of the cheapest, off-white that the website sold, and five bags of another named 'chocolate', a fawny-coloured fiber that, in the online photos, had looked like a form of building insulation. Now, crouched on the living room floor with a length of the chocolate sliver lying in the palms of my hands, I found the cotton was smooth and sleek, the colour slightly flecked with streaks of lighter, golden brown.

I pressed the cotton against my cheek. Its loft was surprisingly soft, as though more air was trapped between its fibres than what seemed possible; what a cloud might feel like if it took on solid form. I'd read that raw cotton picked straight off the plant had a musty, earthy scent. But rubbing the sliver under my nose, I found my cotton only carried that faint, stuffy odour of packaged goods.

The afternoon my cotton arrived I dragged my spinning wheel out of its hibernation at the side of the couch. It had been five months since I'd last used my wheel to spin the tea box full of hemp in Little Akaloa. I was impatient to sit down and treadle the wheel again, desperate to see something spinning into fibre that might take my mind off the sheep outside, off the wool I was still picking from the mānuka trunk.

I'd read online that cotton was difficult to spin with its short staple length and lack of wool qualities—the elastic-like crimp and microscopic scales that helped hold woollen yarn together. My Pakucho cotton sliver, however, spun with little trouble, and three days after the parcel had arrived, I'd spun and plied all my white cotton into yarn.

The plan was to knit a pair of socks for me—the kind I liked to wear most, replicating my hiking socks with their chunky, ribbed cuffs and plain, no-frills knitting. But after I'd knit a swatch with the white cotton to determine my gauge, I realised how lightweight my yarn was. I'd drafted my sliver too fine, and the yarn I now had was more like cotton string; I couldn't knit boot socks out of that.

Perhaps it was time I made something for Rebbecca. I'd been influencing her clothing for a while. Shirt by shirt, jersey by jersey; almost all her clothes were now second-hand, too. I'd all but forgotten the way she dressed when we first met. She seemed to like what I was making for myself. She believed in the moral behind it, my pursuit of fabrics, and my need to feel connected to the clothes I wore. But I knew I

was a difficult person to live with. I was an idealist. I found myself fixated on things in a way that I couldn't turn off, an almost debilitating need to understand how everything worked. So I searched for an online sock pattern, a lacy design that ran down the entire sock from the cuff to the end of the toes. I started the first sock using double-pointed bamboo needles again, a couple of sizes smaller than the needles I'd used to knit the glove in Brightwater.

I began the first sock in the morning while sitting in the wooden rocking chair in our room bedroom, exercising my feet on the floor as my fingers flexed themselves around the bamboo needles. The lace pattern was complex but repeated itself every few rows, and by the time I was halfway down the leg, I almost memorized the stitch sequence.

The leg of the sock took me three hours to complete. A little before lunch, I called out to Rebbecca to come and try the sock on. She walked into the room, still singing, halfway through a folk song she was learning, and sat on the rocking chair with her leg in the air. I crouched in front of her, easing the half-finished sock carefully around her heel.

"The pattern's so pretty," Rebbecca said, twisting her leg from side to side to look at the sock's entire circumference. "I'm so lucky you're knitting socks for me."

"Yeah," I said distractedly, adjusting the sock around her leg, contemplating the slight sag the cotton had taken on after pulling the sock around her heel.

Rebecca continued singing, looking out the door at the pink roses in the landlord's garden while I twisted and tugged at the sock, noting how the cuff didn't spring back tight against her leg. This looseness was something I'd been worried about. Unlike wool, cotton had no natural elasticity, so cheap cotton socks were often blended with polyester and elastane; otherwise, they'd stretch out of shape and fall around your ankle. I used slightly smaller needles than the suggested pattern to bring my gauge down and tighten the sock, but it wasn't helping.

Regardless, I carried on knitting, trying to ignore the slouchiness in the leg that I could now see constantly beneath the needles. The following steps, knitting the heel flap, turning the heel, and knitting the gussets, were the most complicated. Remembering my glove, I took it slowly, putting my knitting down from time to time to rewatch the YouTube video I'd brought up on the laptop next to me on the bed.

Turning the heel was straight-up wizardry. I sat rocking on the chair as the sock turned a right angle beneath the needles, taking on the distinctive shape of that

strange thing: the human foot. By the time I cast off, socks were no longer those banal pieces of clothing that get lost in the washing machine but complex, three-dimensional objects worthy of my utmost respect.

The unfinished sock had seemed too fragile for Rebecca to try back on after I'd finished the leg, so it wasn't until I cast the toes off two days later that I called her in to sit in the rocking chair again. The finished sock, with its lace pattern looking like rows of delicate cockle shells stacked within each other, seemed a shame to wear. It didn't look like something that should be stuffed inside a shoe and worn down. Passing for a sock and a piece of art simultaneously, I felt like putting it behind glass and hanging it on the wall.

"This is amazing," Rebecca said, gently pulling the sock on herself. "You've put so much work into it."

I watched her walk back and forth beside the bed, smiling and flexing her foot.

"It's quite tight in here," she said, stopping and bending over to pinch the cotton at the top of the instep.

I knew right away what the problem was. The gussets around the ankle and the knitting at the bottom of the sock had been worked in plain stockinette stitch and didn't have the extra stretch there was in the lace pattern. The reduced gauge I'd achieved with my smaller needles had tightened that area of the instep up too much, leaving the rest of the lace pattern to stretch and slouch. Just after Rebecca's short catwalk in the bedroom, the leg of the sock had loosened and begun to sink down around her ankle, obscuring the lacework detail.

Perhaps my skin had thickened after my failed glove, or maybe I saw it coming. Either way, I remained remarkably calm. I sat with the sock for a while after Rebecca had taken it off and left the room. The only solution I could see was unravelling back to the bottom of the leg and reknitting the gussets and the heel flap with larger needles, though that wouldn't solve the cotton's natural sag in the rest of the sock.

I tucked the sock away in our bedroom drawer and tried to forget about it for a few days. When I took it out at the end of the week, I discovered I'd grown even more detached from it, like a dormant survival mechanism, a numbness protecting me from the shock of disappointment.

Rebecca would never wear too tight socks, so I thought I could use this single sock to learn. I could cut it into pieces and then sew it back together to see what

adjustments were required: how tight the leg needed to be knit to stop it dropping or how it might work as an ankle sock.

Fetching the kitchen scissors, I crouched in front of the sock on the bedroom floor and placed the soft cotton lace of the leg between the blades. That's when the magnitude of the situation sunk in. Everything about cutting into the sock ran against my basest instincts. Yes. No. Yes. No. I sat with the sock for ten minutes or more, reasoning back and forth. At the last moment, I plucked at a fleeting scrap of courage and sliced the blades through the first few stitches.

