The Institute for Governance and Policy Studies, School of Government at Victoria University of Wellington

POLICY Quarterly

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Where will the Bellbird Sing?

Te Tiriti o Waitangi and 'Race'

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VICTORIA UNIVERSITY OF WELLINGTON TE HERENGA WAKA | Institute for Governance and Policy Studies
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Editorial – Turbulent times call for good governance

We live in darker, turbulent, and uncertain times. An unprovoked war has ravaged Ukraine since February. The damage suffered by that country – physical, economic, social, and psychological – has been colossal.

But the ripple effects globally have also been massive – with energy supply shocks, greater food insecurity, and heightened inflationary pressures. Within Europe the war has put on hold important climate mitigation objectives and decarbonization strategies. Globally, it has strained vital international institutions and fractured the rules-based system – painstakingly crafted over three generations. And after months of fighting, no end is in sight.

Meanwhile, 2022 has witnessed unprecedented heatwaves, unparalleled droughts, and record-breaking floods. In recent months flooding has caused widespread damage on every continent, afflicting multiple countries. The economic and ecological losses have been immense.

To compound matters, the COVID-19 pandemic continues. Many other serious diseases – such as Cholera, Dengue, Ebola, Malaria, Monkeypox, Rift Valley fever, and Yellow fever – remain the cause of deep concern. And health care systems – for those countries fortunate to have them – are under enormous strain.

Equally, if not more, disturbing, political instability, inept leadership, and ideological polarization haunt long-established democracies. Britain has had five changes of Prime Minister and seven Chancellors in six years. The United States is plagued by political division, gridlock, and Fox News. France is beset with public protests and disruptive strikes. And in Italy and Sweden, parties with fascist roots now hold office or wield a major influence.

Locally, for all manner of reasons, discontent is rife. With little doubt, the year ahead is fated to be one of public discontent and vigorous protest.

Political turbulence, of course, is nothing new. Nor are its causes: the lust for power and prestige; authoritarian impulses; the wilful disregard for robust scientific evidence; the pursuit of narrow self-interest; the advocacy of populist twaddle and nationalist drivel; and much else. But given the grave ecological challenges facing humanity, together with profound socio-economic inequalities and the growing risks associated with many advanced technologies, this is a particularly sorry time for there to be democratic dysfunction and increased global divisions.

Whether there is turbulence or relative calm, democratic societies depend on active, well-educated, and informed citizens. This, in turn, requires a high-quality education system, extensive research, a vigorous civil society, reliable public information, responsible journalism, a non-partisan public service which provides free and frank advice to ministers, and in-depth, independent, and rigorous analysis of critical policy issues.

Universities play a unique role in ensuring that democracies are well served in all these respects. Te Herenga Waka Victoria University of Wellington (VUW) – and yes, that remains our name – is no exception.

As the leading university in the nation's capital city, VUW has supported and hosted, for almost 40 years, a research institute dedicated to the critical analysis of public governance, public policy, and public management. From 1983 until 2011, this was the Institute of Policy Studies (IPS), founded by the distinguished economist, Sir Frank Holmes, and the former Secretary to the Treasury, Henry Lang. From 2012, the IPS became the Institute for Governance and Policy Studies (IGPS).

For nearly four decades, the IPS and IGPS have hosted vast numbers of seminars, workshops, roundtables, lectures and conferences; their staff have published hundreds of books, articles, working papers and reports; and their staff have made numerous submissions to Select Committees and government inquiries, and contributed actively to public debate on countless policy issues. Thousands of researchers, students, public servants, businesspeople, politicians, and representatives of civil society organizations have contributed to, and/or benefitted from, these activities.

Since 2005 the two institutes have published a journal – *Policy Quarterly*. The November 2022 issue marks 18 years of uninterrupted publishing. From almost the beginning, I have been privileged to serve either as Editor or Co-editor. It has been a rewarding, yet demanding, experience. I am extremely grateful to all those colleagues, contributors, peer reviewers, editorial advisers, copy-editors, designers, and proof readers who have made this enterprise possible.

But the future of both the journal and the IGPS – sadly, like many species and ecosystems – are now uncertain. A brief explanation must suffice.

Between 2013 and 2021, the IGPS and *Policy Quarterly* were funded largely from an endowment. By 2021 this was worth around $13 million. In late 2021 with little, if any, consultation, the Vice-Chancellor withdrew the endowment from the IGPS. The income from the endowment now supports a contestable research fund within VUW. But the focus of this fund is extremely narrow compared to the goals of the IGPS Charter.

Currently, little external 'public good' funding, especially of a medium-to-long-term nature, is available in New Zealand for policy-related research. Hence, without stable, dedicated university funding, it is difficult, if not impossible, to sustain a vibrant, independent, critic-and-conscience-type institute like the IGPS. Recently, the university has determined that the IGPS should become largely self-funded. Beyond March 2023, therefore, the future employment of the Director (Dr Simon Chapple) and its two senior researchers (Dr Michael Fletcher and Dr Mike Joy) is unclear.

As to the future of *Policy Quarterly*: between March 2023 and March 2024 the journal is being funded primarily by the School of Government Trust. To trim the budget, it will become an electronic journal only from February 2023. It will also be shorter.

I am grateful to the Trustees of the School of Government Trust for their support. But without a further allocation of funding beyond March 2024, there will be no journal – and, in all likelihood – no Institute.

VUW prides itself on being New Zealand's capital city university. Presumably, it values good governance. But recent events call such virtues into question. To paraphrase Oscar Wilde: 'To lose the IGPS would be a misfortune; to lose both the IGPS and *Policy Quarterly* might look like carelessness'. Carelessness can be costly.

Jonathan Boston, Editor

Anne Salmond

Where Will the Bellbird Sing?

Te Tiriti o Waitangi and 'Race'

Abstract

This article investigates deep philosophical differences between the complex relational networks that underpin te Tiriti o Waitangi as originally written, debated and signed by the rangatira of various hapū and British officials in New Zealand in 1840, and the canonical re-framing of the Treaty as a binary 'partnership between races', or 'between the Crown and the Maori race', in the 1987 'Lands' case judgment by the Court of Appeal, at the height of the neo-liberal revolution in New Zealand.

After exploring comparative analyses of the colonial origins and uses of the idea of 'race', and the risks associated with binary framings of citizenship by race, ethnicity or religion in contemporary nation states, the article asks whether relational thinking and institutions – including tikanga and marae – might not offer more promising ways of understanding and honouring te Tiriti o Waitangi, and fostering cross-cultural experiments in Aotearoa New Zealand.

Keywords relational philosophy, Treaty of Waitangi, cross-cultural relations, race, colonialism and citizenship

Dame Anne Salmond is a distinguished professor of anthropology at the University of Auckland.

In Aotearoa New Zealand there are marae (ceremonial meeting places) in most parts of the country. Some marae are unassuming – a small, simple hall, set in a rural paddock, with a dining room beside it. Other marae are magnificent, with carved and painted meeting houses, large dining halls and other facilities.

When they arrive at a hui (gathering), groups of manuhiri (guests) gather outside the entrance of the marae until they are called in by local women, who stand in front of their meeting house, summoning up ancestors and their visitors with karanga (calls of welcome). When the visiting kuia (senior women) reply, calls echo back and forth across the marae ātea, the meeting ground, as the visitors move forward. Both sides join in the tangi, weeping for those who have died since their last meeting. Afterwards the guests sit on benches that face the meeting house, while their hosts sit on benches in the porch or beside their ancestral whare (meeting house).

After a local orator stands to greet the manuhiri, his people sing a waiata (song). In some tribal areas all the local orators

speak before their visitors, while in others, local and visiting orators alternate. Once the whaikōrero (speeches) are over, the visitors place their koha (gift) to the hosts on the marae ātea and join them in the hongi, pressing noses and mingling their breath before sharing a meal together.

In the rhythms of the hui, ancestors and descendants, hosts and visitors, men and women, orators and singers join in ceremonial exchanges. The kawa (ritual protocol) alternately sets them apart and brings them together, forging new relationships and renewing old ones in reciprocal exchanges.

Hobson opened the meeting by speaking in English to the assembled settlers and then the rangatira (chiefs), with the missionary Henry Williams translating, and read the Treaty in English, and then Williams read te Tiriti in Māori.

When I reflect upon the signing of te Tiriti o Waitangi in 1840, I think of these kinds of gatherings. Prophetically enough, on that occasion, the British resident's house at Waitangi served as the meeting house, and the Treaty was discussed on the lawn in front, with the lieutenant governor-designate, William Hobson, and key European officials and missionaries sitting in a tent on a dais.

Hobson opened the meeting by speaking in English to the assembled settlers and then the rangatira (chiefs), with the missionary Henry Williams translating, and read the Treaty in English, and then Williams read te Tiriti in Māori. As the rangatira of the assembled hapū stood in turn to speak, they strode up and down in front of the dais, expressing their fears and hopes about te Tiriti, and telling the kāwana (governor) what they thought about it.

Te Tiriti o Waitangi itself was a similar kind of hybrid – translated into Māori from an English draft by Henry Williams and his son, and using terms some of which were transliterated from English into Māori, but written to appeal to a Māori audience, as best as they knew how.

Te Tiriti o Waitangi

My own engagement with te Tiriti o Waitangi began in 1992, when I was asked by the Waitangi Tribunal to give evidence on Māori understandings of the Treaty in 1840 for the Muriwhenua land claim. For this exercise I worked closely with Dr Merimeri Penfold and Dr Cleve Barlow, friends and colleagues from Māori Studies and both fluent speakers of northern Māori (Salmond, 1992).

Merimeri was a brilliant translator, and Cleve was an historical linguist and specialist in tikanga who had created a concordance of te Paipera Tapu, the Bible, and other early texts in te reo. We worked through te Tiriti line by line, discussing the meanings of key words, with Cleve producing printouts of their occurrences in a range of early Māori texts, including te Paipera.

During my early training as an anthropologist, I had worked with knowledgeable elders and specialised in linguistics, especially sociolinguistics and historical semantics – how language and social life interact to shape our understandings of the world. I was fascinated by early manuscripts and ancestral tikanga, including those on marae (Salmond, 1975), and in 1992 had recently published *Two Worlds: first meetings between Maori and Europeans* (Salmond, 1991b) on early contact history in Aotearoa New Zealand.

One of the first things that Merimeri, Cleve and I noticed about te Tiriti was the way it was expressed as a series of tuku, or gift exchanges (Salmond, 1991a; Mutu, 1992). These begin in the preamble to te Tiriti, in which Queen Victoria, out of her caring concern ('mahara atawai') for the rangatira and the hapū of New Zealand, has sent (tukua) a rangatira as a mediator to the indigenous persons of New Zealand ('hei kai wakarite ki nga Tangata maori o Nu Tirani'), and gives (tuku) William Hobson as a governor for all of those parts of New Zealand that will be given (tukua) to the Queen now and in the future.

