

Extension, subversion, containment: eco-nationalism and (post)colonial nature in Aotearoa New Zealand

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National identity in many post-colonial states is predicated on nature being outside and antecedent to culture and the colonial project. This paper questions the historical and essentialist assumptions underpinning this vision using New Zealand as a case study, and in particular the Christchurch Botanic Gardens in the nineteenth century. I argue that the Gardens were a site in the multi-species extension of colonial space, but that far from being docile entities, non-humans kicked back to change the very nature of the project. New Zealand's eco-nationalist project is described as not only an attempt to order the past, present and future lives of non-humans (invasive, native and migrant alike), but also to sanitise the colonial expropriation of the indigenous and to preclude any mode of relating to 'nature' that might subvert the essentialisms inherent in a preservationist ethic. Situated between three modes of critique: nature-as-ideology; nature as complex but real; and an ontological exposure of hidden hybridity, I make a modest move beyond (re)description of naturecultures to normative critique of their constitutive relations.

key words eco-nationalism New Zealand history nature botanic gardens preservation

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Introduction

Unique plant species, sodden temperate rainforests, the towering Alps and iconic birds like the kiwi have come to represent Aotearoa/New Zealand's place in the world. New Zealand does indeed enjoy high biodiversity. Eighty per cent of its plant species, and even some entire plant orders, and 25 per cent of its bird species are unique to the islands. New Zealand can be seen as a unique fragment of Gondwana, cut off from the rest of the world for 80 million years. This isolation and the absence of mammals encouraged flightless birds, insects and reptiles to evolve and fill unusual ecological niches; gigantism and longevity were marked (Young 2004). This native nature, the government notes, 'offers a unique basis for our culture and sense of national identity' (Department of Conservation *et al.* 2000). The turn to nature as a

reference point for national identity comes at a time in New Zealand when the old coordinates of Empire no longer hold (Turner 1999). New Zealand, after the Waitangi Tribunal was established in 1975 to settle historic grievances between the Crown and Maori, is a Pacific nation, supposedly at peace with its colonial past.¹ A love of native nature is seen as an a-political way to unite *pakeha* (white, European)² and Maori citizens, as well as more recent Pacific rim and island nation immigrants: to achieve this New Zealand's origin myth is extended back into primeval time (Figure 1).

And yet, the many weeds that followed European colonisers in the nineteenth century – chief amongst them black nightshade, broad-leaved plantain, dandelion, Jersey cudweed, sow thistle and wire weed – were global 'homogenisers', disrupting native ecosystems and re-making landscapes in many colonial settings (Flannery 1994).



Figure 1 Wild New Zealand: the iconic Mitre Peak in Fiordland National Park is one of the most photographed mountains in New Zealand

Source: personal photograph

The acclimatisation of weeds, possums, rats and other invasive species in New Zealand led to the extinction of 32 per cent of New Zealand's native birds over the last 1000 years (Wilson 2004). Given the investment in nature as the basis for national identity, contemporary ecological threats that jeopardise indigenous biodiversity become threats to the integrity of the 'imagined community' of the nation-state (Anderson 1983; Comaroff and Comaroff 2001). In this delicate climate New Zealand's indigenous nature requires protection and care – provided by a \$200 million-a-year biosecurity system that seeks to keep exotic pests out and manage those already present. The ongoing creation of this eco-nationalist imaginary of natureculture is the subject of this paper.

Overall, this paper has three aims. The broadest is to examine how an eco-nationalist imagination of nature has emerged in New Zealand, how it has shaped, and in turn has been shaped by, various non-humans. The notion of the 'relational' is much on the agenda in human geography (Lorimer 2007), bringing with it an increased attention to the contingency of actors, human and non-human alike, and to registers beyond representation, such as corporeal experience (Harrison 2000) or the importance of practice in shaping everyday life (Reckwitz 2002). Geographers have made philosophical propositions about the nature of the

world as variously 'more-than-human' (Braun 2005), 'post-natural' (Hinchliffe 2007) or 'posthuman' (Castree *et al.* 2004). If this kind of thinking can be characterised by anything, it is by an anti-essentialist focus on the relations and relating between all kinds of things and actors which make up our world. This has been termed a kind of 'ontological choreography' (Thompson 2005), where subjects and objects are constantly in-the-making, 'consequent on a subject- and object-shaping dance of encounters' (Haraway 2008, 4). Such approaches implore us to withhold judgement about the capacities of human/non-human entities, and to investigate the interactions and emergent properties of heterogeneous arrangements in order to develop geographically-informed descriptions of various naturecultures. This article therefore contributes to the general re-thinking of 'nature' in social sciences, by considering eco-nationalism as a multi-species project. I do this through the notions of extension, subversion and containment. Each of these three describes a basic mode of relating between humans, non-humans and their environment that works to achieve certain effects or moments in the history of eco-nationalism in New Zealand.

Second, I wish to follow Haraway (2003 2008) in moving beyond description to normative critique. Relationality and the re-thinking of nature in human geography have drawn on three main

sources: Deleuzian geo-philosophy, actor-network theory and performance studies (Whatmore 2006). While this has allowed human geographers to re-register the important material presences of non-humans and opened up the intriguing project of some kind of relational ethics (Whatmore 2002), such ontological politics are too oblique for many within geography (Harvey 2006; Smith 2005). In this article I wish to take a lead from Haraway's important recent contributions (2003 2008). Haraway aims to inject a little more direct political concern into thinking about naturecultures. Her turn from the cyborg to dogs, and certain dogs in particular, traces how 'nature' (genes, saliva, reproduction, evolution) is relentlessly imploded in 'culture' (love, dog shows, breeding), through historically specific lives of dogs and people:

We are in a knot of species coshaping one another in layers of reciprocating complexity all the way down. Response and respect are possible only in those knots, with actual animals and people looking back at each other, sticky with all their muddled histories. Appreciation of the complexity is, of course, invited. But more is required too. (2008, 42)

Haraway asks us to do more than reveal the relational complexity of the world. The 'more', she suggests, is to learn to 'be polite' in ongoing asymmetrical relations of living and dying, nurturing and killing. Being 'polite' includes a duty to be curious about the non-human, and a duty to respond fairly and deepen our responsibility to each other. This demands normative judgements that stem from the qualities of relations, rather than from abstract universal principles. In the conclusion I return to what this might mean in New Zealand, where binary concepts such as native/exotic nature, while patently failing to map on to their referents, nonetheless do enormous violence to some creatures but allow others to flourish.

A perspective from the post-colonial 'periphery', moreover, where questions of nature have often been more obviously political than those in Europe, might do more than extend the empirical scope of geographical study (Instone 2004). Geographers have remarked on the continued absence of modern indigenous voices from discussions of nature (Braun 2002; Johnson *et al.* 2007). There is, however, a less remarked upon reluctance by proponents of the ontological projects within geography outlined above to engage with indigenous cosmologies. This article presents a modest step

towards considering how attention to indigenous politics of nature might point to other ways of 'being polite' or a different kind of response to non-humans than that implied by the Western ethico-moral animal rights or biocentric discourses.