The cut-up sock lay around for a couple of weeks. I took it to the sewing machine at one point and ran a few stitches between the cuts I'd made in the ankle, but by then, I'd had enough. Eventually, I unravelled the wrecked sock and hid the broken pieces of yarn away in a paper bag.

\* \* \*

Three months after I pulled the sock apart, we packed up once again and moved to the Wairarapa. It was mid-winter, and Rebbecca wanted to study music and pursue her singing in the second semester at Victoria University in Wellington. As a compromise for my not wanting to live in the city, we decided to settle in Featherston, the town at the eastern end of the Remutaka Tunnel, an hour away by train from the capital.

We found a cozy Lockwood house for rent just outside the Featherston township, halfway up the dubious-sounding Boar Bush Gully Road tucked up against the Tararua Range. Our landlords, Nigel and Fiona, owned three acres of land beyond our back lawn and lived behind us in a house partly hidden by a thick hedge of trees.

The first morning in our new house, Nigel took Rebbecca and me for a walk around their property. We crossed through the paddocks out the back of our house, then over a slippery wooden bridge into a block of native forest, where Nigel pointed out a fallen black beech we could cut for firewood.

Nigel and Rebbecca sat on the thick black trunk and chatted as I wandered about the tree, inspecting its cracked and broken limbs and tossing a few smaller branches into a pile to collect later. The wet grass around the fallen tree was steaming, and the forest was afloat with bees that bounced and zipped through the

air on wobbly flightpaths, their silver wings catching the morning sun that shone through the space in the canopy where the old beech had come down.

By then, we'd been calling ourselves vegan for two years—two years without red meat, two years without fish, two years without milk and two years without cheese. We'd substituted honey with agave nectar: one-litre glass bottles of raw syrup produced from the agave plant in Mexico. Nigel and Fiona owned their own hives, the white wooden boxes stacked and strapped down on three wooden pallets along one side of their back paddock. Standing in the forest that morning, I realised how much I missed honey, how much I missed bees.

Walking back across a paddock, Nigel's five white sheep trotted up along the other side of the fence line, stopping to observe us warily with those long, wide pupils in their pale, yellow eyes.

"Don't mind the sheep," Nigell said, "they're friendly. Except watch out for the ram there," he added, nodding his head toward the bulkier sheep standing to the side of the flock. "He'll have a go at you. He'll take your legs out if you're not looking."

I looked at each sheep, their bony faces framed by their thick, creamy fleece.

"We won't shear them again until the end of the year," Nigel said. "We only shear them once a year; get it all set up in the old shed." He pointed to the flaky, corrugated iron structure at the end of the drive.

I was reluctant to tell him we didn't use wool; it seemed strange to say while we were standing in the quiet paddock with the sheep butting each other impatiently on the other side of the fence. It was also a lie to say I didn't use wool. I no longer spun it, but I owned one woollen jersey I'd bought from a second-hand store on my way down to the Wairarapa, a mottled, dark blue jersey that was just beginning to lose the stitches under its arms. I felt like a fraud every time I wore it. Standing by the fence line, I just nodded at Nigel in acknowledgement.

"Ah, right," I said, glad Rebecca changed the subject and filled the space with easy chatter.

I'd ordered several more pieces of fabric from Rawganique, the online Canadian store where I'd bought my first piece of linen back in Coatsville. I was relieved when my second fabric parcel finally arrived on our doorstep. I'd been seething since the parcel had arrived in the country from Canada. I didn't know about customs and duty

fees at the time and didn't realise I had to pay extra if my package was valued over the four-hundred-dollar duty threshold. The eighty-dollar piece of linen I'd brought in Coatesville had enjoyed a smooth trip from Canada to our front door. But my latest parcel, which was larger and contained a mix of linen and hemp that cost nearly seven hundred dollars, had been held ransom as soon as it entered the country. To free it, I had to pay almost half its original price. When I received the email from customs, all I could think about was the 1.7-odd million hectares of land taken up by dairy farms in New Zealand. Yet, not a single hectare in this country was planted in fabric-producing linen or hemp. It felt like a personal blow. I felt like I was being penalised for trying to do the right thing.

I felt better when I opened the box on the living room floor. As with my first order, the fabric was folded inside a biodegradable plastic bag. As soon as I'd peeled the plastic back, I lifted a few of the crisp, folded sheets of fabric out of the box and pressed the pile to my face, inhaling the sweet, straw-like scent.

I'd bought my hemp and linen fabric in weights from five to fourteen ounces per square yard. I lifted the lightest fabric—a sheet of linen—to the window and could still clearly see the leaves on tītoki tree next to the compost bin. The natural, undyed fabric ranged from dark grey to light cream.

For the next month, I toiled away on shorts and shirts, adjusting my original patterns millimetre by millimetre toward a better fit. My obsession with creating my own patterns had consumed me. The darts, the depths, the curves, the negative ease. I was extending my shorts pattern into trousers and lengthening the sleeves on my shirts. But making men's clothing was like working with blocks; it was all squares and right angles. There were no straps, no dresses with scooped backs or low necklines, no darts for the bust or curve for the hips, and certainly no unnecessary extravagance. For me, that meant no more mathematics, no more calculations. Once I'd worked out the basic pattern to fit my own body, it was simply a few extra measurements or an extended line to turn the pattern into a different garment.

So, I turned my attention back to Rebecca's clothes. I still hadn't made her a single item and she seemed willing to offer herself again as a test subject for my clothing experiments. After some discussion, we decided I should make a simple dress. I sewed it from my lightest, cream-coloured hemp, a straight-sided dress with flat shoulder straps. It took me two days to make. On the first evening, Rebecca

stood naked next to the fireplace with her arms up, singing as I wrapped the tape around her hips, waist and bust line.

The next night, she tried the dress on, pointing her hands to the ceiling while I stood on a chair, lowering the dress onto her, trying to keep the pins holding the dress together from pricking her in the ribs. I brought through the long bedroom mirror and leaned it against the wall.

“I think a little looser under the arms,” she said as I shifted pins and tucked in the edges of the fabric.

She rolled her shoulders back and forth: “Can you drop the straps some more?” she asked. “What do you think, should the bottom come up another couple of centimetres?”