In ture (article) 1, the rangatira absolutely give ('tuku rawa atu') to the Queen forever all the 'Kawanatanga' of their lands. In ture 2, the Queen ratifies and agrees with the rangatira, the hapū and all the people of New Zealand to the tino rangatiratanga of their lands, dwelling places and all of their taonga, while the rangatira give (tuku) to the Queen the hokonga (trade) of those parts of the land where the person attached to the land is willing.

In ture 3, in exchange for the agreement to the kāwanatanga of the Queen, the Queen promises to look after all the indigenous inhabitants of New Zealand, and gives (tukua) to them all the tikanga (customary practices, right and proper ways of doing things) exactly equal with those she gives to her subjects, the inhabitants of England. The rhythm of alternating exchanges in the text is reminiscent of those seen on the marae.

From the speeches delivered at Waitangi and elsewhere in Northland in 1840, it is clear that the rangatira were deeply concerned about the nature of the relationships proposed in te Tiriti between themselves, their hapū, tangata māori (ordinary persons), and the manuhiri – the governor and the incoming settlers. By that time, many Māori had travelled to Britain or to British colonies, including New South Wales and Norfolk Island, met governors and monarchs, and witnessed the social arrangements in those places – the treatment of Aboriginal people and convicts, and the use of soldiers and prisons to uphold government authority, for instance.

During that same period, the introduction of muskets had led to battles and migrations that disrupted life in many parts of the country. Māori were also under acute pressure from unruly sailors, the land sharks and new settlers who cheated them and wanted to buy their land, and the missionaries, who were intent on changing their tikanga.

These experiences filled many of the rangatira with doubts about signing te Tiriti. As Te Kēmara, the local rangatira (a matakite or visionary tohunga), said in his opening speech at Waitangi:

> Were all to be on an Equality, then perhaps Kemera would say yes – but for the Govr to be up and Kemera down! Govr high – up, up, up and Kemera, down, low, small, – a worm – a crawler! This is mine to thee, o Governor! My land is gone – gone – all gone, – the inheritances of my ancestors, fathers, relatives, all gone, stolen, – gone, with the Missionaries No, no, no – I say go back, – go back Govr. – we do not want you here – and Kemera says to thee Go back.

When the Hokianga rangatira Tāmati Wāka Nene spoke, after castigating those who had sold their land he said to Hobson:

> Yes – it is good – straight – remain – dont go away – *Heed not what Ngapuhi say – you stay – our friend & father O Governor*. You must be our father! You must not allow us to become slaves! You must preserve our customs, and never permit our lands to be wrested from us!

The last manuhiri to speak at Waitangi was Nene's elder brother, Patuone, a recent Church Missionary Society convert. He 'spoke at length in favour of Mr. Hobson, and explained, by bringing his two index fingers side by side, that they would be perfectly equal, and that each chief would be similarly equal with Mr. Hobson.' He concluded, 'What shall I say? This is to thee, o Govenor. Sit – stay – you and the Missionaries.' In his final speech, Te Kēmara responded by saying:

> 'Let us all be alike then remain, but the Govenor up, Te Kemera down – no, no;' and here he ran up to Hobson, crossing his wrists as though handcuffed – no doubt as a riposte to Patuone's gesture – and asked: 'Shall I be like this? Like this? Eh! Say! Like this?' He then caught hold of the Govr.'s hand, *shaking it lustily* & roaring out, 'How d'ye do' – then again, & again and again – the whole assembly being convulsed with laughter.[1]

According to eyewitness accounts of the hui at Waitangi, the rangatira had to be persuaded that their mana and tikanga would be upheld before they signed te Tiriti. That was borne out by our linguistic research, which involved a close examination of texts in te reo from the early contact period, including He Whakapūtanga, the Declaration of Independence. From that evidence, we concluded that in ture 1 of te Tiriti in 1840, kāwanatanga meant governorship, not 'sovereignty' (in the sense of overarching authority),[2] and that when they signed te Tiriti the rangatira did not cede sovereignty to Queen Victoria. Rather, as stated in the preamble, they agreed that the Queen could send a governor to New Zealand to act as a 'kai wakarite' (mediator) and bring peace (rongo) and tranquillity (atanoho) to indigenous and European persons living without law ('e noho ture kore ana').

Recently, upon returning to Sir Hugh Kawharu's classic 1989 translation of te Tiriti into English, it was fascinating to find that this eminent anthropologist had arrived at the same conclusion. As he wrote in a footnote: '"Kawanatanga". There could be no possibility of the Māori signatories having any understanding of government in the sense of "sovereignty": ie, any understanding on the basis of experience or cultural precedent' (Kawharu, 1989, note 6).[3] Nevertheless, in 1992 this conclusion was not altogether welcome, and our evidence was quietly shelved by the Waitangi Tribunal.

Seventeen years later, in 2009, when I was asked by the Tribunal to revisit this evidence for Te Paparahi o te Raki claim, which focused on te Tiriti, Cleve had died and Merimeri was not well. Fortunately, I was able to discuss our original findings with Dr Mānuka Hēnare, Hōne Sadler, Dr Patu Hohepa (now Sir Patu) and other close colleagues at the University of Auckland (Salmond, 2010). These discussions only strengthened the conclusion that in 1840, the rangatira had not ceded sovereignty to Queen Victoria.

> … uncertainty raised by the [2014 Waitangi Tribunal's] conclusion over the legitimacy of current governance arrangements that ideas about 'partnership', along with notions of 'Māori sovereignty', 'co-governance' and other constitutional framings, gained new impetus.

In Te Paparahi o te Raki claim, the debate centred upon the relationship between ture 1, the absolute gift forever by the rangatira to the Queen of all of the governorship of their lands, and ture 2, the Queen's agreement with the rangatira, the hapū and 'nga tangata katoa o Nu Tirani' (all the inhabitants of New Zealand) to the tino rangatiratanga of their lands, dwelling places and all of their taonga. Ture 3, the Queen's promise to protect 'nga tangata maori katoa o Nu Tirani' (all the indigenous

inhabitants of New Zealand) and to give to them 'nga tikanga katoa rite tahi' (all the tikanga exactly equal) with those of her subjects, the inhabitants of England, was barely mentioned.

As we all know, in the final, 800-page report of that claim (Waitangi Tribunal, 2014), a brilliant work of historical scholarship, the Tribunal agreed with the claimants, concluding that in 1840 the rangatira did not cede sovereignty to the British Crown. In response, the attorney-general, Christopher Finlayson, stated: 'There is no question that the Crown has sovereignty in New Zealand. This report doesn't change that fact' (quoted in Kenny, 2014).

He Puapua (Charters et al., 2019), constitutional questions about the relative status of Māori and non-Māori citizens were again hotly debated in Aotearoa New Zealand. This reignited my interest in te Tiriti.

Given the claims that were being made about 'partnership' and 'co-governance', I also went back and, for the first time, read the judgment in the 1987 'Lands' case, in which the New Zealand Māori Council challenged the New Zealand government to act in keeping with 'the principles of the Treaty of Waitangi' when partially privatising many public assets, including land. It was startling to find the text of this

In light of the fact that there were two texts of the Treaty of Waitangi, one in Māori and one in English, Cooke declared that 'the principles of the Treaty are to be applied, not the literal words' ...

It is perhaps because of the uncertainty raised by the Tribunal's conclusion over the legitimacy of current governance arrangements that ideas about 'partnership', along with notions of 'Māori sovereignty', 'co-governance' and other constitutional framings, gained new impetus.

In 2010, when the New Zealand government finally supported the United Nations Declaration on the Rights of Indigenous Peoples, the prime minister, John Key, acknowledged that Māori have special status as tangata whenua, with an interest in all policy and legislative matters; affirmed New Zealand's commitment to the common objectives of the declaration and the Treaty of Waitangi; and reaffirmed the legal and constitutional frameworks that underpin New Zealand's legal system, noting that those existing frameworks define the bounds of New Zealand's engagement with the declaration.

When Māori scholars responded to the declaration with reports including Matike Mai (Mutu and Jackson, 2016) and

canonical judgment riddled with references to 'race'. Indeed, in the 'Lands' judgment, the Treaty of Waitangi itself is defined as a 'partnership between races', or 'between the Crown and the Maori race'. Yet I couldn't recall any reference to 'race' – or anything like it – in the text of te Tiriti.

The 1987 'Lands' case

The 'Lands' case (*New Zealand Maori Council v Attorney-General* [1987] 1 NZLR 641) took place at the height of the neo-liberal experiment in New Zealand. With the 1986 State-Owned Enterprises Act, the fourth Labour government had decided to transfer about 10 million hectares of land and other assets owned by the Crown to state-owned enterprises (SOEs), government departments that were being corporatised and restructured as commercial enterprises. According to section 9 of the Act, in this transfer the Crown was not permitted to act 'in a manner that is inconsistent with the principles of the Treaty of Waitangi'.

Fearing that once these 'assets' had been handed over to SOEs, they would no longer be available for Treaty settlements, the New Zealand Māori Council sought to test this provision in court. The Court of Appeal upheld their claim, ruling that before any transfer of Crown lands and assets (including Crown forestry and farming operations, airline and railways, telecommunications, postal and power networks) took place, it had to be tested for consistency with 'the principles of the Treaty'.[4]

According to Sir Robin Cooke (later Lord Cooke of Thorndon), at that time president of the Court of Appeal, 'this case is perhaps as important for the future of our country as any that has come before a New Zealand court' (*New Zealand Maori Council v Attorney-General*, at 651). After issuing their joint decision, therefore, each of the judges delivered their own judgment. Of these judgments, Cooke's has been the most influential. In light of the fact that there were two texts of the Treaty of Waitangi, one in Māori and one in English, Cooke declared that 'the principles of the Treaty are to be applied, not the literal words' (ibid., at 662). Since te Tiriti in 1840 could not take into account the demands of a 'relatively sophisticated' contemporary society, he argued, it was 'the spirit' of the Treaty that mattered, not 'the differences between the texts and the shades of meaning' (ibid., at 663).

In their judgments, Cooke and the other judges, in addressing the statutory language of section 9, effectively cast the 'principles of the Treaty of Waitangi' as implying 'a partnership between races' (or between 'Pakeha and Maori' or between 'the Crown and the Maori race') (ibid., at 664, 667, 714), one that 'creates responsibilities analogous to fiduciary duties' and 'requires the Pakeha and Maori Treaty partners to act towards each other reasonably and in the utmost good faith' in order to find a 'true path to progress for both races' (ibid., at 642, 664). Here, the population of Aotearoa New Zealand is divided into two 'races', 'Pakeha and Maori', and the Treaty of Waitangi is defined as a partnership between them, or between 'the Crown and the Maori race'.[5]

In many ways, this judgment has achieved canonical status, particularly in official circles. There are many aspects of

the 'Lands' judgment that I found surprising, however, and in certain respects discordant with the readings of te Tiriti that we presented to the Waitangi Tribunal in 1992 and 2010. This impelled me to revisit the text of te Tiriti, including some clauses that were not explored in detail in our evidence to the Muriwhenua or Te Paparahi o te Raki inquiries.