My final aim is to highlight the importance of historicising questions of natureculture. The kinds of encounters about which Haraway writes are historically layered. For Haraway,

actors become who they are *in the dance of relating*, not from scratch, not *ex nihilo*, but full of the patterns of their sometimes-joined, sometimes-separate heritages both before and lateral to *this* encounter. (Haraway 2008, 25)

To trace some of the heritages informing contemporary eco-nationalism I turn to a particular place and period, the Christchurch Botanic gardens in the nineteenth century, showing how current encounters are contingent on historic species transfers, both planned and unplanned. Focusing on one place (although not exclusively) allows us to glimpse some of the vitality of non-humans and how they have been active agents in what Schiebinger (2004), after Pratt (1992), has called the 'biocontact zone'. Pratt coined the term 'contact zone' to emphasise the interactive and constitutive nature of colonial encounters, in place of more traditional diffusionist stories where pre-given subjects and objects clashed, the one ousting the other. Schiebinger extends this to encompass human/plant encounters. Some understanding of the historical interactions that have shaped non-humans in New Zealand is required, therefore, to address contemporary questions of eco-national identity. Before turning to the three processes of extension, subversion and containment in the Botanic Gardens, I offer an overview of eco-nationalism in New Zealand, and of three modes of criticising natureculture used by geographers.

Eco-nationalism and New Zealand

New Zealand's human history, both Maori and pakeha, is telescoped into a very short time period. Maori settled around AD 1000, prompting widespread ecological change, as they spent the first 500 years taking Aotearoa apart and the subsequent 500 years learning how to put it back together again (O'Regan 1989). Formal British settlement in the 1840s was preceded by 80 years of patchy commercial exchange between Maori and European interests (Belich 1996). The first immigrants brought by the

New Zealand Company arrived in 1840, lured by adverts of a 'Garden of the South'. Assisted by dubious purchases of land from Maori, many subsequently overturned by the Waitangi Tribunal, and assisted passage to the colony offered by the colonial administration, the population increased from 2000 in 1840 to 500 000 by 1890 (King 2003).

The settlement process involved carving a working landscape from the 'empty' wilderness. As the forest, at once both fecund and threatening, gave way to the plain, the experience of 'improvement' provided some measure of shared identity for nineteenth-century pakeha colonists (Sinclair 1986). After intermittent armed conflict between the Crown and Maori in the 1840s and 1860s, large tracts of land were acquired by the colony, and the Maori population declined to under 50 000 by 1890 (Belich 1996). Towards the end of the nineteenth century, romantic sentiment towards vanishing indigenous people and forests prompted their symbolic appropriation as marks of distinction for the New Zealand colony. The kiwi and the hui (extinct by the early twentieth century) were popular symbols (Dunlap 1999), while Maori artefacts and customs were displayed as exemplars of New Zealand's unique past (McCarthy 2007).

Although New Zealand became a semi-autonomous Dominion in 1907, full independence came gradually through the twentieth century. Whereas the process of settlement provided a common identity for the first generations of settlers, by the last quarter of the twentieth century, faced with increasingly articulate and strident Maori demands for restitution of breaches of the Treaty of Waitangi (see note 1), the process of settlement was increasingly seen as too traumatic a focus for contemporary national identity:

In New Zealand, the white dream of a new country, which requires that indigenous inhabitants be forgotten or constructed in terms of the vision of a bright future, conflicts with the tenacious historical memory and insistent presence of Maori. (Turner 1999, 22)

The Waitangi Tribunal was convened in 1975 to settle historic Maori grievances about dubious land grabs and 'sales' under the 1840 Treaty, and can be pointed to as a post-colonial salve, an effort to make a bi-cultural New Zealand. The need to validate their claims to the land through a European legalistic apparatus has of course not been lost on Maori (Kawharu 2002). Nevertheless, the Treaty of Waitangi has been reinvented as a kind of founding 'constitution' for Aotearoa/New Zealand.

Nature, long seen as the outside other to Western culture, now provides a seemingly neutral terrain (along with perhaps rugby, cricket or netball) on which to found a shared sense of national community. For Maori, Aotearoa has a *mauri* (life force, spirit) of its own, something that colonialists denigrated, but which now holds favour, as descendents of Europeans born with no memory of the settlement process begin to refer to some 'indwelling primordial power' (Park 1995), or to believe that 'slowly the land works on us and, generation after generation, shapes a new culture' (Park 1995, 15). Similar sentiments occur in Australia, where popular writers urge a new dialectic between land and people (Flannery 1994). If the goal is to overcome the disenfranchisement of New Zealanders from the land by creating a sense of dwelling in a special land with unique life forms and spectacular landforms, it is important that everyone can share in the experience (Clark 2002). The highest peak in New Zealand, Aoraki, was for Ngai Tahu (the largest Maori *iwi* or tribe on the South Island) also one of their frozen ancestors. Re-named Mount Cook, it was purchased in 1848 and later turned into a national park. By contesting its sale through the Waitangi Tribunal, Ngai Tahu regained recognition of their relationship to Aoraki. It was re-named Aoraki/Mount Cook and, as a token of the tribe's commitment to the co-management of areas of high historic, cultural and conservation value, was gifted back to all New Zealanders (Ngai Tahu 2004). Such re-namings are part of the process of making sure pakeha and Maori alike are aligned with nature and nation.

Which bits of nature are valued, and how they are preserved, is of course slightly more fraught. A survey of New Zealanders' eco-nationalist sentiment found that native bush was most symbolic of national identity; mountains were aesthetically important; swamp and wetlands were not:

While all living, non-human entities in the landscape could be included in the natural environment, there was a developing sense of hierarchy, dependent on factors such as indigenoussness, the degree to which it had been obviously 'tamped with' and visual appeal. (Kilvington and Wilkinson 2001, 13)

The most valued landscapes, then, are those that were deemed 'untouched'. Conservation, as this suggests, remains overwhelmingly preservationist in mentality. New Zealand's Conservation Act (1987, Section 2) defines conservation as:

The preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values . . . 'Protection', in relation to a resource, means its maintenance, so far as is practicable, in its current state; but includes: (a) Its restoration to some former state; and (b) Its augmentation, enhancement, or expansion.

The term 'intrinsic values' conjures up an idea of nature as external and antecedent to society, culture and the nation-state. The 'former state' (implicit or explicit depending on the proponent's post-colonial credentials) is a baseline some time just before formal European colonisation. The implication of such a pre-colonial baseline is to empty nature of any politics or history. Latour (1993) calls this essentialising move the work of purification, and in the New Zealand context, isolating nature and landscape from politics allows all citizens to appreciate natural wonders without guilt.

Accordingly, New Zealand's biodiversity and biosecurity strategies include calls to build understanding of *matauranga Maori* (Maori knowledge of biodiversity) (Department of Conservation *et al.* 2000). Increasingly forceful Maori voices have regained customary rights such as mutton birding or harvesting *kereru* (native pigeon), while concepts like *tiakanga* (protocols), *tapu* (prohibitions, sacred), *rahui* (temporary restrictions) and *kaitiakitanga* (guardianship) have entered the lexicon of conservation in New Zealand (Roberts *et al.* 1995). This re-appraisal of indigenous knowledge fits in with eco-nationalism's vision of nature that everyone can share equally, regardless of genealogy and history.

But such a re-appraisal confuses epistemology with ontology. As Roberts (2004) argues, there may be epistemological similarities between Western and Maori ecology, such as the desire for large data sets and empirically grounded understanding, but there is ontological incompatibility. For Maori, history is structured through *whakapapa*, or genealogy: 'connections between places, people, animals, plants, stars and gods back to the beginning of creation' (Waitangi Tribunal 2004, 2 cited in Johnson and Murton 2007, 125). 'Nature' exists not before society as a separate realm, but as a family tree, without firm demarcations between the supernatural, the natural and the social (Marsden 1988). This puts Maori views of the non-human at odds with the Western view of nature as external and antecedent to society. To date, piecemeal efforts at bi-cultural conservation have retained an emphasis on preservation, in which 'indigenous authority is circumscribed within the logic of an inclusionary politics which

serves only the goals of conservation' (Coombes 2007, 192). The state refuses to endorse self-determination for Maori, even on their own land (some 6.7 per cent of New Zealand), insisting that all citizens relate to nature in the same, Eurocentric way (Kawharu 2002).