I made these adjustments diligently, standing behind or shuffling around her on my knees. Trapped inside my ego, I didn’t grasp how unusual it was to make clothes in this way for another person – not the measuring and fittings in front of the mirror, but the influence I’d begun to have over Rebbecca, the way I was reshaping her identity, attempting to alter the image she presented to the world. Clothes, I realised, are not trifling things. What we wear expresses so much about our moods, personalities, and values. In our globalised world, clothing trends reflect the moods and values that underlay society. Fast fashion, affordability, synthetics, mass production; our profits and chain stores, our puffer jackets, and our athleisurewear—we believe it is our right, as customers, as shoppers, to purchase whatever we want, whenever we like, and not stopping once to think that some other part of the world is constantly being cut, burned and poisoned.

I’d always considered myself a happy person, but desperate to find better ways of living in the world, I’d become frustrated, confused, and angry. I couldn’t bear someone so close to me not at least appearing to see the world the same way I did, and now I was pushing that onto Rebbecca in ways I hadn’t begun to realise. That’s not to say Rebbecca didn’t like her dress. As soon as it was finished, she started wearing it, with a jersey, into Wellington on sunny days. As far as I could tell, she loved it.

In Featherston, I liked to sit out on our back porch with a cup of tea and wait for tūi to swoosh down from the mānuka on the hillside behind the paddock. Often, if I sat on the porch long enough, Nigel’s flock of sheep would come edging along the fence

line, one slow step at a time—rip, rip, rip, their heads flicking forward as they nibbled and tore at the dark green winter grass.

I'm sure they spotted me from the corner of their eyes, yet occasionally, one sheep would yank its head up suddenly from the grass and eye me side-on through the timber porch railings with that unnerving look of curiosity and fear. Nigel's sheep, buffed up with their thick winter fleeces, had grown enormous by that time of the year, and the battens along the fence line were hooked with wispy locks of wool where the sheep had rubbed up against the wire.

I was still in the habit of picking wool off the fence when I walked down to the forest every few days to collect a barrow of beech wood. I still twisted out the locks, holding one end in my lips and spinning the other between my fingers, then folding the thread in half to ply into a short piece of yarn. I still loved the sour taste of wool on my lips, the tackiness when I rubbed my fingertips together, and the smell of lanolin the wool left on my hands. They were senses too rich for the world beyond our letterbox. But out in the block of forest, walking among the black, velvety beech trunks and the soft pikopiko—the hen and chicken fern growing in the understory that tickled the hairs on my legs—my sour, sticky, lanolin-covered fingers felt right at home. Still, I never took the wool with me back to the house. After I'd loaded up our firewood wood, I'd pick my white yarn apart and let the pieces float away in the breeze.

The sheep were living, feeling, conscious creatures—I didn't own them, so it wasn't right to take their wool, I reminded myself every day. I was a human and had to invent; I had to push to find new solutions and keep ordering my cotton from Peru. With the weather turning colder each time I walked down to the forest, my gloveless fingers ached, and my insufficient clothing struggled to hold onto my heat. Thank God we had a fireplace, I thought each time I heaved the wheelbarrow back across the paddocks to our house.

I grew angry with the sheep, frustrated seeing them daily outside the living room window. The wool in my fingers, my spinning wheel, my craft: it all felt so natural. But I was vegan. I didn't use animals in my life anymore. My resolve was supposed to be growing stronger. Instead, I felt terrible and constantly conflicted with my decisions. I questioned everything I did.

We'd picked up some part-time gardening work around Featherston to supplement Rebbecca's student allowance, under-the-table jobs we found through

word-of-mouth. One of our jobs was a ten-minute bike ride from our house on a rural property down Underhill Road. The section was just uphill from where the Tauwharenīkau River twisted its way out of the Tararua Range. One cold, drizzly morning, Rebbecca and I biked to the property to finish stripping the ivy out of a small block of young native bush the owners were trying to establish.

It was wet, honest work, but we warmed up quickly. Occasionally, through the trees, I would catch glimpses of the sheep that lived in the paddock next door: small, brown things with wet, shaggy fleeces, the kind of scrawny, wind-swept sheep you'd picture picking their way between rocks on barren, mist-swept hilltops in Scotland.

Seeing the brown sheep made me feel restless. I was wearing my green Mountain Designs jacket, the last store-bought item of clothing I owned. I didn't like wearing the jacket; it was too green, and the nylon fabric rubbed against itself with that unmistakable jacket-like swish. Standing wet beneath a cabbage tree in the block of native forest, I wished I was wearing the brown fleece instead.

We finished the job later that afternoon, and as usual, I raced ahead of Rebbecca on my bike, sprinting my pedals down the long, straight stretch of gravel road that led back into Featherston. Halfway down the road, I passed a large silver woolshed crowded out front with white sheep crammed into holding pens. Biking past, I could smell the sheep's wet fleece and the trampled mud. A red, double-trailer stock truck had pulled up in front of the shed, and five or six men dressed in brown oilskins were talking beside their muddy quad bikes at the bottom of the woolshed steps. Earlier that morning, I'd seen the sheep herded down the hill behind the wool shed, two black and white dogs working the edges of the flock like marlin driving a school of fish. I presumed the truck was taking the sheep to slaughter. Peddling past, I could see the sheep's yellow, liquidy eyes staring out between the pen's thick wooden railings.

Outside, biking into the cold drizzle, I found it difficult to feel frustrated or angry over the sheep in the pens. The world felt too raw and fresh, like the way terrible night-time thoughts dissipate when exposed to the light of morning. But I did ponder, as I continued home, what the farmers saw the sheep as—a natural resource? A commodity? It was hard to imagine they saw them as singular, individual living creatures.

I'd been home a few minutes, sitting at the living room table waiting for the kettle to boil, when I heard Rebbecca pull up on her bike out front of the house. I

could tell something wasn't right as soon as she walked in through the front ranch slider door, the way she tugged at her jacket without looking at me, without her usual, cheery smile.

"Fuck," she yelled, throwing her jacket into the corner of the living room.

The back of my neck bristled.

"Did you see those farmers down the road?" she asked, stomping to the living room window seat and throwing herself down on the cushions.

I gave a slow, uncertain nod, not knowing where she was going next.

"I biked in there," she said, leaning forward on her elbows and turning her head to look at me.

I cringed. Oh god, you didn't, I thought; I'll never be able to bike down that road again. But Rebbecca was pissed. She kept fidgeting with her hands, a sign I'd come to recognize—over our six years together—as a warning.

"I asked them if they thought they had a right to treat the sheep like that," she said, leaning back against the window.

"They were so fucking condescending. They looked at me and smiled like I was just a stupid woman. Like I didn't know anything."

I gave a contemptuous snort and shook my head. I could imagine how they'd reacted seeing her bike up the driveway. Still, I also wondered what else she could have possibly expected.

"One of them told me that it's tradition," she said, sneering at the carpet.