Fortunately for me I'm a scholar, not a politician nor a judge, and don't have the task of reaching a determination on these matters. This is not a matter of 'laying down the law', but simply of raising questions for wider discussion.

The first thing that surprised me about the 'Lands' judgment was its heavy reliance on the English draft of the Treaty of Waitangi, along with various translations of te Tiriti into English

Although the English draft was read out at Waitangi, it was te Tiriti, the Māori text, translated from the English draft, that was debated in Māori and signed by rangatira and British officials almost everywhere around the country. Legally, one would expect te Tiriti to be regarded as the most authoritative version of the agreements reached in 1840 between the rangatira and Queen Victoria.

Instead of reading te Tiriti in the original, however, the judges relied on an array of translations into English. In Europe it would be unthinkable to embark upon the legal interpretation of a significant constitutional document (in French, say, or German) without a sophisticated grasp of its language and historic context. In New Zealand, gaps in linguistic and cultural competence have led to a heavy reliance on the English draft rather than the Māori text of te Tiriti in Treaty jurisprudence and scholarship.[6] This means that, despite their best intentions, judges and scholars alike have often taken for granted 'Western' framings of the world, rather than the 1840 Māori understandings that underpin the agreements in te Tiriti.

The second surprising feature was the judges' decision to depart from the actual text of the Treaty

As a non-lawyer, I had thought that in legal agreements, the actual words used in the text would be all-important. When Sir Robin declared that 'the principles of the Treaty are to be applied, not the literal words', it seemed that a different standard was being applied to te Tiriti.[7] This was reinforced by Cooke's claim that since te Tiriti in 1840 could not take into account the demands of a 'relatively sophisticated' contemporary society, it was 'the spirit' of the Treaty mattered, not 'the differences between the texts and the shades of meaning'.

The third surprise was to find major discrepancies between the 1987 'Lands' case judgment and the original text of te Tiriti

This unshackling of Treaty jurisprudence from the text of the original agreement allowed legal interpretations that significantly depart from the terms of te Tiriti, including its parties and other key provisions.[8] In many ways, these discrepancies overlap with the main concerns expressed by the rangatira during the debates at Waitangi and elsewhere in 1840 – about the protection of their mana, the preservation of their ancestral tikanga, and the care of their ancestral lands.

In the 'Lands' judgments, in relation to these key concerns, the judges came down repeatedly on the side of the English draft of the Treaty; and in one area they introduced an idea which is mentioned neither in the English draft nor in te Tiriti itself, that of a 'partnership between races', or 'Pakeha and Maori' or 'the Crown and the Maori race'.

In the preamble and ture 1: kāwanatanga compared with 'sovereignty' in the English draft and in the 'Lands' judgment

As we have seen, at Waitangi and elsewhere, the rangatira discussed whether or not to accept William Hobson as a kāwana or governor. They were familiar with governors from Port Jackson, Norfolk Island and from the Bible, and were concerned about how the introduction of a governor to New Zealand might affect ancestral tikanga and their own mana. They were very resistant to the idea of any top-down relationship with Hobson, or, for that matter, with any of the new arrivals.

In the preamble, William Hobson states that 'the Queen wishes the Kawanatanga (Governorship) to be established to avoid harm to the indigenous and the European person living without law' ('Na ko te Kuini e hiahia ana kia wakaritea te Kawanatanga kia kaua ai nga kino e puta mai ki te tangata maori ki te Pakeha e noho ture kore ana'). This is 'because many of her people have already settled in this land, or are coming' ('na te mea hoki he tokomaha ke nga tangata o tona Iwi Kua noho ki tenei wenua, a e haere mai nei').

While describing the governor as a rangatira, the preamble introduces the concept of 'kai whakarite', a term used in early Māori translations of the Bible as a translation equivalent for 'judge' (e.g., Kai Whakarite – Judges: Barlow, 1990, p.85) (tetahi Rangatira – hei kai wakarite ki nga Tangata maori; a Rangatira – lit. one who makes things alike or equal, to the indigenous inhabitants of New Zealand).

The role of 'kai whakarite' as a mediator in inter-hapū disputes had become familiar in the North as a role that the missionaries might usefully play, and the term 'kai wakarite' was used by William Williams in an 1832 translation of an official letter to describe the role of the newly-arrived British resident, James Busby, as a facilitator and mediator in Māori–European exchanges (Orange, 1987, pp.13, 16 – see appendix 1; see also Biggs, 1989). The syntax of the phrase 'ki nga Tangata maori o Nu Tirani' suggests that this kai whakarite role was to be played not so much with hapū as collectivities, as with their members as individual persons.

[Māori] were very resistant to the idea of any top-down relationship with Hobson, or, for that matter, with any of the new arrivals.

This was not unlike the role of some senior rangatira, who dedicated themselves to peacemaking. As the artist Augustus Earle observed in 1832:

> I became acquainted with a few venerable men of truly noble and praiseworthy characters; such as would do honour to any country. They had passed their whole lives in travelling from one chieftain's residence to another, for the purpose of endeavouring to explain away insults, to offer apologies, and to strive by every means in their power to establish peace between those about to plunge their country into the horrors of war. (Earle, 1832, pp.141–2)

At the same time, the role of the governor in bringing peace (rongo) and undisturbed occupation (atanoho) was linked with the bringing of law (ture), and kāwanatanga was to extend across 'all the parts of this land and the islands' ('ki nga wahikatoa o te wenua nei me nga motu'). This differs from some interpretations, which suggest that kāwanatanga would apply only to Europeans. It seems clear that the governor's mediating role involved both indigenous people and the incoming settlers, and was intended to deliver justice and equality and settle disputes between them.

According to the 'Lands' judgment, on the other hand, 'Maori' were understood to have ceded sovereignty to 'the Crown': the Treaty was

> a solemn compact between 2 identified parties, the Crown and the Maori, through which the colonisation of New Zealand was to become possible. For its part the Crown sought legitimacy from the indigenous people for its acquisition of sovereignty and in return it gave certain guarantees. (*New Zealand Maori Council v Attorney-General*, at 673)

It seems clear, however, that 'kawanatanga' or governorship (with a governor as a mediator, one who makes things equal) is not the same thing as 'sovereignty'. On the one hand, te Tiriti forged alliances between the various rangatira and their hapū and Queen Victoria, the sovereign herself, and her heirs and successors, and theirs. For many years, Māori leaders faced with breaches of te Tiriti travelled to England to ask Queen Victoria or her descendants to intercede on their behalf, precisely for this reason. In 1995, when Queen Elizabeth II signed the Waikato-Tainui deed of settlement, with its apologies for past breaches of te Tiriti, she was acknowledging the promises made by her ancestor.

Whakapapa, ... is based on an all-inclusive set of kin networks, in which Ranginui and Papa-tuānuku are the source of all living beings, ...

On the other, the concept of sovereignty itself was foreign to te ao Māori. It derives from ancient Western top-down framings: for instance, the Great Chain of Being, a cosmic hierarchy dating back to the ancient Greeks (Lovejoy, 1936).[9] In mediaeval times, God sat at the top of the Great Chain, followed by archangels and angels, a divine sovereign (the origin of 'sovereignty'), the ranks of the aristocracy and commoners – with men over women and children and 'civilised' people over 'barbarians' and 'savages' – sentient and non-sentient animals, insects, plants and rocks. Here, every link in the lower ranks of the Great Chain of Being was subservient to those higher up, owing them obedience, service and tribute. This provided a God-given mandate for an array of exploitative relations, from ranked classes to sexism, slavery, racism, imperialism and human 'dominion' over the earth and all other life forms.

In British society in 1840, the 'sovereign' was much higher in the chain of command than a governor. Today, this kind of top-down model is echoed in the chain of command in many organisations, including government departments and other bureaucracies, educational institutions, corporations and the armed forces.

Whakapapa, by way of contrast, is based on an all-inclusive set of kin networks, in which Ranginui and Papa-tuānuku are the source of all living beings, including tāngata or human beings, and relationships are animated by exchange. It is neither anthropocentric, nor racist, nor sexist, seeking an always fragile equilibrium among different kinds of forces, beings, groups and persons.

It is also relatively egalitarian. While mana (ancestral power) flows more directly to those in the senior lines of descent (tuakana), this is balanced by the need for rangatira to uphold the interests of their kin groups, and the reciprocal exchanges that animate the whakapapa networks.

In Europe at the same time, ideas such as 'the web of life' in the Enlightenment, in which the idea of balance was also significant, were closely linked with the emergence of ecological thinking, the emancipation of slaves, commoners and women, and indigenous rights (see, for instance, Reill, 2005). These resonate quite closely with the complex networks of whakapapa. Such relational framings also informed the debates over the Treaty in Britain, the instructions given by Lord Normanby to Hobson, and the assurances given to the rangatira during the debates at Waitangi.[10]

It seems that most of the rangatira accepted those assurances, and their unreserved gift in ture 1 to Queen Victoria forever of all the 'Kawanatanga' of their lands was a major step, taken in the hope of rongo (peace) and atanoho (tranquil living). Still, top-down social arrangements remained dominant in Britain at that time, and the rangatira were right to be concerned about their status relative to the governor and Europeans.

In ture 2, 'tino rangatiratanga' and 'taonga' compared with 'possession of ... properties' in the English draft and in the 'Lands' judgment

In ture 2, the Queen's agreement with the rangatira, the hapū and all the

inhabitants of New Zealand to uphold the 'tino rangatiratanga' or the absolute chieftainship of their lands, dwelling places and all their taonga was no doubt intended as a reassurance to each of the rangatira in response to their concerns about their mana, and that of their hapū, ancestral tikanga and territories.

In 1850, Te Arawa rangatira Te Rangikāheke wrote an account of 'rangatiratanga' for Sir George Grey in which he explained this idea by listing the attributes of a rangatira – expertise in agriculture, warfare, building canoes, houses and food stores, hospitality and diplomacy; and senior descent, which linked them directly with the atua (powerful ancestors), the source of their mana and tapu.[11] In the English draft of ture 2, however, 'tino rangatiratanga' was expressed as 'the full exclusive and undisturbed possession of their Lands and Estates Forests Fisheries and other properties', a very different matter. Likewise in the 'Lands' case, the question of the 'possession' of lands and other 'properties' was central.

As we have seen, the 'Lands' case arose in the context of the proposed transfer of 10 million hectares of land, among other 'assets', to the newly created state-owned enterprises. This happened at the height of the neo-liberal revolution in New Zealand, with its emphasis on the commodification of 'the commons' and the corporatisation of public life.