Spatially, New Zealand's eco-nationalist project can be understood as an attempt to map an orderly regime on to what is a much more viscous, turbulent domain of mobile non-humans (Figure 2). The Department of Conservation has a range of techniques to quantify, manage and to fix nature in space – including GIS, electronic tagging, poison, genetic databases, biosecurity controls to keep out pests, and so on. For example, 'mainland islands' are reserves protected by tailor-made combinations of fencing, traps, poison and other pest control measures which require specialised, complex, local ecological knowledge (Meurk and Swaffield 2000). This kind of panoptic, ecologically-informed apparatus defines non-human objects in the world, classifies them, tidies them, and renders them knowable in a given context: 'introduced biodiversity is neither all "good" nor all "bad"; threats or benefits of individual species most often depend on the situation in which they arise' (Department of Conservation *et al.* 2000). Ordering tendencies 'from above' tend to 'territorialise' space (DeLanda 1997), to impose order on to a messy, mobile array of non-humans, portraying nature and alternative indigenous cosmologies, as the unruly, un-rational other to the contemporary nation-state. Conservation techniques, in other words, are constitutive of the objects they exist to save.

Criticising nature

Having evolved through practical problem-solving techniques and hard-won ecological know-how in a unique but isolated physical environment, the state's conservation and biosecurity regimes make familiar claims about nature: that it is complex, but knowable; non-linear, but manageable; outside culture, but endangered by culture; and that Western rationality can save it. Nature is docile. Where nature is not docile, it must be disciplined and made to fit within neat spatial and temporal boundaries and the linear history of the nation state. This has predictable consequences for animals like possums, or human societies that fail to map neatly on to the Great Divide between superior man [*sic*] and nature, such as indigenous peoples

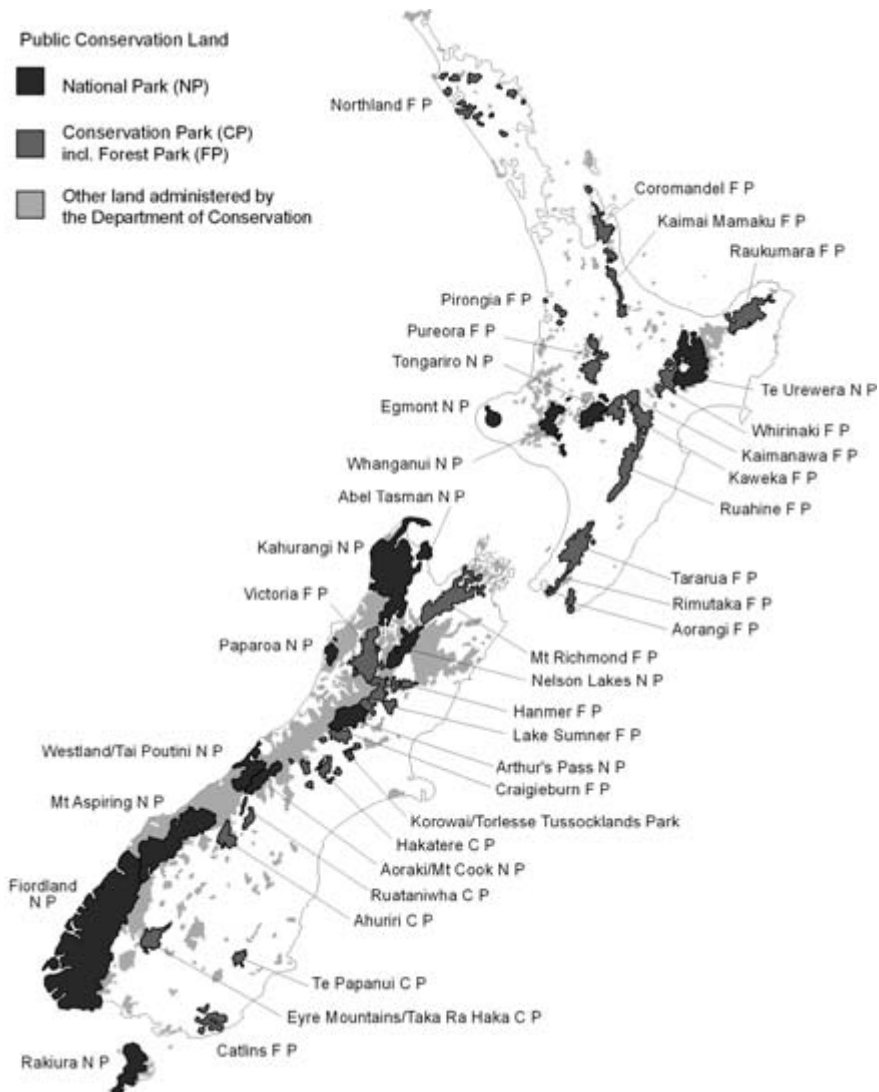


Figure 2 Map of conservation Land

Source: Copyright Department of Conservation, New Zealand

(Latour 1993). The next section explores three modes of critique geographers might deploy in understanding this vision of nature.

The first critique of the eco-nationalist imagination of nature is that it is *ideological*. Much work in geography, cast as 'de-naturalising' by Castree (2005), has shown how 'nature' has been historically staged as either 'false' ideology – as a material object of manipulation and calculation, or as a field of knowledge. As Cronon (1996) argued, 'wilderness' is a profoundly human construction. Its history in

the US could be traced to the closing of the frontier; in the UK to the romantic reaction that re-imagined Britain's wild places as opposed to industrialising cities. Europeans projected such views of nature onto the new landscapes they encountered (Dunlap 1999) in the Americas (e.g. in the Amazon; Raffles 2002), Africa (Neumann 1998) and the Pacific (Salmond 1997). The opposition between nature and civilisation was racialised and so provided a rationale for European colonial rule over more 'primitive' peoples and their 'unspoiled' or empty

lands. Braun (2002) has shown how this ideology of nature continues to have power today: wilderness can be invoked by actors with seemingly divergent interests, such as loggers and conservationists, to achieve certain political effects, notably the foreclosure of indigenous claims to the land.

Historians of science have shown how nature was implicated in the ideological projects of scientific knowledge creation and imperialism (Drayton 2000; Miller and Reill 1996; Pratt 1992). Studies of colonial botany have shown that what counted as a 'species' was less a recognition of pre-given essence than a complex negotiation involving a whole chain of processes, from the naturalist 'in the field' through technologies of capture, storage and transport, to codification in centres of calculation, such as botanic gardens like Kew (Latour 1987). The collection of nature in colonial botany invariably drew on indigenous knowledge (Schiebinger and Swan 2005), though such knowledge did not always travel from the colonial periphery to European centres of calculation, being deemed too 'local' to be of relevance (Endersby 2001), or too dangerous, such as indigenous women's knowledge of plant-derived Caribbean abortifacients (Schiebinger 2004). The layout of botanic gardens both reflected and produced different kinds of knowledge about nature (Johnson 2006 2007). The nature-as-ideology critique, then, is largely constructivist in approach, and aims to expose the power relations hidden in the seemingly neutral terrain of nature.