She sank her chin back and did her best, deep-throated impression of a male farmer: "My dad and grandad were sheep farmers. I've been mustering my whole life. There isn't any money in it anymore; we just do it out of tradition."

After her rendition, Rebbecca eased back into the seat, and her face relaxed a little. I shared Rebbecca's frustration. Yet, simultaneously, I felt envious of the farmers, jealous that they lived a life on the land, their days spent outside in the paddocks, their boots covered in dirt. Jealous, too, of their sense of tradition, of the knowledge passed down through generations, and, most contrary, their lives spent working with sheep.

Rebbecca walked through to the kitchen. She was still seething; I could feel it emitting off her like radio waves. I had so much to say, but I couldn't find a way to express it. So I sat quietly at the table, chewing thoughtfully on my cheek.

My frustration drove me deeper into my obsession with figuring out how to dress myself entirely in plant-based clothes. I was growing impatient to knit something larger; my dream was still set on a jersey, but I only had the white cotton yarn left over from the socks and five bags of chocolate-coloured cotton still yet to be spun. I thought it would be just enough to make beanies, which seemed a great idea: small scale, practical for what remained of the winter and spring, and I was sure they were fail-proof—one piece of knitting I wouldn't have to hide in the wardrobe or cut up with scissors.

I started with a beanie for myself. Although the concept behind a beanie—knitting in the round to the desired depth—was straightforward, I still felt a little uncertain about the decreases that shaped the crown, so just to be sure, I found a knitting pattern online, a Rastafari style beanie knit with alternating rows of reverse stockinette stitch. This technique created puffy rings of purl stitches on the outside of the hat so that the beanie naturally crumpled up on itself when it sat on my head, theoretically generating more warmth.

I had measured my head for a custom fit, subtracting ten percent off for negative ease. I stood before the bathroom mirror and wrapped the tape around my head. I'd always thought I had a funny-shaped head, bulging slightly too much just above the ears. Now, my measurements confirmed it. At sixty-one and a half centimetres, I had a whopper—four and a half centimetres larger, according to Google, than the average adult male. No wonder I struggled to fit bicycle helmets when I was a kid.

My beanie turned out a complete success. The puffy, purl-stitched rings crumpled together as they were supposed to, giving extra thickness to the side of the hat. The short, curved decrease rows, not so difficult as I first thought, radiated out from the centre of the crown with delicious, mathematical perfection. Best of all, the beanie fitted snugly on my oversized head.

I wasted no time in moving onto Rebbecca's beanie. I spun my five bags of chocolate-coloured cotton, and together, Rebbecca and I purchased a pattern off Etsy. The beanie Rebbecca chose had been designed with a forest in mind, the stitch pattern resembling rows of leaves and tendrils. Over the next three days, the beanie dropped down row by row from beneath the needles like a very slow 3D printer; around and around, each stitch picked off its needle like a single pixel.

Most of my time knitting I sat in the window seat in the living room. From there, I could look out at the back lawn and over the fence into Nigel and Fiona's paddocks and keep an eye on the world: the blackbirds tugging worms from the lawn, the sparrows and finches that hopped and chirped between the clothesline and the tītoki tree. I could study the changing shapes of clouds that rolled and billowed and swelled across the blue Wairarapa sky.

Only occasionally did I catch myself off guard, in brief, hurried moments when the rest of the world caught up with me: the sound of a plane overhead or a car winding its way down the gravel out of Boar Bush Gully Road. In those moments, my stomach would lurch, and I would sit feeling futile and pointless, wondering what my knitting was all for. Wasn't this sunshine, these birds, these clouds, this knitting just an illusion to the real world that was racing past everywhere outside the end of our drive, where people were busy with real jobs, churning out beanies in factories, counting the time spent and money made? Beyond just a hobby, wasn't it trifling to knit, to try making my own clothes with such determination when anything these days could be bought so effortlessly?

These thoughts would fester in my mind, causing me to doubt every stitch, making me question my use of time, and for a moment, I would have to put my knitting down and wait, hoping this feeling would pass. And eventually, it would. The plane would fly on, the car would drive off, and in time, something small would flicker at the periphery of my thoughts—a breeze rattling through the harakeke leaves along the edge of the lawn or a bellbird warbling out in the mānuka, reminding me that a deeper current eddied through this world of ours, a deeper current that flowed sometimes unseen, often in silence but always slowly. That's all it took to return to my knitting, to the rhythmic click of my bamboo needles and the hours of stitching together our clothes. As Rebecca's beanie took shape round by round, loop by loop beneath the needles, I was reminded that every stitch we knit for someone else is a prayer for them.

Rebecca was chuffed with her new beanie. She wore it out of the house almost daily. She looked good in it, the leaves and tendrils turned out even more detailed than I thought, and the light, chocolate-coloured cotton suited her mousy brown hair. After my success with the beanies, I felt confident and thought it was time to move on to a more significant piece of clothing

“I’m going to use the rest of this cotton to start knitting you a jersey,” I said to Rebecca one afternoon when I came in from sitting on the porch in the winter sun with a couple of cold beers.

Rebecca looked up from the pile of music she was studying at the dining room table, her eyes wide with surprise. “Are you serious? That’s going to take you a long time.”

I was envious of the look she gave me. My own jersey seemed to be slipping further away; every decision I made about my clothes cast me into further confusion and doubt. Rebecca had no stakes in it; she would continue to wear her clothes either way.

Not wanting to have extra chocolate-coloured cotton left over, I needed to place another order as precisely as possible. I thought my woollen jersey, which wasn’t bulky, would be roughly equivalent in weight. On the bathroom scales, my jersey weighed eight hundred and seventy-two grams. With the three hundred grams of cotton still left over from my beanie, I thought an extra seven hundred grams would be enough. I placed the order that afternoon; another one hundred and thirty dollars, another two-week wait until it arrived.

In the meantime, I studied online patterns to learn how a knitted jersey worked. There were raglans, drop shoulders, circular yokes and set-in sleeves. At first, I was tempted to knit a drop-sleeve jersey, which, being straight-sided, didn’t require a sleeve cap or arm scythe shaping. Or perhaps a yoke sweater that was worked in a single piece without the need for seams at all. But I wanted to challenge myself. The set-in sleeve was the most notorious among knitting websites and online forums. Essentially, for the set-in sleeve, the same shapes I’d cut out to sew my linen shirt in Coatesville had to be made with knitting, then the pieces stitched together along their seams. This, I decided, was the jersey I would knit.