In many ways, the 1980s shift towards 'privatisation' realised an old colonial ambition. In the Great Chain of Being, Papa-tuānuku, the earth, lies at the bottom of the cosmic hierarchy, just as 'savages' are the lowest of human links in the Great Chain. In 1838 Reverend Samuel Hinds, an advocate for the New Zealand Company, wrote in support of its ambitions to colonise the country:

> Civilized man is the guardian of the savage. God and nature appoint that it should be so; and if civilized man deprives the savage of his real or supposed inheritance, by disposing of it to those who will cultivate it and settle in it, this not only raises the value of the land disposed of, but of the land which remains.
>
> It [also] teaches them to make their property more and more valuable, and to assume a sovereignty over their portion of the earth, in some other sense than that in which the lion and tiger are sovereigns of their jungles, and the buffalo of his pasture grounds. (Hinds, 1838, p.12)

By this time in Britain, the emphasis on 'possession' and the idea of 'private property' as the foundation of 'civilised' societies was built into legal as well as everyday framings. As William Blackstone, for instance, wrote in his famous *Commentaries on the Laws of England*, in a state of 'savagery' there was no private property: 'All was common among them, and everyone took from the public stock to his own use such things as his immediate necessities required'. As populations increased, animals were domesticated, houses were built and fields were cultivated, the idea of private property emerged – 'that sole and despotic dominion which one man claims and exercises of the external things of the world, in total exclusion of the right of any other individual in the universe' (Blackstone, 1765–9, vol.1, pp.39, 47). Here the structural parallel between 'sovereignty' for societies and 'private property' for individuals is apparent.

In ture 2, in return for the Queen's agreement to the 'tino rangatiratanga' of the various rangatira, their hapū and all the inhabitants of New Zealand, the rangatira gave the Queen the right to hoko (barter, buy and sell) 'those parts of the land where the person attached to the land is willing' ('ka tuku ki te Kuini te hokonga o era wahi wenua e pai ai te tangata nona te wenua'). Even then, the use of the possessive pronoun nōna places the relationship with land in the same category as relationships with family members. This link is based on ancestry, kinship and active association, not 'ownership' as private possession.

Later, the Native Land Court, with its use of surveyors, maps of 'blocks' and lists of owners, cut across whakapapa, transforming land into a commodity and overlapping whakapapa networks into 'tribes' and 'sub-tribes' with bounded territories and 'blocks of land' with 'lists of owners', a process referred to as 'cutting up the land'.

Given the intimacy of links with kin group territories, rangatira might refer to the land as their own body. As a group of Taranaki rangatira wrote to Donald McLean in 1850, protesting at the government's attempts to force the purchase of their ancestral territories: 'I myself have the say for my land, and it is right to say that my land is my own. It is not as if you can divide up my stomach, that is, the middle of the land.'[12] The land itself, in which the bones of forebears and the afterbirth of children were buried, was understood as an ancestor, with its own tapu and mana. As Rēnata Kawepō remarked to the superintendent of Hawke's Bay in 1863, 'Sir, our land is a rangatira, but now it is being enslaved, inasmuch as it is being sold for money. In the old days it was not sold.'[13]

... Rēnata Kawepū remarked ... in 1863, 'Sir, our land is a rangatira, but now it is being enslaved, inasmuch as it is being sold for money. In the old days it was not sold.'

Indeed, in He Whakaputanga, the Declaration of Independence, New Zealand itself was described as 'he whenua rangatira', a chiefly land. It is possible, then, that the ture 2 promise of 'te tino rangatiratanga o o ratou wenua' refers to the rangatiratanga (chieftainship) of the ancestral territories and taonga themselves, as well as the people.

In his translation of te Tiriti into English, Sir Hugh Kawharu also picked up on this point, translating 'tino rangatiratanga' in his footnotes as 'trusteeship', not 'possession', and noting that '"taonga" refers to all dimensions of a tribal group's estate, material and non-material – heirlooms and wahi tapu (sacred places), ancestral lore and whakapapa (genealogies), etc' (Kawharu, 1989, notes 1, 8). As Sir Hugh suggests, the idea of 'trusteeship' (the 'public trust' doctrine, for instance) seems closer to ancestral relationships with rivers, mountains and other taonga than ideas of 'property' and 'ownership'[14] – although it does not capture the interwoven tapu (ancestral power) and mana of the land, people and their ancestral taonga.

It is also interesting to note that ture 2 of te Tiriti is non-racial. Here, Queen Victoria promises 'te tino rangatiratanga' of their lands, dwelling places and treasures not just to the various rangatira and hapū, but to 'all the inhabitants of New Zealand'. With the introduction of a cash economy, however, along with land, timber, flax, root crops, fish and services, including sex, were being sold for money, while guns, ammunition, iron tools, clothing and other goods were purchased from European traders. Over time, as capitalist framings took over from the idea of waterways, mountains, forests, fisheries and the ocean as rangatira themselves with their own lives and tapu and mana, the ture 2 promise to uphold the tino rangatiratanga of these taonga was transformed into a promise of their possession as property, in keeping with the English draft of the Treaty.

The transfer of land from government departments to newly formed SOEs in the 1980s was part of this process, along with other shifts towards privatisation. As Alex Frame has observed,

> The commodification of the 'common heritage' has provoked novel claims [to the Waitangi Tribunal] and awakened dormant ones … Claims to water flows, electricity dams, airwaves, forests, flora and fauna, fish quota, geothermal resources, seabed, foreshore, minerals, have followed the tendency to treat these resources, previously viewed as common property, as commodities for sale to private purchasers. Not surprisingly, the Māori reaction has been: if it is property, then it is our property! (Frame, 1999, p.234)[15]

… [the] binary distinction between 'Pākehā' and 'Māori' – along with its linked counterparts 'civilised' vs 'savage', … 'science' vs 'superstition', 'Kiwi' vs 'iwi' – lies at the heart of race-based thinking in Aotearoa New Zealand.

When iwi were nominated as 'post-settlement governance entities' after the 'Lands' case to receive Treaty settlements, with requirements to observe commercial conventions, neo-liberal principles were carried into the heart of whakapapa.[16]

In their Treaty settlements, some iwi have tackled these ideas head on. In Te Urewera Act 2014, for example, Tūhoe declared the centrality of whakapapa while asserting their ancestral territory, Te Urewera, to be a living being in its own right. As Tamati Kruger, their chief negotiator, explains:

> My iwi is a kinship organisation … We are not a corporation and we are not a business ... our nature as an iwi is not business. That is one of the enemies we have to fight, is the inclination and the pressure to become a business. (Kruger, 2017)
>
> What we've done is ... declared war on certain beliefs that human beings have adopted, such as that land is no longer Mother Earth, it's property … There is this view that nature is a helpless damsel. That reinforces the idea of property. We own it and it depends on us. No, it's the other way around. (Warne, 2018)
>
> So, giving Te Urewera a legal personality is not a new thing. It's an old belief, isn't it, that comes from you and I, and it talks about our whakapapa to the land, our kinship to the land. Something that I believe many, many New Zealanders are proud of, and aware of, and easily grasp – that philosophy and that belief. (Kruger, 2017)[17]

'Nga tangata' in ture 2 and ture 3 of te Tiriti, compared with the idea of a partnership between 'two races' in the 'Lands' judgment

Like 'property', the idea of 'race' is a colonial construct, along with its binary framing. Surprisingly, there is no precedent for the idea of 'race' in the English draft of te Tiriti, let alone in te Tiriti itself. The idea of a 'partnership between races' or between 'Pakeha and Maori' was a radical reformulation.

Like many other New Zealanders (including the judges, I suspect), I'm so used to this kind of race-based framing that upon reading the judgment for the first time, I almost took it for granted. Yet this binary distinction between 'Pākehā' and 'Māori' – along with its linked counterparts 'civilised' vs 'savage', 'settler' vs 'native, 'white' vs 'black', 'the West' vs 'the rest', 'science' vs 'superstition', 'Kiwi' vs 'iwi' – lies at the heart of race-based thinking in Aotearoa New Zealand.

Such binary oppositions are deeply embedded in Western habits of mind, with an ancient history in Europe. From the mid-17th century, when Rene Descartes split mind (*res cogitans*) and matter (*res extensa*), subject and object, culture and nature, people and environment, asymmetrical binaries became ubiquitous (mind over matter, people over environment, civilised people over 'the

wilderness' and 'savages', etc.).[18] 'Cartesian dualism' led to the partitioning of an objective reality subject to human inspection, with different 'fields' abstracted and separated out from each other and organised into gridded arrays – the origins of silo thinking.

This included the gridding of space and time through instrumental calculation (in cartography, for instance); the division of human knowledge into the different disciplines; the hierarchical sorting of life forms into different genera and species through taxonomy,[19] and of human populations into different groups through censuses and racial theory (see discussion in Salmond, 2017, pp.316–50). In his gridded version of the living world, for example, the Swedish naturalist Carl Linnaeus divided humans into four different 'varieties', now recognised as one of the origins of 'scientific racism' (Linnean Society of London, n.d.; see also Hoquet, 2014).

The emergence of the idea of 'race' during the Enlightenment, along with various racial taxonomies, has been well documented (for instance, Marks, 2008). As the American Association of Biological Anthropologists remarks, this concept is now regarded as scientifically invalid and ideologically loaded:

> [T]he Western concept of race must be understood as a classification system that emerged from, and in support of, European colonialism, oppression, and discrimination. It thus does not have its roots in biological reality, but in policies of discrimination ... The belief in races as a natural aspect of human biology and the institutional and structural inequities (racism) that have emerged in tandem with such beliefs in European colonial contexts are among the most damaging elements in human societies ... Race does not capture [migration] histories or the patterns of human biological variation that have emerged as a result ... It does, however, reflect the legacy of racist ideologies. (American Association of Biological Anthropologists, 2019)

The idea of a Pākehā 'race' in the 'Lands' judgment, for instance, covers a history of diverse groups (including 'African', 'Asian', 'Pacific' and 'European') mixing, merging and migrating around the world, while a radical division between 'Pākehā' and 'Māori' 'races' cuts across intricate exchanges of whakapapa over time.

Such racial polarities are almost invariably asymmetrical, with one side 'superior' and 'dominant' over the other: 'white' > 'black', 'settler' > 'native', 'Pākehā' > 'Māori'.[20] This may lead to a view of 'emancipation' in which the 'superior' and 'inferior' values are simply reversed: 'black' > 'white', 'native' > 'settler', 'Māori' > 'Pākehā'. At the same time, the binary opposition itself is ready to spring back to its original asymmetry in a more extreme form ('white supremacy', for instance), a dynamic process that the anthropologist Gregory Bateson has called 'schismogenesis' (Bateson, 1935).[21]

While the 'Lands' case judgment speaks of 'a partnership between races', there are no racial dichotomies in te Tiriti. It speaks of rangatira or chiefly leaders; hapū, or ancestral kin groups; and ngā tāngata in the plural – human beings in their personal capacities, unmarked by gender, race or ethnicity, unless by a qualifier.