A second line of critique of the external, eternal nature invoked in New Zealand's eco-nationalism is that it is *wrong*. Based on an ecological understanding of natural history, Low (2003) argues that nature may be external to the nation state, but it is certainly not stable. For Low, preservation of national parks ignores the reality that 'nature was never timeless' and we should acknowledge just how much animals and plants, including endangered species, are bound to human societies. He also disputes the ecological sense of binaries like native/exotic. For example, silvereyes, blow-ins to Aotearoa from Australia in 1856, are now considered native, but thrive only on modified farmland, avoiding native forests in winter (Low 2003). Indeed, conservation *practice* as opposed to conservation rhetoric in New Zealand acknowledges that a simple native/exotic binary fails to map onto ecological realities. For example gorse, vilified as an invasive exotic, can in fact play an important

role in understorey plant regeneration, where as an edge-dwelling pioneer it shelters young natives (Meurk and Swaffield 2000). This 'new ecology' has for more than a decade been emphasising disturbance over stability, non-equilibrium over balance, and spatial variation over conformity (Phillips 2004; Zimmerer 1994). 'New ecology' holds that

animals and plants were not embodiments of eternal essences but piecemeal historical constructions, slow accumulations of adaptive traits cemented together via reproductive isolation. (DeLanda 1997, 13)

A better, more scientific understanding, perhaps with some indigenous concepts thrown in, can reveal the true nature, purged of politics, in all its complexity.

A third line of critique, introduced earlier, could be termed *ontological*, whereby eco-nationalism is seen not so much as ideological or empirically wrong, but rather generative of an undesirable reality. A critique would therefore aim to understand how eco-nationalism is co-fabricated by many more-than-human subjects, to trace this ongoing making of bodies and assemblages (Whatmore 2006). This line of thought has been in part a response to an over-emphasis on representation in nature-as-ideology critiques, an emphasis that reduces the non-human to a cipher for human interests. In cultural geography focus has been on semi-wild lands and their heterogeneous occupants (Lorimer 2006), urban human/non-human interactions (Hinchliffe *et al.* 2005), the private garden (Head and Muir 2006; Hitchings 2003; Power 2005), or spectacular fields of capital accumulation like biotechnology (Bingham 2006). One important implication of all this work is that animals and plants, things and objects are now seen as having agency or 'thing-power' of their own (Bennett 2004). They are all active players in Haraway's 'dance of encounters' that make up objects and subjects, a dance in which 'the partners do not precede their relating' (Haraway 2008, 17). The 'relation' is not some new irreducible unit of analysis, but is a historically contingent result of differences: it is the flow of energy and matter between these differences that generate the geological, cultural and natural forms that come to inhabit the world (DeLanda 2006). In this dynamic realm of becoming, then, New Zealand's eco-nationalist and conservationist practices and imaginaries can be seen as *productive* of certain patterns of natural/cultural relations, and

by interfering in this production we might begin to imagine other possible worlds (Law and Hassard 1999).

There are, of course, overlaps between these three modes of critique. For example, both nature-as-complex and relational geographies are anti-essentialist, accounting for the stability of current actors not through reference to some eternal 'essence', but historically layered contingencies. Here, I am less interested in making claims about the way the world really is than in using the three modes of critique to compile a counter-narrative of a specific arrangement of natureculture in New Zealand. As Latour worries, while stories that rely on the nature/culture divide for their power may say 'nothing about what really happened . . . [w]e are still struggling to find a *positive* narrative, one fitting for the newly defined Earthlings' (Latour 2007, 5). I want to ask how eco-nationalism has led to certain relations, and wonder how re-ordering these might give us a more positive narrative. But I wish also to see if an assessment of eco-nationalism drawing on nature-as-ideology, nature-as-complex and natureculture as relational entanglement can offer a way towards normative ideas how to 'live more politely'. Commenting on conservation, Haraway suggests that we should aspire to

an environmentalism committed simultaneously to multispecies cofilourishing, heterogeneous collective memory, and complex histories . . . Serious projects are required to build and rebuild liveable naturecultures in the future. (2008, 388)

My aim therefore is a modest step towards making normative judgements about New Zealand's eco-nationalism based on an understanding of its complex multispecies histories.

The three modes of critique do not map neatly on to the three processes of extension, subversion and containment I use to organise my narrative. Although the process of extension is ideological, it is also – as we shall see – about the making of new associations and beings. On the other hand, noting the subversive agency of non-humans only makes sense within a wider field of (ideological) meaning about the proper role of invasive or exotic species. Each of the three critiques, then, weaves through this article. I focus empirically on one botanic garden – the Christchurch Botanic Gardens on the South Island of New Zealand. There are, of course, other spaces or places through which we could put some nature back into the politics of nationhood in

New Zealand. We might, for instance, consider more everyday sites of human/non-human co-constitution like the domestic garden (Longhurst 2006), but there are at least three reasons why the botanic garden is useful for the purposes of this article.

First, botanic gardens served as normative exemplars of a particular kind of nature–culture relation. They were laboratories in which the munificence of the natural world was mapped and made known, through which the enlightened European visitor could promenade and gaze at all the world's majesty, tamed and ordered by science (Livingstone 2003).

Second, in the nineteenth century botanic gardens provided a material platform from which to extend colonial ideologies of nature. Economic botany, plant-based accumulation strategies and landscape improvement aimed to improve nature for the good of all (Brockway 1979; Drayton 2000; McCracken 1997). Botanic gardens were places where nature and culture was actively shaped and re-worked through hard graft and micro-relations between human and non-humans, and potentially subverted by the awkward behaviour of indifferent plants (Hitchings 2003; Power 2005).

Finally, little attention has been paid to the continued symbolic power of the botanic garden (Heyd 2006). Laid out in 1863, the Christchurch Botanic Gardens were never as grand or scientific as Melbourne, Edinburgh or Kew. However, they played a role in producing New Zealand's messy landscape and remain today a site that mixes an 'English' gardenesque landscape aesthetic with native and regional plants. The nineteenth-century vision of nature tamed and ordered, reworked today through biodiversity and eco-nationalist sensibilities, retains tremendous popular appeal – the Christchurch Botanic Gardens, for example, receive over one million visitors a year (Christchurch City Council 2006). For these reasons, then, the Christchurch Botanic Gardens provide a route into historicising New Zealand's eco-nationalist imaginary. I now turn to the Gardens' role in extension, or the process of re-making New Zealand through colonisation.