The task was too daunting to work without a pattern, and I spent many nights sipping many cups of tea as I lay stretched out on the living room floor, searching for the perfect design. I found it at last: a simple, elegant cardigan in plain stockinette stitch with a fine, cabled button band running down the front. Rebecca was happy to let me choose this pattern secretly; the finished cardigan would be a surprise.

The cotton arrived, packed again in its Ziplock bags. I spun it all in one week, hoping to maintain an evenly weighted yarn. I bought 3.25mm thirty-two-inch circular needles specially for the project. The needles themselves were short and were

shaped and polished from laminated birch. The laminated plies were coloured yellow, green, red and blue and almost looked edible. The needles screwed onto a nylon cord and allowed a large piece of knitting to be worked in the round. The cardigan, buttoned in the front, would be worked flat, but the width of the finished fabric required the extra length that the circular needles provided.

It took me twenty minutes to cast on the two hundred and twenty-four stitches that the pattern required because I kept losing count, having to return to the start of the needle each time and run my finger along the stitches like counting the beads on an abacus. I was shocked by the number of stitches I had to cast on. I thought back to the grey jersey I'd unravelled in the caravan in Clive, how the yarn kept pulling and pulling, and the lifetime it seemed it would have taken to knit it back together. When all the stitches had been cast on and triple-counted, I let out a deep breath as I laid the needle over my legs and looked down at what was the very bottom edge of an entire cardigan.

I settled in and knit the first row. Ten minutes later, when I reached the end, I marked a single pencil dash on the piece of paper lying beside me on the dining table, then turned the needles around and worked back the other way, also knitting on the back side of the work to create the garter stitch that would prevent the bottom edge from curling.

I paced myself over the next few days. Gradually, as the minutes turned into hours and the hours turned into days, the bottom edge of the cardigan began to emerge. At times, getting carried away and spending an entire morning knitting was easy. At other times, despite the Buddha-like qualities I was cultivating, I grew restless and unable to concentrate for more than an hour. I set myself targets on those days: five rows per sitting, two to three times a day. I put on music; I listened to BBC podcasts. Sometimes, Rebecca stood in the living room and sang. Scarborough Fair and Blackbird, Simon and Garfunkel, and Julia Fowles. When Rebecca was a girl, her singing teacher told her she had the voice of an angel. She did, and she knew it. Rebecca was learning folk songs in Gaelic and didn't need an instrument; she stood in the living room and sang a Capella, and the world would stop for a minute or two. When Rebecca sang, she sounded like doves cooing in a tree. The kind of voice that could heal wounds. The type of voice that could break hearts.

The knitting continued steadily. Rain fell and cleared; the sun rose and set. The days had turned into a week, and eventually, the weeks turned into a month. Then, one miraculous morning, the body was knit, the armless cardigan looking like a buttoned vest. I hooked my hands under the shoulders and weighed the vest in the air. It seemed surprisingly heavy, the fabric denser than anything I'd knitted previously. I put it down to the needles; perhaps they were a size too small, squashing the stitches together undesirably.

It was time for Rebbecca to try on the cardigan for the first time. Carrying it through to the living room, I realised the impossibility of Rebbecca trying the cardigan on without seeing it—I wasn't going to blindfold her. Besides, I thought now it was best she did look at it and maybe provide some encouraging feedback. Rebbecca stood in front of the mirror again as I slipped the unfinished cardigan carefully over her arms. Not having attached the buttons yet, I closed the front with a row of long pins.

"Oh my God, it's incredible," Rebecca said, posing from side to side and trying to look backward into the mirror.

Like the beanie, Rebbecca suited the cardigan's light, chocolate-coloured cotton.

"Adam, what the heck—" she cut herself short with her enormous grin, laughing into the mirror and folding her arms around her chest. "You've put so much work into this. I'm so excited to see it finished."

Seeing Rebbecca so happy over something I'd made felt good, but the weeks had worn away on me. The more I worked with the cotton, the more I thought about wool. The more I thought about Rebbecca's cardigan, the more I thought about my own jerseys, the jerseys I wanted to knit but found myself drifting further away from.

I was also worried about how much yarn I'd knit through already. The shape of the arms made it difficult to tell precisely how much more yarn I'd need, but there weren't many balls left. After Rebbecca removed the cardigan, I carried it to the bathroom scales. It weighed nearly six hundred grams; my tight stitches must have been pulling in excessive yarn. The fabric wasn't as soft as I'd imagined.

I cast on the first arm the following day, starting at the gartered cuff and working up, increasing the arm's width as I moved toward the sleeve cap shaping. As each ball unravelled, I re-ran calculations through my head every five minutes, trying to convince myself I would somehow make it. But as the sleeve widened and sucked

up ever more yarn, I yielded. Two days after that, three-quarters of the way up the first sleeve, the final ball rolled to an end, and my knitting stopped.

Meanwhile, outside, spring had begun to appear—the feathery green leaves trembling on the silver birches along the side of our drive; the yellow daffodils that had sprouted in the corner of the paddock; the sun rising higher every day over the Tararua Range. Nigel’s sheep had grown even rounder, their creamy fleeces bulging tightly behind their ears. I would watch the sheep from the living room window when it rained, their sagging fleeces noticeably heavy and wet, but the sheep still nibbling the grass contentedly or sitting with their sleepy, half-closed eyes as they chewed the cud.

The days were warming up, and on sunny afternoons, when I was out on the back lawn, the sheep would sometimes wander by, looking at me from the other side of the fence line and panting softly in the heat. I knew Nigel would be shearing them any week now. I thought about the sheep being shorn in the shed with a mix of allure and aversion. I was still inextricably connected to the farming landscape, the sheep, the wool. Yet another, newer part of me had fought against that connection so resolutely for so long that I no longer knew how to distinguish between these two conflicting sides of myself.

Back in Brightwater, when I was still spinning my box of Corriedale fleece, my thoughts about sheep were the same as everyone else: sheep must be shorn, so why is it such a problem to use their wool? The problem, I now realised, was the difference between wild and domesticated sheep.

In the wild, the outside of a sheep’s fleece comprises guard hairs—long, smooth fibers that cover a shorter, thermal layer of wool underneath. Wild sheep self-shed their guard hairs yearly at the start of summer while the shorter, inner layer of wool remains in place. The guard hairs on wild sheep aren’t suitable for spinning because they lack the microscopic scales that true wool has, causing them to slip apart on the spinning wheel, much like human hair. Through thousands of years of selective breeding, humans have picked out sheep with shorter guard hairs and longer wool. Eventually, sheep appeared whose layer of wool grew longer and faster than the guard hairs, resulting in sheep with enormous fleeces that are not self-shed at the start of summer but must be shorn off by farmers at least once a year. This troubled Rebbecca and me, realising the sheep were a direct result of human

intervention and that, if released from their paddocks and into the wild, the sheep would not survive. They'd grow heavier and hotter and harbour more parasites until they eventually succumb to hyperthermia or fell over and couldn't get back up onto their own legs.