- In ture 2, for instance, 'tino rangatiratanga' is ratified not just for rangatira and hapū, but for 'nga tangata katoa o Nu Tirani' – all the inhabitants of New Zealand.
- The promise of absolute equality in ture 3 refers to 'nga tangata maori katoa o Nu Tirani' and 'nga tangata o Ingarani' – all the indigenous inhabitants of New Zealand and the inhabitants of England as persons.
- In the text of te Tiriti, 'nga tangata maori o Nu Tirani' in ture 3 refers to the 'maori' or normal, ordinary, indigenous inhabitants of New Zealand in their personal capacities, rather than to a collectivity (e.g., te iwi Māori).

It should also be noted that in 1840, 'tangata maori' enjoyed a high degree of autonomy. According to Frederick Maning, an early settler in Hokianga:

> The natives are so self-possessed, opinionated, and republican, that the chiefs have at ordinary times but little control over them, except in very rare cases, where the chief happens to possess a singular vigour of character, or some other unusual advantage, to enable him to keep them under. (Maning, 1863, p.37)

The settlers arriving from Britain and elsewhere were also impatient of restraint, sometimes to the point of lawlessness, ...

In 1857, Francis Dart Fenton observed:

> No system of government that the world ever saw can be more democratic than that of the Maoris. The chief alone has no power. The whole tribe deliberate on every subject, not only politically on such as are of public interest, but even judicially they hold their 'komitis' on every private quarrel. In ordinary times the vox populi determines every matter, both internal and external. No individual enjoys influence or exercises power, unless it originates with the mass and is expressly or tacitly conferred by them. (Fenton, 1860, p.11)

Even in war, as the missionary Henry Williams noted, 'it was their usual way for each party to go where they liked, that everyone was his own chief. Without any one to direct, not only does each tribe act distinct from the other, but each individual has the same liberty' (Carleton, 1874, p.111).

As Te Rangikāheke explained to Grey, this independence of spirit arose from living links with ancestors, the source of a person's tapu and mana, which had to be protected: 'A

person does not forget, they think of it all the time, their tapu. They do not forget the good things they have; they think their most important possession is their tapu.'[22] Thus, while whakapapa linked each tangata or person with all other living beings, it also imbued them with tapu and mana (except for taurekareka or mōkai – slaves, war captives – whose links with their ancestors had been thwarted), giving them considerable autonomy in their personal affairs.

The settlers arriving from Britain and elsewhere were also impatient of restraint, sometimes to the point of lawlessness, having often fled prejudice, poverty, loss of land and the violent repression of ancestral languages and cultures (in the case of the Highland Scots[23] and Irish, for example) in their homelands.

After many years spent in Northland, Henry Williams and his son Edward were acutely aware of these dynamics, and the need to gain the support of kin group members for the Treaty, not just of the rangatira. This no doubt explains the emphasis in the text of te Tiriti on the tino rangatiratanga of 'nga tangata katoa o Nu Tirani' (all the inhabitants of New Zealand), and the promise of absolute equality for 'nga tangata maori' (ordinary, indigenous persons) and 'nga tangata o Ingarani' (English persons, the settlers), and their tikanga.

'Hapū' are the largest collectivities mentioned in te Tiriti, and again these are not equivalent to 'races'. Hapū were the main political and economic communities in te ao Māori in 1840, with their diverse territories and tikanga. Whakapapa bound them to particular ancestral landscapes, giving them tūrangawaewae (a place to stand in the world) and making them tāngata whenua (literally, people of the land). In ture 2, they and their rangatira, along with all the inhabitants of New Zealand, are promised te tino rangatiratanga of their lands, dwelling places and all their ancestral treasures.

At the same time, as Pita Tipene explained to the Waitangi Tribunal, the power of the rangatira is tightly constrained by hapū members. 'A rangatira is a person who weaves people together. The rangatira is not above the hapū. The rangatira must listen to the hapū, in accordance with tikanga. If they do not listen they will be cast aside' (Waitangi Tribunal, 2015, p.27). Whakahīhī – raising oneself above others – is not admired in te ao Māori.

Iwi were alliances of hapū, and often episodic (in war, for example).[24] Although iwi ('tribes') are not mentioned in te Tiriti, they have been required to act as the definitive unit in Treaty settlements. This requirement has often been highly divisive, sometimes overriding te tino rangatiratanga of hapū.

Efforts to aggregate Māori into larger units for governance purposes in parallel with European social structures have had a long colonial history. On 8 October 1823, for instance, when the missionary Samuel Marsden talked with the leading northern rangatira Hongi Hika, he urged him to make himself a king and put an end to the inter-tribal wars that were raging. Hongi replied that the other rangatira would never agree to this, and 'that when he was at war he was feared and respected, but when he returned home they would not hearken to anything he might say' (Marsden, 1932, p.118).

As Vincent O'Malley has observed, the first British resident, James Busby, found this participatory, egalitarian approach frustrating, and tried to set up a 'Confederation of the Chiefs of the United Tribes of New Zealand' as a precursor to a system of indirect rule (O'Malley, 2011). This led to He Whakaputanga o te Rangatiratanga o Nu Tirani (the Declaration of Independence of New Zealand) in 1835, signed by a number of rangatira, mainly from the North, in defiance of a perceived threat of French intervention.

In many ways, te Tiriti was the next step in this process, aiming to acquire sovereignty by creating a collectivity of rangatira and hapū who had signed te Tiriti. When Sir Robin Cooke defined te Tiriti as a 'partnership between races', between 'the Crown and the Maori race' or between 'Pakeha and Maori', this was another stage in this long process of aggregation. Rather than locating the relationships in local landscapes, where hapū and other New Zealanders live together, these were abstracted to the level of the state, splitting 'the Crown' from the 'Maori race'.

These binary dichotomies do not reflect the multiplicity of parties in the text of te Tiriti, however, which brought together the rangatira, the hapū, the Queen and 'nga tangata katoa o Nu Tirani' in ture 2, and 'nga tangata maori katoa o Nu Tirani' and 'nga tangata o Ingarani' in ture 3, in a complex matrix of relationships, with an expectation of reciprocity and balance among them. Te Tiriti is thus a multilateral network of alliances involving the Queen, the various hapū and their rangatira, 'nga tangata maori' and the incoming settlers, rather than a bilateral agreement.

Nor does a racialised dichotomy reflect the complexity of contemporary 'Pākehā' (non-Māori?) and 'Māori' populations, with their intricate diversity and overlapping whakapapa, or the need for balance in these relationships as well. Rather, this rewriting of te Tiriti reinforces a sharp-edged racial polarity between 'Pākehā' and 'Māori' that emerged during the course of the colonial process in New Zealand.

After more than 40 years of Treaty settlements, acute disparities between Māori and other citizens remain. During the neo-liberal reforms of the 1980s, many Māori families suffered disproportionately, reinforcing intergenerational disparities in

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health, justice, education, housing and employment arising from colonisation. While some politicians describe the Treaty of Waitangi as 'separatist', 'divisive', 'racist' and incompatible with democracy, they should not blame te Tiriti, but look closer to home.

Colonial ideas of 'race', with their taken-for-granted hierarchies, translate into persistent inequalities in life chances. As Te Rarawa political theorist Dominic O'Sullivan has pointed out, the idea of a 'partnership between the Crown and the Maori race' separates Māori from the Crown, rather than trying to work out how 'kawanatanga' might best respect the tino rangatiratanga of hapū and 'nga tangata maori' as fully equal citizens, with their tikanga – as guaranteed under ture 2 and 3 of te Tiriti (O'Sullivan, 2020, pp.17, 227; see also O'Sullivan, 2017).

The fourth surprise was to discover a fundamental difference between the text of ture 3 and the English draft of article 3, one that flatly contradicts the idea of a 'partnership between races' in the 'Lands' judgment

In 1831, when the northern rangatira wrote to Queen Victoria's predecessor, William IV, they asked him to become their friend and kaitiaki (guardian from the ancestral realm) for 'these islands': 'Ka inoi ai kia meinga koe hei hoa mo matou hei kai tiaki i enei motu.'[25] In ture 3 of te Tiriti, the Queen's promise of care was extended to all the indigenous inhabitants of New Zealand.

In ture 3, the Queen promised to 'tiaki' (take care of) 'nga tangata maori katoa o Nu Tirani' (all the ordinary, normal, indigenous inhabitants of New Zealand), and give (tuku) to them 'nga tikanga katoa rite tahi' (tikanga, all the right ways of doing things, exactly equal) 'ki ana mea, nga tangata o Ingarani' (with those she gives to her subjects, the inhabitants of England). Again, this promise was made to them as tāngata or persons, not as a collectivity (say, 'te iwi Māori'). The phrase 'rite tahi' indicates that in relation to the Queen's subjects, precise equality would be maintained, and not just for the ordinary inhabitants of New Zealand, but for their tikanga as well.[26] As 'kai whakarite ki nga Tangata maori' (mediator, one who makes things equal for indigenous persons), the governor had a key role in this regard. This was a final reassurance to the rangatira and ordinary Māori that their personal mana, tapu and their ancestral tikanga alike would be protected under te Tiriti.[27]

The Queen's gift is thus not at all the same thing as the 'rights and privileges of British subjects' promised in the English draft of the Treaty, as Sir Hugh Kawharu has pointed out:

> There is, however, a more profound problem about 'tikanga'. There is a real sense here of the Queen 'protecting' (ie, allowing the preservation of) the Māori people's tikanga (ie, customs) since no Māori could have had any understanding whatever of British tikanga (ie, rights and duties of British subjects). (Kawharu, 1989, note 11)

Nor is it anything like the 'partnership between races' or between 'the Crown and the Maori race' laid out in the 'Lands' case judgment. Indeed, the very idea of 'race', with its static, top-down taxonomies, is antithetical to the promise of relationships based on 'belonging together differently' (Maaka and Fleras, 2005, cited in O'Sullivan, 2020, p.14). As Justice Sir Joe Williams has noted, while the 'partnership between the Crown and the Maori race' described in the 'Lands' judgment implicitly assumes that 'the Crown' is Pākehā in contradistinction to Māori (O'Sullivan, 2019), this assumption is clearly mistaken:

> Fundamentally, there is a need for a mindset shift away from the pervasive assumption that the Crown is Pākehā [non-Māori], English-speaking, and distinct from Māori rather than representative of them. Increasingly, in the 21st century, the Crown is also Māori. If the nation is to move forward, this reality must be grasped. (Waitangi Tribunal, 2010, p.51)

Furthermore, the key promises made by the Queen of 'tino rangatiratanga' to hapū and 'nga tangata katoa o Nu Tirani' (all the inhabitants of New Zealand) in ture 2 and of 'nga tikanga katoa rite tahi' (exactly equal tikanga) to 'nga tangata maori katoa o Nu Tirani' (all the indigenous inhabitants of New Zealand) in relation to 'nga tangata o Ingarani' (the inhabitants of England) in ture 3 were made to hapū as kin groups and to tāngata as persons distinguished by their countries of origin, not to different 'races'.