Extension

When to begin? Where are the origins of the extension of an orderly arrangement over nature's excessive vitality to be located? The mapping of grid-iron settlement in Christchurch (Figure 3),

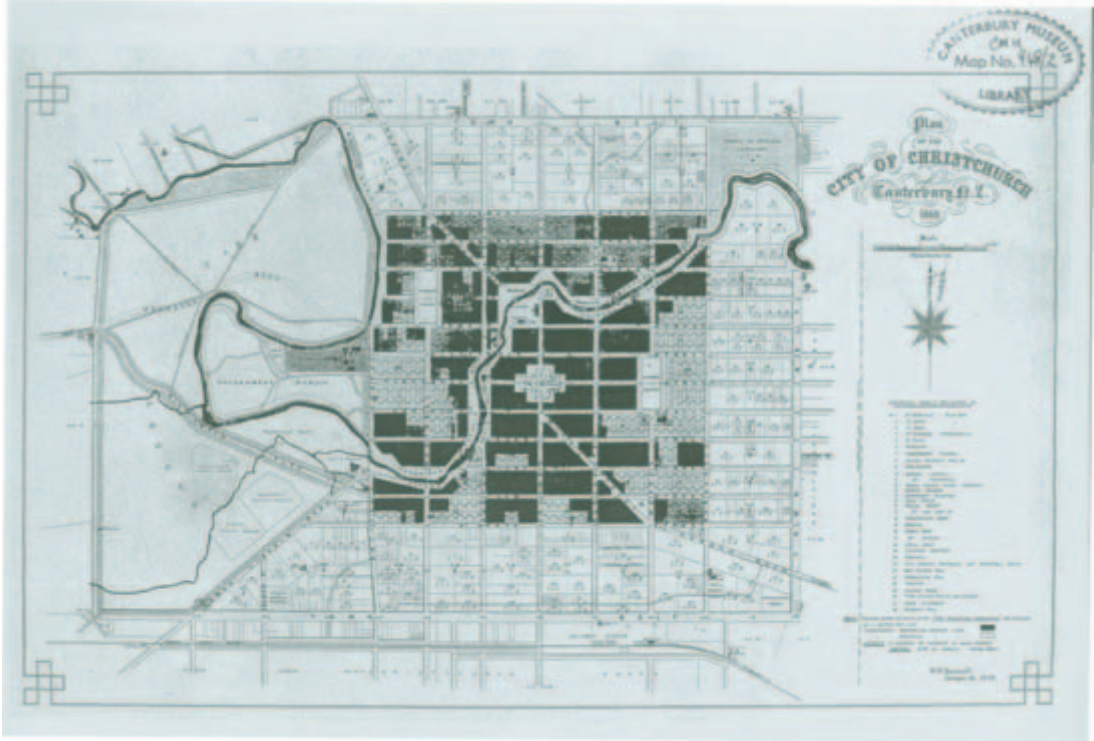


Figure 3 Darnall map 'Plan of the city of Christchurch 1868'

Source: Canterbury Museum

where the theodolite turned 'prodigious ecology into geometric settlement' is one well-known beginning (Park 1995). This rational, efficient city layout – first surveyed by Captain Thomas in 1849 – was particularly suited to Ōtautahi (the site of Christchurch), with its low sand hills and swampy waterways, surrounded by windswept plains. The wetlands of Ōtautahi were harvest grounds for eels and birds of Ngai Tahu, the largest Maori *iwi* (tribe) on the South Island, as well as providing a seasonal trading point and a few small areas of cultivation (Tau 2000). Letters sent home to Britain by settlers reflected an evangelical unease that indigenous life – both natural and Maori – needed redemption at the hand of white Christian people:

To begin with, there were these vast Plains in their original state, I may say, for they showed no sign of ever having been cultivated... All was waiting the advent of a white race of people to reclaim them and make them useful or beautiful as a garden. (Jane Deans, letter written 16 December 1887, in Deans 1937, 76)

Acclimatisation societies, interested settlers and colonial administrators all wanted to create a 'Britain of the South' by transplanting familiar plants and animals to the imagined wild lands of New Zealand (Dunlap 1999). The garden, that quintessential balancing point between nature and culture, was a metaphoric and material goal in the transformation of the New Zealand landscape, and Christchurch was labelled the 'Garden City' (Pawson 2000). The Christchurch Botanic Gardens played a crucial role in the rational extension of a productive British landscape in three main phases.

At first, private nurseries and personal exchanges with family back in Britain met the demand for trees, hedging and ornamentals. William Wilson was foremost among early private nurserymen in Christchurch. From his site in the future grounds of the Botanic Gardens he established the import techniques, cultivation methods and breeding stock to meet the demands of settlers, through an elaborate trade network involving nurserymen in Nelson, Wellington, Sydney and

Hobart (Challenger 1978b). This Antipodean exchange network, which was maintained by Wilson's successors, shows that much botanical exchange took place between colonies, and that Kew's pre-eminence in facilitating global species transfer has been overstated (Endersby 2001). Wilson concentrated on raising and distributing large numbers of a few economic species for wind protection, firewood, enclosure, fruits and nostalgia. In May 1852 Wilson's advertisements list 10 000 hawthorn and 50 000 gorse plants, and by May 1855 his stock of hedging had risen to 200 000 plants, in a province with a population of only 10 000 settlers (Challenger 1978b). Wilson grew both wealth and political capital from his horticultural skill, becoming the richest man in Christchurch and mayor in 1868.

The second phase of orderly landscape improvement was the creation of a tangible metaphor in the form of a botanic garden. In 1864 the Provincial Gardener, Enoch Barker, laid out the Botanic Gardens on a site composed of sandy hills, extensive shingle-beds and swampy areas (Challenger 1978a). Barker set a basic layout of fenced lawns and paths (Herriott 1919), and indigenous tussock, toe toe and Spaniards were replaced by English grasses (*Lyttelton Times* 1864a). Plantings were all exotics (*Lyttelton Times* 1864b), reflecting the desire to create an aesthetic and productive landscape reminiscent of home. Bits of native vegetation persisted – the banks of the Avon were still pocked with tussock and flax well into the 1900s. While never perfect or complete, the Botanic Gardens were set out as a tangible model for how New Zealand as a whole could be improved; an enclosed arcadia amidst a swampy, degenerate wilderness (Pawson 2000).

The Botanic Gardens were more than a small-scale allegory of the superiority of Eurasian species and European dominion over nature. They were a nursery in which to incubate the extension of an English landscape. William Wilson's commercial efforts were surpassed in the third phase of extension by a government-sponsored improvement programme. Christchurch Botanic Gardens was prolific in distributing seedlings (overwhelmingly ash, oak and birch) for 'relieving the monotony' of the landscape (*Christchurch Press* 1872): some 779 239 between 1870 and 1884 (Armstrong 1884). This figure is an under-estimate, as it includes only public estates. This is substantially more than the Wellington Botanic Gardens on the

North Island, which distributed 200 000 seedlings from 1870 to 1880 (Shepherd and Cook 1988), and also well above the distribution of 2000–3000 seedlings per year to local settlers by typical colonial botanic gardens estimated by McCracken (1997).

Planned plant introductions aimed to make not only a cultural landscape, but also a productive landscape through cultivation of potentially valuable plant species. In the 1870 and 1880s the Gardens experimented with economic plant species, including mulberry, local varieties of flax and hakea brachnaya, and a section of the Gardens' nursery was used for cultivating grasses (Domain Board Minutes 1871). John Armstrong, Botanic Gardens curator from 1867 to 1889, spent much fruitless labour trying to coax immense stocks of plants into vigorous being, and overall, most plant species either proved unsuitable for cultivation or uneconomic. The Christchurch experience was reflective of colonial gardens at large: the spectacular successes of rubber, cinchona and sugar, though important for the profile of Kew and often celebrated as examples of imperial extension (Brockway 1979), were exceptions to the rule of economic botany. There was more value in mundane crops like sugar, cocoa, fruit, tea, coffee and timber trees, all of which were more familiar to European-trained botanists (McCracken 1997). All in all, Armstrong is estimated to have introduced and acclimatised over 4000 plant species (Christchurch City Council 2006).