For Rebbecca and me, animals were a topic of conversation almost every night. We talked about the sheep and the shearing, fortifying our beliefs and hardening against the views of others. Yet whenever I looked at the sheep in Nigel and Fiona's paddock, whenever I thought about those sheep being shorn, I couldn't stop thinking about the bags of fleece that would soon be piled up in the old shed at the end of the driveway, about the wool that would have come straight off this land, a place that I had begun to feel connected to. I couldn't get the thought of handling the fleece out of my mind, about transforming the fleece with my own hands, through my craft, into a piece of clothing that I would make with care and respect, a piece of clothing that I would treasure.

While Rebbecca and I thought we were closer to animals because we didn't try to use them in any direct way to aid our own lives, I sensed that something in our equation was out of balance, that there was something about the interdependence between humans and sheep, between humans and other animals that was necessary; that to protect something, to truly understand what caring was we had to be part of the cycle.

A deep part of me felt so shattered and confused at the time. I'd started walking daily up to the reservoir at the top of Boar Bush Gully Road. Halfway up there was a gate across the gravel road where a four-wheel-drive track followed the gully the rest of the way up to the reservoir. After the gate, the hills along the side of the gully steepened, and the track became muddy and pitted with deep wheel ruts. Sometimes, walking around a bend, I'd come across a pack of three or four brawny-looking dogs running eagerly up and down the road, only pausing now and again to point their noses into the breeze. The first time I saw them, I recognised them straight away; pig-hunting dogs buckled up in their thick leather rip collars. I'd give them a scratch on the head or a pat on the ribs if they stopped, though they weren't the kind of dogs that stood around looking for affection, and just as suddenly as they'd appeared, they'd be gone, crashing back down into the bracken and mānuka off the side of the track.

A moment later the quad bike would come rumbling around the next corner, ridden by the same hunter I saw every couple of weeks, a burly, rugged-looking man wearing a dark blue swan dry and black stubby shorts with a thick, steel-butted knife sheathed in a leather pouch on his belt. We never talked; he just tipped his head and raised his index finger off the throttle as he motored past.

I couldn't agree with pig hunting anymore. I'd seen too many mangled pigs, too many wounded dogs—too many dogs shot out in the pine forest because they'd chased a goat—to see pig hunting with dogs as a necessary part of foraging from the land. Still, I couldn't help but feel a sense of nostalgia every time I passed the dogs or the hunter on his quad bike.

I didn't know how to fix the parts of me that felt broken. I was rarely speaking to my dad by then. Every few weeks, we talked on the phone. But it was always the same conversation that looped about in circles, treading carefully around the one topic we'd once shared an interest in but never touching it, never breaking that ground.

Why this rift? On the surface, it was apparent. I'd chosen to live my life by a new set of morals. I now did the opposite of everything he'd brought me up to do, that he'd raised me to know and understand. But underneath, it wasn't that simple. I'd been driven to these decisions out of detachment from the animals I saw around me daily on the land. It had just happened so suddenly, so entirely that it must have seemed a complete renunciation of everything I'd once believed.

Perhaps my dad saw it that way, but all I did was give myself some distance from all of it, bunkered down deeper inside myself where there was the space to think through the wide range of possibilities we have for living in this world. But didn't my dad and I still share basic ethics, a sort of timeless hunter's code of respect for the animals we'd killed together? Wasn't that something we still shared?

I'd placed another cotton order. Another four bags, another four hundred grams, another eighty dollars, although this time it took an extra two weeks to arrive. When I did find the package on the front porch one month after I'd ordered, I didn't tear it open excitedly and sit at my spinning wheel straight away. By now, on my third order, I was pissed off; I was growing sick of the whole cardigan. When I lifted the half-finished piece of knitting out of the wardrobe later that morning, I found I'd lost much of my original enthusiasm to work on it.

Three days passed before I started spinning the new cotton. At first, the light fawn colour of this new chocolate cotton looked identical to the first lot, but after I joined my new yarn to the half-finished arm and had knitted the first few rows, I realised the new cotton was a slightly darker shade. Perhaps the latest cotton had come from another farm, another field in another lowland village in Peru, or, like the linen and hemp, there were probably variations between the seasons, and this latest cotton might have come from a separate harvest.

The difference between the two yarns was almost imperceptible, but knowing it was there felt like a little splinter stuck under my skin. I liked the idea of such diversity, of living by the seasons and the whims of the weather, but Rebecca's cardigan was not supposed to change colour halfway up the arm. Yet, it ultimately came down to the distance between me and my materials. I didn't have a deep understanding of where and how cotton was grown and picked. If I lived in Peru, I would visit the cotton fields and talk with the farmers, just as I would if I was still using wool in New Zealand. I would have liked to talk to Nigel about his sheep, but I'd raised a barrier. It frustrated me not having this knowledge and connection, this loss of control over my materials. And so, while Rebecca's cardigan would be fine, and passing glances would never detect the change of shade in the arm, it still left me feeling more irritated and disheartened with the cotton I picked up every day and knit.

I'd spun the yarn a bit finer this time, hoping my knitting wouldn't be as stiff, although now the upper arm was taking on a noticeably different feel, a pliability that the rest of the cardigan lacked. I tried to ignore it, but I kept pausing in my knitting to pinch at the stiffer body of the cardigan with one hand and the softer, most recent, upper half of the arm with the other, rolling the two fabrics between my fingers to fuel my irritation.

After another two days, I stopped so often to judge where I'd gone wrong and what I could have done better on the cardigan that it was starting to significantly slow down my knitting. I began to put it away for two or three days at a time, only to pull it back out and fire up my frustration. It was more than just a lack of enthusiasm now; it had started solidifying inside, a ball of anger I could feel aggregating inside my chest. I started to think Rebecca wouldn't like the cardigan anymore. She'd only tried it on once, and I was dreading the day she would try it on finished, worried she might not

like it, that she might wear it occasionally like a burden but otherwise fold it away like an awkward gift.

Halfway up the second arm, I considered unravelling the cardigan, jumbling the balls up to distribute the yarn's inconsistency, then knitting the pattern again with larger needles. But I couldn't stomach it; the hours of work I'd put into the cardigan had simply grown too immense.