[ture 3] promise to deliver justice and equality in human dignity and everyday living – a promise that has not been delivered for many tāngata Māori.

In 1840, it seems clear, the concepts of 'race' and 'tribe' had not yet been normalised in New Zealand. Rather, identity focused upon hapū – kin groups defined by whakapapa, whenua and active engagement – or one's country of origin (Nu Tirani, Ingarani).

Like whakapapa, then, the ture 3 'nga tikanga katoa rite tahi' promise to indigenous tāngata as persons in relation to the Queen's subjects is inclusive and non-racial.[28] It is a promise to deliver justice and equality in human dignity and everyday living – a promise that has not been delivered for many tāngata Māori. This resonates closely with article 1 of the United Nations Universal Declaration of Human Rights: 'All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.'[29]

At the same time, ture 3 gives a guarantee of cultural equality, promising that tikanga Māori will be protected and play a major role in everyday life, in

reciprocal exchange with the tikanga of the incoming settlers.

The question then has to be asked: if the 'Lands' idea of a partnership between Māori and Pākehā' as 'races', or between 'the Crown and the Maori race', has achieved canonical status, is it heading towards the realisation of the promises of te Tiriti? Or, in some respects at least, does it uphold old colonial ideas, including those of 'sovereignty', 'property' and 'race'?[30]

Comparative, tikanga- and race-based approaches to te Tiriti

Comparative approaches

The promises exchanged in te Tiriti o Waitangi have generated a very large literature, both in scholarly accounts and in reports from the Waitangi Tribunal. These focus on inter-group relations, in 1840 and over many generations since.

For New Zealand scholars it is almost impossible to detach from contemporary debates about te Tiriti, since these are passionately felt, with many practical implications for our small, intimately interconnected society, and for those who engage in these exchanges.[31] For that reason, it is illuminating to explore comparative studies from other societies.

Eric Schwimmer, for instance, a Dutch-born scholar who came to New Zealand as a teenager and worked in the 1950s as an editor for *Te Ao Hou* before pursuing a distinguished career in anthropology in French Canada, has written penetrating analyses of inter-group relationships in Canada, Spain (with the Basque) and New Zealand. According to Schwimmer, in these engagements, indigenous groups alternately work with majority institutions and their representatives when relationships are relatively positive, and withdraw when an acute sense of injustice is felt and 'negative reciprocity' prevails (Schwimmer, 1972). In his later work Schwimmer also emphasises the multiplicity of perspectives (or 'voices') within indigenous groups, the need to maintain openness and inclusion, and the challenges faced by those who act as mediators between the wider society and indigenous peoples[32] (Schwimmer, 2004, p.249; see also Gagné, 2009, pp.38–9).

More recently, a Québécois scholar from Canada, Natacha Gagné, who works in Tahiti and New Caledonia as well as Canada, has drawn on Schwimmer's work on 'boundary maintenance' by indigenous groups in response to unequal power relations and assimilative pressures, reflecting upon how different colonial histories affect the participation of indigenous peoples in the life of the wider society, and different patterns of withdrawal and engagement. According to Gagné, during her research in New Zealand at the time of the foreshore and seabed controversy:

> The role of the legal system, of the state, and of the country's colonial history, are all ... eminently political and produce effects that prevent the establishment of a dialogue between the minority and the majority populations. The symbolic competition then emphasizes differences, which, in turn, re-emphasize ethnic separatism. So dialogue appears increasingly impossible and this has the effect of paralysing the political sphere. (Gagné, 2009, p.49)

In a comparative study of 11 societies, McCoy and Somer describe how this distancing can occur. In a process they call 'pernicious polarisation',

> Leaders and supporters alike describe their own and opposing political groups in black and white terms as good and evil. They ascribe nefarious, often immoral, intentions and demonstrate prejudice and bias against those in the opposing camp[33] …
>
> In polarizing settings, people who hold moderate opinions and maintain interests and identities that cut across the dividing line are increasingly ostracized, diminishing any chance of dialogue between opposing groups.[34] (McCoy and Somer, 2019, pp.244, 246)

They warn that 'pre-existing binary narratives of group belonging and citizenship make polarization more devastating when it occurs' (ibid., p.263; see also Le Bas, 2018), and suggest that ensuring equality of participation in democratic processes is vital.

Dominic O'Sullivan, a Te Rarawa political scientist at present working in Australia, addresses this challenge. According to O'Sullivan, in a 'bicultural' relationship, Māori are always the junior partner; and a definition of te Tiriti as a 'partnership between the Crown and the Maori race' excludes Māori from full citizenship, since it separates them from the Crown (O'Sullivan, 2007, 2020, 2022).[35] For O'Sullivan, the aim of 'kāwanatanga' in a liberal democracy should be to uphold human equality, including ancestral legacies: 'For Māori, human equality means that citizenship must be attentive to the claims of culture and responsive to colonial context ... The alternative is cultural homogeneity, which automatically prevents Māori from *being* Māori when participating in public decision-making' (O'Sullivan, 2022, p.2). This reading echoes the preamble and ture 3 of te Tiriti, with the Queen's promise that indigenous persons and their tikanga would be absolutely equal with the incoming settlers, and the role of 'Kawanatanga' in that regard.

In some ways O'Sullivan's vision echoes the dynamics of the marae, with its alternating rhythms of separation and engagement:

> [R]ather than thinking about political relationships as an 'us' and 'them' binary, policymaking can be recast as a site of both respectful inclusion and

… The alternative is cultural homogeneity, which automatically prevents Māori from *being* Māori when participating in public decision-making …

> respectful difference ... [T]his ... is not a discussion of race or about the rights of minorities but rather one about the nature of political communities, their different and common spheres of influence and their interrelationships. (ibid., pp.3–4)

He defines rangatiratanga as 'a people's authority over its own affairs, an authority that is not subservient or subject to the control of others', and notes that 'some [local government] functions could be more justly carried out by iwi, hapū, marae or other Maori political communities' (ibid., pp.1–2). Since hapū and marae predate te Tiriti, O'Sullivan notes, they exist as political communities in their own right, with their own tikanga and mana. A truly democratic society requires 'parity of esteem' for indigenous institutions such as hapū and marae and for ancestral thinking within democratic decision making. In such a democracy, 'we do not make decisions until we understand each other' (ibid., p.15; O'Sullivan, 2020, p.47).[36]

In *Neither Settler nor Native*, a recent book on postcolonial nationalism around the world, the Ugandan political theorist Mahmood Mamdani (Mamdani, 2020) casts new light on such challenges, offering a comparative inquiry into the way in which categories such as 'settlers' and 'natives', 'races' and 'tribes' were created as part of the colonisation process, engendering nation states with 'permanent minorities'. After independence, many former colonies have violently fractured along these fault lines.[37] In writing elsewhere about the Hutu and the Tutsi in Rwanda, for instance, Mamdani observes: 'The minority fears democracy. The majority fears justice. The minority fears that democracy is a mask for finishing an unfinished genocide. The majority fears the demand for justice is a minority ploy to usurp power forever' (Mamdani, 1998).

In South Africa, on the other hand, the Truth and Reconciliation Commission, which arose from the Promotion of National Unity and Reconciliation Act 1995, aimed at unifying and reconciling different groups in South Africa in a 'non-racial' democracy in the wake of apartheid. Given the ardent anti-apartheid protests in New Zealand in 1981, it is surprising that just a few years later the Court of Appeal could rewrite te Tiriti as a 'partnership between races'.

In his powerful work, Mamdani argues that decolonisation requires moving beyond colonial categories such as 'race' and 'tribe' with their destructive potential: 'My project is to tell a new story that historicises political identities. I take us back to the colonisation process, so as to historicise the categories of race and tribe on which [postcolonial] nationalism is based.' He adds: 'Decolonising the political does not require that we pretend that we are all the same, far from it. It requires that we stop accepting that our differences should define who benefits from the state, and who is marginalised by it' (Mamdani, 2020, p.23).[38]

> ... the challenge of te Tiriti is ontological, a clash between different ways of being in the world.

In *On the Other Side of Sorrow: nature and people in the Scottish Highlands*, James Hunter takes us back even further in the colonial process, arguing that in Great Britain, links between racism and colonial control were forged in Scotland and Ireland before being exported to the imperial outposts. According to Hunter,

> The British variety of imperialism, even the very vocabulary of this country's particular brand of racism and colonialism, owes a good deal to the political requirement to impose its will on Scottish Highlanders – or if not on Highlanders, then on the Irish.

Defined as 'barbarians' and 'savages', the Highlanders were 'void of all religion and humanity', 'wild and barbarous beyond expression', 'bare-arsed banditti' who deserved only to be 'absolutely reduced' (Hunter, 1995, pp.19–39). In the process, the Gaelic language was to be 'abolished and removed' as 'one of the chief and principal causes of barbarity and incivility', the history of the Highlanders replaced by English history, the lands of the clans confiscated by the Crown or taken by rapacious landlords, including their own clan chiefs, and resistance brutally suppressed in battles such as Culloden and in the Highland Clearances (Calloway, 2008).

In his work *White People, Indians, and Highlanders*, Colin Calloway adds a further twist to this analysis, noting that in Great Britain, Scottish Highlanders and North American Indians alike were regarded as 'savages', 'tribes in the sense of the Latin term *tribus*, "barbarians on the border of the Empire"'. In North America, however, while some Highlanders showed a close affinity with Indian communities, others participated in military assaults and the seizure of their lands (ibid.), relationships that were later echoed in colonial New Zealand.

Like Mahmood Mamdani, Australian scholar Simone Bignall explores alternatives to antagonism and conflict in achieving 'a just mediation between diverse worlds', a state she calls 'ex-colonialism' (Bignall, 2014). Perhaps in the end this might reflect the rhythm of exchanges on the marae, in which different groups alternately stand apart, reaching out towards each other through exchanges of karanga and whaikōrero, and coming together in moments when it is possible to say 'kua ea' (it has been balanced, requited, reconciled).