Each of these three orderly transformations entailed a tight, well-defined relation between plants and planter. The use of familiar European species was more than simply a cultural preference – Wilson, Barker and Armstrong knew how to grow these species, and their customers knew how they would behave. This skill and familiarity, born of a long co-evolution in European climes, joined the plants and settlers as 'companion species' (Haraway 2003) that enabled a tightly orchestrated network to extend order across the fecund landscape of New Zealand. We are reminded of the multi-species nature of colonialism in New Zealand – colonialism was never something simply done *to*, it was also done *with* oak, gorse and other imported species. Rats devoured native birds and left niches for familiar European species, pigs blundered through forest scrub layers and provided food, and gorse colonised cleared land and out-competed native shrubs.

Subversion

This story so far of material and ideological 'extension' of a European vision of natureculture of course draws on Crosby's (1986) seminal 'ecological imperialism' thesis. For Crosby, New Zealand colonisation aimed to create a 'neo-Europe' through disruption of indigenous ecosystems, and by extension Maori economies, a process dependent on attracting sufficient numbers of people to alter habitats and introduce invasive organisms. John Armstrong, curator of the Botanic Gardens, conducted a botanical survey of Christchurch in 1871 and listed 171 naturalised species, nearly equalling the original number of native species, and far outweighing them in volume (Armstrong 1871). By 1879 there were 250 naturalised species, the most common being weeds and various grasses (Armstrong 1879). For Crosby, the co-evolution of weeds, crops, animals and cultures in Europe made for perhaps the most robust colonising team of all time.

Post-colonial scholars have criticised the idea of orderly extension of imperial ambition through notions such as hybridity and mimicry, whereby indigenous peoples resisted and subverted linear narratives (Bhabha 1994). Similarly, we might problematise the notion of ecological extension by noting the subversive tendencies of non-humans in the 'bio-contact zone'. First, drawing on a nature-as-complex critique, we might point to failure. Wilson (2004) argues that those species that became naturalised pests in New Zealand were repeatedly introduced from many sources. Very few species leapt off ships and ran rampant. Eighty per cent of bird and half of mammal introductions failed to establish themselves; others were entirely accidental (Wilson 2004).³

Second, many plants – native and exotic – often behaved in unexpected ways when brought to New Zealand. When they arrived as Polynesian settlers in around AD 1000, Maori accidentally introduced the Polynesian rat, *kiore*, which quickly reached plague proportions. Such pests, along with a reduction in New Zealand's forest cover from 75–80 per cent of total land mass to around 50 per cent by the time of European settlement, led to the extinction of 14 bird species during Maori times, more than the total number of extinctions in the previous 11 000 years (Wilson 2004). Even in the heart of colonial extension, the Botanic Gardens, species behaved unpredictably. Curator John Armstrong wrote to the Domain Board in 1875, and repeatedly thereafter, complaining that

a great many trees in the Plantation were injured by hares, and in the nursery thousands of seedlings have been destroyed by pheasants, sparrows, finches and other imported birds. (Armstrong 1875)

Other plants threatened the colonial economy: watercress became expensive to hold in check as it threatened to block Christchurch waterways in the late 1860s (Armstrong 1871); another aquatic, *Anacharis alsinastrum*, escaped from the Christchurch Acclimatisation Society's pond to the River Avon in 1869 and spread vigorously (Lamb 1964). The extension of orderly colonial space did not always fix nature, native or exotic, in its proper place on the tree-lined street, the farm boundary, or the unimproved swamp. Instead, the ostensibly human project of creating a bounded territorial entity existed alongside the *disorderly* tendencies of non-humans actors – and even whole species – to behave unexpectedly, demonstrating 'flagrant disregard for the ordering and improving aspirations that delineated them to the new country' (Clark 1999, 138).

Third, we might look at the making of new hybrid forms and associations. The bio-contact zone was a place where objects and subjects were in the making, not simply advancing or receding. Pratt argues that a European 'planetary consciousness' did not simply diffuse from the core, but was made in and through the practices whereby 'the planet's life forms were to be drawn out of the tangled threads of their life surroundings and re-woven into European-based patterns of global unity and order' (Pratt 1992, 31). Captain Cook, when he visited New Zealand in 1769, unloaded a small number of pigs taken from Tonga. Some died. Some were eaten. Others survived and went feral – their descendents, known as Captain Cookers, still roam parts of rural New Zealand. Feral pigs illustrate how new ecological entities can emerge in specific historical and geographical circumstances. Cook also traded potatoes with Maori and unwittingly off-loaded rats and weeds including canary grass and wild cabbage. Cook's ship the *Endeavour* (and other European vessels) may have been the vector that brought these non-humans to New Zealand, but these species transfers were actively reworked in Maori society (Salmond 1997). The potato all but replaced the kumara in Maori farming by the 1820s, and its cultivation was a key component (along with guns and politics) in the re-working of territorial boundaries

and economic networks in early nineteenth-century New Zealand, and in turn aided some spectacular military successes against the British (Belich 1996).

Non-human agency of course emerges as an effect of relations. It is not an inherent capacity or an expression of intent (Murdoch 1997). So the actions of hares, sparrows and other birds become meaningful only within their relations to what is supposed to be a tightly orchestrated incubation ground for the colonisation of the New Zealand landscape. In other words, both an ideological and a nature-as-complex critique are required. In this context early conservation measures emerged, based around the ideas of preservation and containment, not simply as the embodiment of enlightened or nostalgic settler angst, but also as a reaction to the problem of subversion.

Containment

On island colonies species extinctions, exhaustion of timber and negative ecological impacts became increasingly visible as the nineteenth century progressed (Grove 1995). By the turn of the century, the only signs of nature on most New Zealand plains were the few scattered trees that remained to be cleared – wetland forest coverage, for example, was reduced from 670 000 to 100 000 hectares (Park 1995). For New Zealand botanists, cataloguing the colony's unique flora was an urgent task, given the way that New Zealand species seemed to be yielding before their more potent Eurasian counterparts:

It must be quite evident to every observer that the introduction of European plants will certainly result in the extermination of the indigenous flora, and that at no very distant duration of time... The native plants no longer have strength to maintain its own against the invading races. (Armstrong 1871, 285)

Geographers have noted the spatially contingent nature of the uptake of Darwin's ideas on evolution (Livingstone 2006). In New Zealand, Darwinism was enthusiastically received, in part because the colony lacked any strong religious institutions to oppose evolutionary ideas, and also because scientists were keen to expound Darwinism as it lent a modern, professional basis to their efforts (Stenhouse 1999). Eurasian species, naturalists of the day believed, had evolved over a much longer time than Southern species, which possessed the weakness and vulnerability of youth. Darwinism could also do the work of legitimising

notions of the Maori as a dying race. To colonial observers at the end of the nineteenth century, a declining Maori population and retreating native flora seemed to indicate the triumph of white races, regrettable as some felt that to be (Park 1995).

Most accounts of colonial gardens ignore the significance of cultivating native plants, noting merely that many gardens – Singapore, Jamaica, Darjeeling – retained native forest or vegetation remnants (McCracken 1997). Wellington's Botanic Garden, on New Zealand's North Island, for example, retained native bush in its hard-to-cultivate gullies (Shepherd and Cook 1988). By contrast, John Armstrong, curator of the Christchurch Botanic Gardens, wanted to plant out a native garden (Domain Board Minutes 1874). The Domain Board, the public body in charge of the Botanic Gardens, was not particularly supportive. Among other reasons, there was a concern that growing natives in the Gardens would accelerate the destruction of plants in the wild. The Board argued that

people... are anxious to obtain the names of Native plants that they may make money by stripping the woods and mountains of their treasures and sending them to Europe for sale. (Domain Board 1886)

Lack of funds and Board enthusiasm meant Armstrong had to wait until 1874 to lay out his New Zealand arboretum, and until 1875 to cultivate two acres of New Zealand trees, shrubs and herbaceous plants in botanical order (Armstrong 1875).