My knitting had slowed down. I was trying to prolong the whole project as long as I could. Perhaps that helped distract my attention from the dwindling state of my yarn. I was so fucking close, just a few rows beneath the start of the sleeve cap but still a handspan of knitting to complete when I joined on my last ball. I couldn't figure out where I'd gone wrong; why hadn't I ordered one more bag? I knit until the ball ran out, the sleeve cap just beginning to take on its shape, then folded the three cardigan pieces up and put them back in the wardrobe. I didn't tell Rebecca any of this, but inside, I seethed.

I returned to my sewing as we moved into summer. I still had a lot of hemp and linen fabric left. I made a shoulder bag with wooden buttons. I sewed a shirt and tried to dye it with the rust I scraped off old nails but ended up boring holes through my fabric. The Wairarapa summer was hot and carefree, the tarseal melted on the roads, and I spent months wearing my hemp shorts and linen shirts.

I was able to put my blue woollen jersey away for the summer, but as winter came around again, as the leaves on the silver birches turned yellow and fell in drifts onto the gravel driveway, I had to bring it out and start wearing it again. By now, the loose stitches under the arms had begun to pull apart, and my shirts were starting to show through the back arm seams. I thought about picking up the stitches on a needle and trying to re-knit it, but the fabric on either side of the seams was thinning, too, and there was nowhere to get a proper hold.

The winter came on cold. Out across the Wairarapa Plains, snow powdered the hills. Nigel had shorn his sheep at the start of summer, and for a few weeks, they walked around the paddocks naked and bony. Now, their fleeces had grown back, full and thick. I hadn't placed another order for cotton, and Rebecca's unfinished cardigan still lay out of sight in the wardrobe. Every day, I looked at my spinning wheel sitting in the corner of our living room. I kept it dust-free with a damp cloth, and

every now and again, I lubricated the flyer shaft axle with a few drops of olive oil. Sometimes, I sat down in front of it and treadled the wheel just to hear it purr.

Rebecca quit the music course at university after one year, trading it for a year-long correspondence course in aromatherapy. I'd picked up some gardening jobs around town, but at the end of our first year in Featherston that winter, I signed up at The Learning Connection, a correspondence art school based in Lower Hutt. The course was self-directed, and to begin with, I spent a lot of my time drawing and mixing my own watercolours and oil paint.

By early spring, Rebecca had started planning a solo singing performance in town, compiling a few folk songs she'd been working on at university. At that point, she didn't have any clothes suitable for such a performance, and wanting something exciting and unique, she asked if I would make her a dress. It was the sort of project I'd wanted to work on for a while, and now I could put my time at the correspondence school toward it. Rebecca requested something tight fitting up top and loose from the waist down. Besides that, I had free reign, although, in the end, we designed a lot of the dress together.

We decided to sew the dress using a piece of creamy-coloured hemp leftover from the previous order. This fabric was light enough for summer but still had enough weight to lend the dress a smooth, subtle drape.

Besides the simple, straight-sided dress I'd made for Rebecca the year before, I knew nothing about dressmaking. I taught myself on the internet as I went. According to Google Images, the sort of dress I'd sketched out in pencil might have been a princess or an A-line dress, a flare or a high waist dress; I couldn't tell.

I needed to take more detailed measurements of Rebecca's body. She stripped off one evening and stood straight with her arms at her sides as I ran the tape from the nape of her neck to the deepest curve of her spine. Moving around in front, I draped the tape from her shoulder down over a nipple to the narrowest point of her waist, just above her belly button. Next, I reached my arms around her and circled the tape about her chest, both of us trying not to laugh as the tape perched loosely over her nipples, slipping down occasionally when she giggled or when the tape shifted, and a cold inch of the fiberglass strap touched the soft, sensitive skin on the sides of her ribs. I noted all these measurements down in a set of lines and arrows that I drew on top of the outline of a curvy female figure I'd sketched on paper.

By now, I had a pile of sketches lying all over the living room table, each showing a variation of the dress I was working toward: the upper half having thin shoulder straps and a bodice cut tight to the curve of her waist, while the skirt, joining above the hips, flared out to the hemline sitting just above the knees.

Rebecca had picked up a wide roll of paper in Wellington, which I rolled out and cut into long lengths that dangled over the table's edge. I would work late into the night, bent over the table with the long straight edge of extruded aluminium I'd found in the shed, my pencil and ruler clasped in my hand as I measured, pinpointed, and ruled lines over the pulpy newsprint paper like a sea captain pouring over his maps.

If Rebecca had been a piece of fruit, she would have been a pear. Shower water had never found a straight path down the length of her body. To accommodate, I had to place darts on the pattern. Darts are narrow, wedge-shaped folds of fabric sewn on the inside of the garment to pull in excess fabric and create a three-dimensional shape that follows the curves of a human figure. I placed two darts under the arms and two on the waistline, pointing toward Rebecca's bust and pulling the bodice into a close, shapely fit.

It took me a month to make my first cut on the fabric, another two weeks to assemble the bodice and the shoulder straps and three days to sew the skirt. Initially, the bodice was too tight for Rebecca to easily remove, so I designed a cut-out on the back to give some ease. The cut-out was in the shape of a heart. It filled the space between her shoulder blades, the two top sides of the heart joining with a small coconut button and forming the neckline seam that sat a few centimetres below the nape of her neck.

To finish the dress, I sewed on small loops and made a thin belt to hide the seam where the bodice and skirt joined. The belt came together at a circular wooden buckle at the bottom of Rebecca's belly. The buckle, a piece of rimu cut from an old floorboard I found in the shed's rafters, took me a whole afternoon to fashion. I cut, filed and sanded the buckle with fine grit paper down to a solid disk that would have fit snugly inside the rim of a cappuccino mug. To finish it, I polished the buckle with linseed oil, massaging the wood with my fingers until the rimu's fine golden grain lines came through.

For my own clothes, I preferred the natural greys and creams and dried grass colours that the hemp and linen fabric came in, but Rebecca didn't want her dress

to be so plain and creamy white. She wanted something colourful, something that popped. I'd been researching dyes and the dying process since we moved to Featherston, often finding that the more I read, the more confused I got. Dyes were complex, a chemistry all on their own, but they could also be categorised into two distinct types.

The textile dying industry was one. I was shocked to discover that this industry was responsible for twenty percent of all global clean water pollution. The day I read that fact, I thought of all the clothes I'd ever seen in all the stores on all the shelves. I thought of all the jerseys and the shirts, the pants and the jackets, all the reds and the blues, the greens and the yellows, and all the poisons they'd leached out into all the fresh water on their journeys around the world before they reached our front doors and it made me feel sick.