Tikanga-based approaches and co-governance

> It is quite right for us to say what we think; it is right for us to speak; let the tongue of every one be free to speak; but what of it? what will be the end? our sayings will sink to the bottom like a stone, but your sayings will float light, like the wood of the whau-tree, and

always remain to be seen; am I telling lies? (Mohi Tawhai in the Hokianga debate over te Tiriti, 1840)[39]

At its deepest, the challenge of te Tiriti is ontological, a clash between different ways of being in the world.[40] In writing about te Tiriti o Waitangi, Pā Henare Tate from Hokianga places te Tiriti firmly within te ao Māori, and fundamental values that explain why, in Te Paparahi o te Raki claim, the claimants so often described te Tiriti as a kawenata (covenant), a sacred agreement:

> Te wa, the journey of life, is filled with opportunities to address the tapu of our fellow-travellers ...
>
> There are three ways of addressing tapu: through tika (justice), pono (integrity, or faithfulness to tika) and aroha (love) ...
>
> The process of welcoming visitors on to a marae is another well-known way of addressing tapu. Visitors (manuhiri) are under tapu in the form of a prohibition as they approach a marae. They have their own tapu, or dignity, of course, but in this context they are foreigners, an unknown quantity. Who can tell whether they are friend or foe?
>
> The kuia calls her greeting. In some situations a warrior issues a fiery challenge and lays down the wero, dart. The visitors respond according to the protocol of the marae with korero (speech) and waiata (song), after which the hongi (embrace) lifts the tapu, erasing the status of 'manuhiri' and making the visitors one with the tangata whenua – the people whose turangawaewae (identity) is at that marae. The visitors are now hunga kainga (people of the house).They share their hosts' hospitality, protection and mana ...
>
> A hundred and fifty years ago the Treaty of Waitangi provided Pakeha with the opportunity to become tangata whenua, and to share the mana of the Maori. Like visitors to a marae, the newcomers were seen as manuhiri. The treaty was a vehicle by which the designation of manuhiri could be lifted. However, though the document was signed, the treaty was not implemented. Tika and pono were violated, and aroha fled ...
>
> Without acknowledgement and encounter, injustice will never be truly resolved. Like a whale, it will disappear for a time, only to surface again seeking the pure oxygen of tika, pono and aroha ...
>
> I believe that Pakeha have not enjoyed the mana of tangata whenua because of treaty violations. The result is a generation of New Zealanders that is still looking for its roots and hungering for a deeper relationship with the land.
>
> The answer is in the tapu of the treaty. Address the tapu that has been violated, and mana will be set free to be the mantle under which all may become tangata whenua. (Tate, 1990)[41]

... whakapapa has many advantages, tracing lineages from ultimate origins alongside other life forms through human histories involving migrations, settlement and alliances.

In a recent article, Te Kawehau Hoskins and Alison Jones engage in a dialogue that explores the limits of binary thinking and the complexity of relationality in a (post?) colonial settler society. Like Pā Tate, Te Kawehau turns to the pōwhiri, the ritual of welcome on the marae, to discuss the different kinds of engagement that can happen, and the need to remain true to ancestral ethics in contemporary relationships (Hoskins and Jones, 2020).

As O'Sullivan, Carwyn Jones (e.g., Jones, 2014, 2016), Mamari Stephens and many others have argued, such ways of thinking have the potential to generate approaches to te Tiriti that are tika (just, even-handed and fair) and pono (true, faithful, with integrity), and conducted with aroha (fellow feeling, generosity of spirit).

While Mamari Stephens discusses a Māori *demos*, a fair description of decision making in ancestral kin groups (Stephens, 2013, p.822), Carwyn Jones describes five key values that underpin tikanga:

- whanaungatanga – 'the centrality of relationships to Māori life';
- manaakitanga (and kaitiakitanga) – 'nurturing relationships, looking after people, and being very careful how others are treated', and an ethic of guardianship;
- mana – 'the importance of spiritually sanctioned authority and the limits on Māori leadership';
- tapu/noa – 'respect for the spiritual character of all things'; and
- utu – 'the principle of balance and reciprocity'.

As he notes, 'As a whole, these values/institutions reflect the importance of recognising and reinforcing the interconnectedness of all living things and maintaining balance within communities' (Jones, 2014, p.190). In this respect, Jones' analysis resonates with the suggestions made by Dominic O'Sullivan.

Such tikanga-based approaches typically engage with te Tiriti through te reo rather than English translations, and through a whakapapa rather than a racial lens. They are enmeshed with ancestral landscapes, and draw upon ancestral ideas and values as well as contemporary experience to reflect upon the future.

In ancestral times, rangatira usually led by persuasion, respecting the tapu and mana of others. Where the balance was upset through attacks on tapu and mana, including insults, violence or failures in generosity, conflict almost invariably followed, both within and among whānau and hapū, although some disputes could be settled by diplomacy to redress the imbalance and restore mana to all parties – a state described by the term 'ea' (requited, balanced).

Tikanga-based approaches to te Tiriti are thus focused on relationships among

different parties, and these keep on evolving. When the star navigators set off in their voyaging canoes from Hawaiki, they brought their atua (ancestor gods) and whakapapa with them, establishing new kin networks in a new land. Over time, they became tangata whenua (land people), with their own territories, marked by ancestral rivers and mountains. Many generations later, when new groups of people began to arrive, some had children with tangata whenua, entering the whakapapa and bringing their lineages with them. These include persons described as 'Pākehā', 'Asian' or 'Pacific Islanders' in contemporary census tabulations.

In whakapapa, where racial categories do not exist, these complexities are handled with admirable simplicity. Human tīpuna (ancestors) are all described as tāngata, persons with their own origins and ancestral heritages. Here, difference is not a problem but a creative possibility, generating new forms of life. As time passes, non-indigenous incomers may even have whānau named after them – the Manuel/Manuera whānau, the Stirlings, the Jacksons, the O'Regan whānau, and so on.

As an alternative to the concept of 'race', whakapapa has many advantages, tracing lineages from ultimate origins alongside other life forms through human histories involving migrations, settlement and alliances.[42] It deploys ramifying kin networks, rather than binary oppositions, and is non-racial, constituting identities and groups through relationships based on descent, kinship, affiliation and places of origin, rather than racial polarities. Whānau-like structures have also sprung up in the wake of internal migrations, including urban marae, kapa haka groups, waka ama clubs, kōhanga reo and the like (see Metge, 1995).

Whakapapa-based structures are thus flexible and adaptive. When people stand to speak, they often claim their ancestors on different taha or 'sides', including those from Scotland or Ireland, Europe, the Pacific or elsewhere. Individuals may identify with the kin group of either parent or any grandparent, and kin groups define themselves by reference to an apical ancestor. Such choices, however, have to be backed up by practical engagement with particular whānau, hapū and marae.

Since the Waitangi Tribunal was established in 1975, with knowledgeable elders deeply involved in its proceedings and hearings often held on marae, its judgments have been shaped by these ways of thinking.[43] By and large, the Tribunal's reports stay close to the promises of te Tiriti, often involving agreements with particular hapū and iwi to settle historic grievances over ancestral lands, forests, rivers and mountains. This is also true of much Treaty jurisprudence, which calls upon the testimony of kaumātua and wānanga experts (see Palmer, 2008, pp.105–20).

Co-governance arrangements, for instance in relation to Te Urewera and the Whanganui River, typically arise from a tikanga-based approach to te Tiriti. These arise from specific claims to the Waitangi Tribunal and may recognise the life and identity of ancestral places in their own right, along with the existential relationships of hapū with their ancestral territories, rivers, forests, mountains and harbours, in relation to other citizens who inhabit and visit these places.

In such agreements, relevant parties are characterised as working together to enhance the mana and well-being of these ancestral places and their inhabitants for future generations. Such reciprocal, localised and long-term arrangements are widely accepted, although they are often asymmetrical in practice. They need to be further strengthened, based on genuine collaboration among all parties, and resourced to achieve the desired outcomes.

This also applies to arrangements for the governance of waterways, the ocean and the land at the local or regional level, where whānau, hapū and iwi have long-standing relationships with ancestral landscapes and seascapes. Ture 2, with its promise to the rangatira, the hapū and 'nga tangata katoa o Nu Tirani' (all the inhabitants of New Zealand) of te tino rangatiratanga of their lands, dwelling places and all of their taonga, seeks to ensure that the tapu and mana of these ancestral relationships, and of these places themselves, are respected.

As O'Sullivan has noted, whānau and hapū, with their marae, predate and exist independently of government, but in relationship with it and with other New Zealanders. Under te Tiriti, the Queen promises that te tino rangatiratanga of their ancestral territories and taonga will be upheld and honoured. These kin communities have their own resources, often augmented by Treaty settlements, and diverse ancestral tikanga. Many marae – including urban marae – already deliver education, justice and health services (as we have seen during the Covid-19 pandemic), often to great effect, in different ways in different rohe (ancestral districts).

> ... whānau and hapū, with their marae, predate and exist independently of government, but in relationship with it and with other New Zealanders.

As many have recently argued, there is nothing particularly threatening about these kinds of arrangements, which are already operating successfully in many parts of Aotearoa New Zealand. As O'Sullivan suggests and Tamati Kruger insists (e.g., Kruger quoted in Warne, 2018), a tikanga-based approach to te Tiriti would begin by recognising and strengthening indigenous communities in their own terms, from the flax roots upwards, rather than the 'top-down' binary colonial structures typical of 'race-based' approaches.[44]

As for ture 3 of te Tiriti, the Queen's gift to 'nga tangata maori katoa o Nu Tirani' (all the indigenous inhabitants of New Zealand) of 'nga tikanga katoa rite tahi' (all the tikanga exactly equal) with those of the incoming settlers underpins cross-cultural experiments in the delivery of governance, education, the media, justice, housing, health and the like, and in relations with the living world. This

includes kōhanga reo, kura kaupapa, whare wānanga, hau ora, Māori television and radio stations and many other such innovations, as well as the use of te reo and tikanga in 'mainstream' services.

Again, although these experiments provoke controversy at times, they are usually not 'racially' exclusive, and are clearly based on the ture 2 promise to uphold te tino rangatiratanga of ancestral taonga, as well as the ture 3 promise of 'nga tikanga katoa rite tahi', absolutely equal tikanga. They also hold great promise for tackling otherwise intractable social and environmental dilemmas.

Nor does a relational approach have to draw solely on tikanga Maori; there are relational ways of thinking in 'the West' as well, from ideas about the 'web of life' and socio-ecology to complexity theory. My own Gaelic-speaking ancestors in the western isles of Scotland, for instance, had a fascination with genealogy and ancestral bonds with land and sea that resonate closely with whakapapa (Hunter, 1995). Concepts such as justice, truth and equality also have much in common with notions such as tika, pono and 'nga tikanga katoa rite tahi' in guiding right ways of living.

As te reo and the stories of our country's histories are taught in schools, with their rich interweaving of strands from the Pacific and Europe, Asia, the Americas and Africa, new ways of understanding the past and living together with each other and the wider world will emerge from those exchanges among rising generations.

Dialogue that aims to achieve mutual understanding and consensus, as on the marae, will also be vital (e.g., new approaches to participatory democracy), along with practical projects that aim to foster thriving whānau, hapū, communities and landscapes at the flax roots and grassroots, rather than top-down policies and structures in which the lives of ordinary people and the whenua seem almost irrelevant (see Spoonley and Dickie, forthcoming).