Armstrong's explicit aim was 'to preserve [native plants] from the destruction which is fast overtaking the indigenous flora' (Armstrong 1875). The Botanic Gardens were a logical refuge for fragile representatives of a dying world. Christchurch botanists hoped preserving native plants would 'teach us to look with regret on the charred and blacked stumps of what were once noble forests' (Potts and Grey 1870, 183). Native shrubs were placed in discrete beds surrounded by a sea of clipped, European grass lawns (Plate 1). Moreover, native plants in the Botanic Gardens were generally confined to one area, which served as a 'wild' counterpoint to a more civilised arrangement of fine conifers, clipped lawns and bedding displays. Armstrong acted as a 'curator' of New Zealand's nature: cultivation of rare native plants only made sense within this space of Western control, which in turn made Maori customary use of plants and animals seem irrational. In his practices of cultivation and display, Armstrong was also beginning to



Plate 1 Native shrubs in the Cockayne Memorial garden, Christchurch Botanic Gardens, June 2005

Source: personal photograph

forge a new sense of national ownership, a sentiment through which New Zealand's native flora were aligned with an emerging nation – and spoken for by skilled naturalists.

Outside the Botanic Gardens, Armstrong and other botanists exhorted local gardeners to abandon 'prejudice against planting native shrubs' (Potts and Grey 1870, 181) and to follow the examples of Leonard Cockayne's Tarata Experimental Garden at New Brighton, or Samuel Barker's garden on Cambridge Terrace. These gardens emphasised the utility of native trees as shelter and the aesthetic appeal of ornamentals or those with 'luxuriant foliage' (Strongman 1999). Ferns and cabbage trees added a touch of the exotic, while kowhai, koromiko, matipo, lancewood and more were readily used in private gardens not only in Christchurch, but also in Britain (Strongman 1999). But these native plants were used *within* an English garden aesthetic (Leach 2002). Moreover, ordinary gardeners also lacked the competence and knowledge to cultivate natives successfully, for they often took specimens from the wild that were too large or too old to survive (Potts and Grey 1870; Thompson 1871).

Armstrong's garden fell into decay and disorder after his resignation in 1889. Elsewhere, however, local Scenic Preservation Societies or individuals were demarcating nature reserves. These reserves privileged waterfalls, ferny gullies and forests – in short, sublime landscapes (Star and Lochhead 2002). But these places, and future ones like them,

were not chosen simply by accident. Often they were Maori *nga uruora* (groves of life), carefully managed forest areas, very deliberately selected by local *iwi* (Park 1995). Even so, scenic preservation, alongside more utilitarian measures like closed seasons for oyster (1866) or seal (1872) hunting, was not especially popular (Star and Lochhead 2002). Early conservationists were at the time seen as rather odd cranks, though they have since been re-imagined as enlightened progenitors. In the nineteenth century the more pressing urge was always to contain land in order to cultivate it. Premier Julius Vogel's 1877 Land Act, for instance, obliged settlers to bring land under cultivation: 10 per cent of urban and 5 per cent of rural land had to be cleared in the first year – anything indigenous on the plain was an enemy of the state (Park 1995). Conservation, likewise, be it in the botanic garden, planting by local amateurs or on scenic reserves, was about the containment of the exotic within sovereign spaces of European control. Nature represented a primitive state and Maori a dying race; both needed to be contained in order to be saved.

The task of changing the New Zealand landscape, then, was not one of straightforward extension, but rather was fraught with uncertainty. New natural-cultural assemblages resulted from colonisation of New Zealand, and the pragmatic and romantic reaction of the settler was a doctrine of containment that aimed to preserve the remnants for posterity and as a mark of colonial difference. More systematic ecological knowledge replaced amateur natural history through the first half of the twentieth century, leading to the conclusion by the 1920s that reserves should be free of exotics. At the same time, explicit links between native nature and national identity, once limited to cranks like John Armstrong or scientists like Leonard Cockayne, were becoming well established in mainstream society (Star and Lochhead 2002). However, until the 1970s, conservationists focused almost exclusively on islands and remote, mountainous reserves, and legislation remained patchy or contradictory: possums were protected by law until 1947, and not subjected to targeted eradication campaigns until evidence they were damaging native bird populations was found in the 1970s (Isern 2002). Conservation today is dominated by a strong preservationist mentality: forestry and agriculture are two of New Zealand's largest industries, and government does very little to promote conservation on these vast,



Plate 2 An example of containment in a local ecological restoration project. Predator-proof fence surrounding Riccarton Bush, a 19-acre forest reserve in Christchurch, New Zealand, January 2005. The fence protects the native forest remnant (described as precious, fragile, prehistoric) from threats such as possums, cats and subversive humans

Source: personal photograph

modified landscapes. This is in marked contrast to the amount of energy that goes into ecosystem management and pest eradication on the publicly-owned conservation estate (some 30 per cent of New Zealand's land area) (Figure 2).

The idea of containment, then, constitutes the very objects it purports to protect (Plate 2). Constitutes not in the sense of an immaculate social construction, or literally making their flesh and bone, but rather through ordering and classifying, rendering certain beings 'saveable' and certain beings 'killable'. Although this ideal of containment attempts to forge fixed spaces and static non-humans, this is belied by global flows of non-human traffic (Clark 2002). In an increasingly globalised world the nation-state is implicated in cross-border flows that open up its territory as never before. Even countries as physically isolated as New Zealand are at risk to biological invaders:

New Zealand is threatened by hundreds of thousands of exotic species that could cause harm. Potential pests range from tiny microbes (such as the virus that causes FMD), to plants and animals in aquatic and terrestrial environments. New Zealand's pests nearly all originate from other countries. (Biosecurity Council 2003, 34)

The Northern Pacific Seastar (*Asterias amurensis*), native to Korea and Japan, is a voracious starfish

that, were it to reach New Zealand waters, would have devastating impacts on native biodiversity and the shellfish industry. The *Wollomai* pine, with only 100 individuals growing in the wild, is Australia's rarest tree. It is the subject of intense efforts at establishment in parks and gardens, and as good post-colonial neighbours, Botanic Gardens in New Zealand have sought to support this effort. For David Given, former curator of the Christchurch Botanic Gardens on the South Island, the two inches of paperwork required to apply for a permit to import exotic species to New Zealand is enough to make him think twice about importing *Wollomai* pine (Christchurch City Council 2006, 88; Given 2005). Will it weed? Will it occupy a similar niche to any native species? Might it hybridise? Species that are rare or endangered elsewhere may not be welcome in the botanic garden's leafy haven, or in the wider New Zealand landscape. By contrast, however, New Zealand has a 30 per cent global share in the Chinese gooseberry market – imported in seed form 100 years ago and since re-branded as 'kiwi fruit' (True 2005). More recently, in the 1970s, the Pacific oyster (*Crassostrea gigas*) hitched a lift on a cargo ship from Hiroshima, and has since become New Zealand's number one cultivated oyster (Biosecurity Council 2003). Some invaders are clearly more welcome than others.