The culprits of this pollution were heavy metal mordants like chrome, copper, cobalt and nickel used to attach the synthetic dyes to the fabric. The textile dying industry—driven by consumers and an insatiable hunger for vibrant colours—used mostly synthetic dyes derived from coal and petrochemicals. There were vat dyes and phthalocyanine dyes, reactive and sulphur dyes, triarylmethane dyes and acid dyes; the list continued. The industry also used naphthol, formaldehyde and nitrates for fabric preparation, helping to fix the dyes, altering colours and even preventing stains and anti-creasing. We lived our lives as though vivid colour was a human right and that we should have access to it, no matter the cost.

But these weren't our only options. As with everything in the world, there was another way. By late spring, an entire colour pallet was emerging around our neighbourhood. Yellow fennel heads pushed up through the tangled grass along the side of Boar Bush Gully Road; in front gardens, I saw purple geraniums and red azaleas, yellow chrysanthemums and blue hydrangeas, pink dahlias and orange lilies. I saw brown bark flaking off tree trunks and new green leaves tumbling down the footpath. The last pink and white blossoms had fallen from trees and clogged up the gutters in town.

I'd been looking into natural dying for a while. Still, all I'd done so far was boil a few handfuls of eucalyptus leaves in a saucepan, then drop in small squares of hemp fabric to see if they soaked up any colour. The kitchen smelled delicious while the leaves were simmering. Yet, while I hoped to extract a yellow or red dye, they'd barely changed color when I pulled the fabric pieces out.

I discovered that my eucalyptus leaves hadn't worked well as a dye because unprocessed fabric doesn't take up colour very well. Natural dying was completed in three stages: scouring, mordanting and dying. For the mordanting, I needed tannins and alum. Chemically speaking, the tannins fixed themselves to the fibre, the alum (the mordant) fixed itself to the tannin and the dye then fixed itself to the alum.

Alum was the sulfate of aluminium, a metallic salt that lacked the high toxicity of the heavy metal mordants like chrome and copper. Tannins, however, were found in the brown liquid left over from soaking tannin-rich plant material such as acorns or chestnuts. However, the most effective source of tannin was an oak gall, a small round growth formed on oak trees in response to the gall wasp laying its eggs in the tree's buds. The oak gall grew around the wasp's egg, eventually providing protection and food as the larvae grew, pupated, then finally bored a hole through the gall and flew away, leaving the dried oak gall attached to the branch.

I didn't know if we had the proper wasp in New Zealand, but I hadn't found any galls on the oak trees in Featherston, so I ordered a bag of oak galls from Wales. They arrived as a golden, hand-ground powder, the galls collected from a local woodland once the tiny wasps had hatched.

I started returning from walks around Featherston with my pockets full, emptying petals, leaves, pine cones and pieces of bark out into a jumbled pile on the dining room table. I simmered and soaked them all in pots, watching the colours leach into the water: bright crimsons, caramel browns, reds and blues as dark as ink. While the dye baths were still hot, I dropped in small squares of hemp fabric I'd scoured and mordanted, leaving them to soak for a few hours or overnight. As my squares dried the next day, their colours would lighten and settle into an infinite palette of tints, tones and shades; the dye baths diluted and splashed out over the back lawn.

The dyes I'd discovered were stunning in their own way. However, by mid-summer, I was still searching for the perfect plant, for the perfect colour to dye Rebbecca's hemp dress. I'd experimented with hydrangea flowers, thinking a pale blue might work. The dye bath extracted all the blue from the hydrangea petals. Still, the dye wasn't lightfast on the fabric samples, and the pale, ghostly blue almost faded entirely after an hour of sunlight. I'd learned a hard and fast lesson: not every plant with colour is willing to impart its magic onto my clothes. I shouldn't be greedy;

some colours were best enjoyed in the garden, in the shade and the sunlight with the worms and the bees.

By then, our marigolds had flowered out the front of the house. That was our bee garden, the strip of soil at that side of the path that I'd scattered with bee-friendly wildflower seeds a few weeks earlier. Now it was a miniature meadow tipping over under its own weight—Californian poppies, borage, calendulas, alyssum, cornflowers—the bees were so loud we could hear them buzzing when we stood inside the house. I'd dug in the marigold seeds separately at the far end of the garden next to the garage. We'd grown the marigolds for the bees too, with no intention of using them as a dye. Still, when I saw them in full flower, their ruffled orange petals folded open to the sun like origami frills, I knew I'd found my perfect plant, my perfect dye.

There were enough marigolds in the garden to take just a few pinches of petals off each flower head, leaving plenty behind for the bees. I picked enough petals to cover the bottom of my large saucepan about a centimetre deep. I wasn't sure they would work, but as they simmered, the water began to take on a rich, amber-like colour as the dye leached slowly out of the petals. Rebecca's dress had already been mordanted—apparently, deeper colours could be achieved if the alum was given time to cure. Later that day, with the pot off the heat, I held the creamy-coloured dress above the rising steam, then lowered it slowly into the dye.

The fabric began to take up colour immediately, a bright yellow despite the orange petals that had gone into the pot. I left the dress to soak in the dye overnight. When I lifted it out the next morning, I was stunned. The colour had deepened overnight, shifting from bright yellow to a more saturated, mustard-like orange. I rinsed the dress and hung it over a stick on the front porch. As the fabric dried and reflected more light, the colour softened and slowly brightened, and by midday, the sunlight, absorbed and scattered in ways unique to natural dyes, had given the dress an orange-yellow glow that was almost luminescent, unlike any colour I'd ever seen.

I lifted the dress off the stick and held it up by the straps in the shade under the front porch. The bees, still hovering in clouds above the wildflowers, knocked against my legs as they came and went through the warm afternoon breeze. I glanced at the marigolds growing in the dark soil at the end of the path, then looked back at the orange dress I was holding up in front of me, realising I'd just completed a form of alchemy, transferring the life of the petals into the fibres of my fabric.

Those mediaeval chemists had tried to convert base metals into gold, but what I had made was about something more than money. The dress had taken me weeks, and the dying was a slow accumulation of knowledge and connection with my local environment. The slower the process and the longer it took, the wealthier I became.

Rebecca was eager to put on her new dress. Once she'd slipped into it, I helped her button it up at the back, just above the heart. She threaded the belt through and clipped it together on the back of the rimu buckle, then stood in the living room smiling, smoothing the fabric over her stomach and running her hands down the sides of her legs.

The dark brown rimu buckle matched the orange-yellow dress perfectly. Rebecca spun around in the living room with her arms up, the dress flaring above her knees like a spinning top. When she stopped, she skipped across the living room, put her arms around my neck and kissed me. That moment felt like one of the closest we'd ever been, this making and gifting, this sharing and connecting. It seemed like a beautiful way to live. At the time, it seemed like it could have gone on forever.