As well as keeping potential invaders out, New Zealand's biosecurity apparatus works to contain and repress biological threats already present in the country. The possum was introduced from Australia in 1837 to stimulate the fur trade. Although many Australians think fondly of the possum, it is unwelcome in New Zealand when it endangers kiwi or kereru, and as such is systematically suppressed (Isern 2002). The possum is seen as legitimate road-kill, illustrated in New Zealand's national museum, Te Papa, by an exhibit showing the stages of bodily decay, from freshly killed possum through decaying carcass, to final absorption into unmarked tarmac grave. Exotic invasive species, like refugees and nomads, are antithetic to the modern nation state – rootless and cultureless, and this renders them killable. As one experienced New Zealand ecologist has noted, 'starlings and sparrows are common world tramps with little biological or (let it be said!) patriotic appeal' (King 1984, 190).

But just which species are indigenous and which exotic? Even taking the obvious bottom line of 'before human settlement' requires complex

decisions. Westerly winds have helped many species reach Aotearoa from Australia at various times. The pukeko, an emblematic New Zealand bird, arrived just 300 years ago. It thrived by raiding Maori sweet potato cultivations, assisted further by Maori harvesting of competitor species. There is even some evidence that the sacred kiwi jumped the Tasman Sea shortly after the New Zealand land mass broke from Australia. Global warming will favour Australian spiders and butterflies on the North Island, and other new 'natural' arrivals are inevitable. New Zealand's biosecurity and conservation apparatus is contingent on the unexpected impact of many species dating further back in time, organisms adapting their patterns of behaviour in relation to the landscape.

The idea of a pre-colonial baseline, or indeed any baseline, substitutes an origin myth for learning to live with historically layered relations – relations that have made 'us' who we are today. It fixes nature as something external to colonialism. The point is not then to push back the time of 'static nature', but to acknowledge that change, mobility and disturbance go all the way back (Clark 2002). The kahikatea (*Dacrydium dacrydiodes*) is a tree species endemic to New Zealand that evolved 180 million years ago, and has outlived all the native pollinating species for which its flowers co-evolved (Park 1995). Kahikatea is no anachronistic remnant, however – blackbirds (definitely not native) are as happy as liberal-minded ecological restoration project officers to spread its seeds, and are infinitely more skilled in their consumption and excretion. This 'prehistoric survivor' lives quite happily with the 'exotic invader', muddying the notion of New Zealand's nature as static, ancient and fragile.

Conclusion

The Christchurch Botanic Gardens were in the nineteenth century one of the sites through which European colonisers sought to exclude nature from politics and history by 'extending' – in conjunction with their domesticated and runaway non-humans – order across the landscape of New Zealand's South Island. The negative consequences, intended and unintended, of these flows of non-humans necessitated the turn-of-the-nineteenth-century ideology of containment, pre-figured in Armstrong's native garden. The notion of containment works to constitute the very objects it seeks to save – drawing on an opposition between ungovernable

non-humans such as voracious starfish, runaway gorse and feral pigs, or troublesome indigenous demands for sovereignty over 'national' treasures, and history-less non-human natives, such as the kiwi or the towering Alps.

This article has been situated between three modes of critique: nature-as-ideology, nature as complex but real, and an ontological critique exposing the hidden hybridity of naturecultures. My aim has been less to pursue a specific theoretical agenda, although I might suggest that some of the de-naturalising political power of the nature-as-ideology critique may be sacrificed in an ontological mode, than to explore how we might approach the 'more is required' that Haraway demands in terms of 'multispecies coflourishing, heterogeneous collective memory, and complex histories'.

First, essentialising and fixing non-humans as either indigenous or exotic legitimates the systematic repression of many animals; exotics are poisoned or culled, while the quality of life of individuals is subsumed into a right to life discourse at the species level for certain native species, such as the kakapo. Acknowledging that such violence is done not to preserve any unique 'essence' of indigenous being, but instead has become necessary due to past contingent interactions might be more honest. We might, for example, celebrate rather than be surprised by the thorough intermingling of species that enable kahikatea to spread their seedlings around the very English city of Christchurch in the gut of blackbirds and other commonplace international species, or the complex role that gorse plays in native re-growth. The spontaneous re-growth of indigenous species within 'modified' landscapes is in fact much more widespread than many presume (Stewart *et al.* 2004). Recently staff at the Christchurch Botanic Gardens noticed that native ferns and sedges were growing spontaneously along the River Avon in the 'daffodil woodland' part of the Gardens (Given 2005). Rather than eradicate these, a management plan seized on this non-human activity as a focus for riparian ecological restoration (Christchurch City Council 1995). This might be a tentative step towards enabling multi-species co-flourishing, acknowledging that it is the techniques of eco-nationalist-informed conservation that renders certain beings killable and certain beings saveable, rather any supposed intrinsic nature.

Second, heterogeneous collective memory: New Zealand's eco-nationalist project is not only an attempt to order the past, present and future of

non-humans (invasive, native and migrant alike), but also to sanitise the colonial expropriation of the indigenous and to preclude any mode of relating to 'nature' that might subvert the essentialisms inherent in the preservationist ethic. The idea of a pre-colonial baseline for measuring ecosystem health or ecological restoration projects continues the myth of colonial time as an 'ugly chapter' (Braun 2002), now forgotten or reinvented. Against this, however, Maori demands for customary access to resources trouble the Western preservationist mentality, as well as the ontological divide between nature and culture. Maori cosmology also offers a different perspective, one more concerned with the political and spiritual, than the normal ethical/moral response offered by Westerners, to bio-prospecting and GM, for example (Roberts 2004), though this is not to suggest that Maori are opposed to exploiting natural resources, for example, by proposing a monorail through the Mount Aspiring national park to speed tourists' journey times. Rather, an indigenous perspective, along with a complexifying historical account such as this article, poses questions about the degree of politeness implied by New Zealand's eco-nationalist imaginary. A genuine commitment to bi-cultural conservation would go beyond the inclusion of Maori conservation tools and techniques within the goals of preservationist conservation, to entertain notions of self-determination and genuinely heterogeneous naturecultures. It would also involve a re-assessment of the preservationist paradigm, which has done so much to solidify the Western separation of nature and culture, with all its attendant political and ecological consequences (Latour 2004).

Finally, a re-imagining of New Zealand's eco-nationalism would require further understanding of the complex layers of interactions out of which current relations have evolved. This means acknowledging plants and animals as active participants in the extension of the colonial landscape, but also as subversive agents. It might also involve loosening the spatial classification of land as indigenous, productive or exotic, and the containment of native nature in national parks or deteriorating and scattered small reserves, by acknowledging the complex histories and mobilities plants possess, and their potential to form new associations and plant communities (Meurk and Swaffield 2000). Above all, it would require learning to live with the relations that have made up the many beings

that inhabit New Zealand, rather than an act of collective forgetting of colonisation, and a spatial paranoia that imposes rigid classification on a messy world.

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Notes

- 1 The Waitangi Tribunal was set up in 1975 to investigate breaches by the Crown of the Treaty of Waitangi, signed by (most) Maori chiefs and the Crown in 1840. The Treaty provided the basis for guardianship of natural resources and land, and formal relations between the Crown and Maori tribes, but was riven with linguistic and cultural misunderstandings. The Tribunal's powers and authority have varied through time. It is now empowered to offer reparations for breaches of the Treaty by the Crown extending back to 1840 and to make recommendations on Maori claims to how the Treaty is to be implemented in contemporary policy matters.
- 2 Pakeha, originally a derogatory Maori term for Europeans, is now in common use and relatively politically neutral (hence not italicised hereafter). All Maori translations from Ryan (1997).
- 3 More recently, Schiebinger (2004) has demonstrated how the peacock flower was a political weapon of slave women, who used it to abort their offspring rather than let them be born into Caribbean slavery.

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