Race-based approaches and parallel governance

> An understanding of the past can help us to appreciate how far the values embodied in our present way of life, and our present ways of thinking about those values, reflect a series of choices made at different times between different possible worlds. This awareness can help to liberate us from the grip of any one hegemonal account of those values and how they should be interpreted and understood. Equipped with a broader sense of possibility, we can stand back from the intellectual commitments we have inherited, and ask ourselves in a new spirit of enquiry, what we should think of them. (Cambridge historian Quentin Skinner, quoted in Palmer, 2008, p.32)

In a top-down racial dichotomy, kin groups and their tikanga and ancestral landscapes are often marginalised in the creation of a 'them and us' relationship between 'the Maori race' and 'the Crown' ...

As the comparative studies indicate, race-based approaches work very differently, with vertical approaches that tend to split communities rather than binding them together. In Aotearoa New Zealand, where the 'Lands' case framing of te Tiriti as a 'partnership between races' or between 'the Crown and the Maori race' has achieved canonical (or 'hegemonic') status, political relationships may be cast in a static 'us and them' bi-racial dichotomy that separates 'Māori' and 'Pākehā', 'iwi' and 'Kiwi', and creates, as Mamdani would describe it, 'the Maori race' as a 'permanent minority' in relation to 'Pakeha' and 'the Crown' (Mamdani, 2020; Le Bas, 2018).

Because the idea of a 'partnership between the Crown and the Maori race' begins at the national level, it may generate top-down parallel governance structures in which the population is institutionally split into two distinct 'races', with sharp boundaries between them.[45] This framing is sometimes reflected in the idea of te Tiriti as a 'bridge', as though Aotearoa New Zealand was split in half, with the Treaty as a span across the chasm.[46] This is fundamentally different from the image of te Tiriti as a marae, a meeting place where kin groups come together to negotiate and renew the tapu and mana of their relationships, as explained by Pā Tate, for example.

In a top-down racial dichotomy, kin groups and their tikanga and ancestral landscapes are often marginalised in the creation of a 'them and us' relationship between 'the Maori race' and 'the Crown', as O'Sullivan notes, echoing the state of separation described by Schwimmer and Gagné. In these parallel structures, the complex, interwoven living networks of whakapapa with its reciprocal exchanges are replaced by a siloed, bounded hierarchy of kin groups, on the model of biological taxonomy.

The aggregation of kin groups – from whānau and hapū, to iwi, to 'the Maori race' – often leads to the diversion of resources and decision making from the kin groups themselves to overarching hierarchical bureaucracies framed along Western lines, and those qualified to serve in them.[47] Radical inequities may thus be accentuated, frustrating the ture 3 'nga tikanga katoa rite tahi' promise to 'nga tangata maori katoa o Nu Tirani', all the ordinary, indigenous inhabitants of New Zealand. If this bipolar dynamic becomes too insistent, nation states can fracture, as Mamdani and Le Bas have shown (Mamdani, 2020; see also Vogt, 2018).

Here, 'the Crown' is also racialised. When te Tiriti is expressed as a 'partnership between the Crown and the Maori race', or 'between Pakeha and Maori', the Crown is implictly understood to be 'Pākehā', and non-Māori are spoken of as 'the Crown's people'. These bi-racial polarities are highly artificial, and quite unlike the non-racial,

multilateral exchanges of te Tiriti.[48] In *He Puapua*, for instance (Charters et al., 2019), a report written for the New Zealand government which focuses on the United Nations Declaration on the Rights of Indigenous Peoples (see Salmond, 2022), 'the Crown' (or 'kāwanatanga karauna') is split from 'Māori' (or 'rangatiratanga Māori'), with a 'relational space' between them, a literal reflection of the 'Lands' case rewriting of te Tiriti as a 'partnership between the Crown and the Maori race'.[49]

At the same time, the 'relational space' in *He Puapua* is dominated by bureaucratic transactions between 'the Crown' and 'Māori', and relationships with other New Zealanders are barely mentioned. In a democracy in which constitutional change relies on majority support, this is surprising. It is also very different from the kinds of relationships outlined in te Tiriti, described as gift exchanges among a multiplicity of equals, based on reciprocity and balance.

Some of the parallel structures in *He Puapua* are adapted from top-down colonial models – for instance, parallel Parliaments served by parallel bureaucracies. This is based on a racial polarity that assumes that while Crown or 'kāwanatanga karauna' structures will be 'bicultural', the Māori or 'rangatiratanga' structures will be staffed by and serve 'Māori' alone. These structures are hierarchical, highly abstract and curiously empty. It is as though, in the relationship between 'the Crown' and 'the Maori race', all other citizens disappear. As Dominic O'Sullivan has observed: 'As this involves Maori structures working "in parallel" with Pakeha ones, bicultural distributivism inevitably envisages a Maori copying of Pakeha bureaucracy, rather than the restoration of Maori social and political structures' (O'Sullivan, 2007, ms, p.20).

Nor does *He Puapua* discuss how instituting such a structural dichotomy at the national level might work in practice, and its impact on relationships among individual citizens, families and communities, including whānau, hapū and iwi, or on social cohesion. Given the emphasis on relationships among tāngata or ordinary people in te Tiriti, and the centrality of whakapapa in te ao Māori, this is also surprising.[50] Unlike 'race', whakapapa is a relational rather than a 'biological' or taxonomic framing, although this may be changing. In early colonial times, for instance, Europeans often lived with or married into kin groups which gained access to European weapons, goods, skills and networks in return. If the relationship was close, they were regarded as whānau, attitudes that have survived into recent times (see Hohepa, 1999).[51]

At the personal level, too, the Western idea of 'race' is problematic. After 200 years of cohabitation in Aotearoa New Zealand, a demographic approach that describes 'Maori and non-Maori populations' as if they run 'on separate parallel train tracks' is difficult to sustain (Chapple, 2000).

The gridding of persons into separate, sharp-edged silos in 'racial' categories and 'identity politics' echoes the fragmentation of the world in neo-liberal ways of thinking.[52] This is very different from whakapapa, with its complex networks and mana and tapu, as Eruera Stirling has observed:

> The old people told us, study your descent lines, as numerous as the hairs upon your head. When you have gathered them together as a treasure for your mind, you may wear the three plumes 'te iho makawerau,' 'te pare raukura' and 'te raukura' on your head. The men of learning said, understand the divisions of your ancestors, so you can talk in the gatherings of the people. Hold fast to the knowledge of your kinship, and unite in the brotherhood of mankind. (Salmond, 1980, p.241)

In his own whakapapa, a diverse array of descent lines – from Scotland, from Kai Tahu and from Te Whānau-ā-Apanui – were included, honouring a myriad of ancestors, including his great-grandfather Captain William Stirling, the Scottish whaler after whom Stirling Point at Bluff is named. In the same way, when answering census questions, many New Zealanders tick multiple 'ethnic' boxes, indicating the complexity of identity in contemporary Aotearoa New Zealand.

The 'Pakeha race' in the 'Lands' case, for instance, encompassing as it does a long history of very different groups, including 'Pacific', 'Asian' and 'European', mixing, merging and migrating around the world, fails to acknowledge this complexity.[53] At the same time, the 'Maori race' also extensively overlaps with these groups,[54] as Tamati Kruger has noted:

> [T]he word Māori is not really a racial term, but it means beautiful, it means natural, it means ordinary, it means commonplace. And Tūhoe, we need to find out what that means. What that means in 2017, in 2090. Now that we are a diverse and global people, we have our work cut out for us …
>
> [I]f I was to fill this room up with Tūhoe people, it would probably be true to say that we've probably married into every ethnic group that the world can offer. We will bring together all religions, languages, beliefs, traditions, customs ...
>
> Which part of them is the Tūhoe part? How does one locate that, and how do we use that to talk with each other and find some unity and find a direction forward? These are the difficulties which I believe all iwi have. (Kruger, 2017)

Such unilateral, 'them–us' approaches contribute to mutual disaffection ... which threatens to upset a long-standing, non-partisan consensus around Treaty settlements.

A 'split state' approach at once cuts across the ramifying networks of whakapapa, with its different kin groups, and works against the ability of democratic institutions to deal with the diversity of understandings across and within different communities.

In the case of *He Puapua*, the framing of the Treaty of Waitangi in the 'Lands' case as a 'partnership between the Crown and the Maori race' has also shaped the consultation process, with a minister for Māori development meeting with Māori groups and individuals long before engaging with the rest of the population about its proposals.

Such unilateral, 'them–us' approaches contribute to mutual disaffection, as described by Gagné, which threatens to upset a long-standing, non-partisan consensus around Treaty settlements.[55] It also helps to explain why *He Puapua* and other related proposals have been so controversial. The 1987 formulation of a 'partnership between the Crown and the Maori race' that justifies these proceedings is based on a Western idea of 'race' that has a long and damaging colonial history, and is scientifically obsolete. This is not a promising foundation for new constitutional arrangements in the 21st century.

Comparative analyses also indicate the fragility of nation states structurally divided by race, ethnicity or religion. In a world beset by climate change, pandemics, conflicts and rising inequality, styles of governance based on relational networks that bind people together are increasingly vital in generating adaptive responses.

Conclusion

All of this suggests that it would be timely to move beyond the idea of 'race' and the 1987 'Lands' case judgment, and to revisit te Tiriti in the original. Written at a time when te reo was the pre-eminent language in New Zealand, tikanga governed ancestral ways of living and whakapapa framed the world, it expresses a spirit of shared humanity that is in danger of being lost in some processes surrounding Treaty settlements. As the saying goes:

> Hūtia te rito o te harakeke, kei hea te kōmako e kō? Kī mai ki au, hei aha te mea nui o te ao? Māku e kī atu, he tāngata, he tāngata, he tāngata.
> If you pluck out the heart of the flax bush, where will the bellbird sing? If you ask me, what is the greatest thing in the world, I will answer, it is people, it is people, it is people.

In part, this may arise from racial dichotomies that dehumanise 'others'; and in part from inherent challenges in the Treaty process in trying to reconcile tikanga-based values with neo-liberal values and powers.

Over time, too, the Waitangi Tribunal hearings have become immersed in legal styles of argument that are often adversarial. These oppositional habits of mind are evident in key documents such as *He Puapua*, mainly written by lawyers, that seek to outline new constitutional futures for Aotearoa New Zealand.[56]

The marginalisation of 'non-Māori' New Zealanders from these discussions has also been unhelpful. Likewise, muddles between parallel governance and co-governance arrangements, and between race-based and tikanga-based approaches to te Tiriti, risk fracturing a broad-based non-partisan support for the Treaty and Treaty settlements that has endured since the 1970s.

This would be a great loss, because in the 21st century, the promise of 'nga tikanga katoa rite tahi' in ture 3 of te Tiriti offers a chance to explore tikanga Māori as well as 'Western' conventions in creating new ways of living in Aotearoa New Zealand. The idea of the world as a vast kin network, a 'web of life' where earth and sky, rivers, mountains and the ocean are more ancient and powerful than people, transcends the idea of different 'nations' and 'races', offering a real alternative to the extractive philosophies that are currently destroying living systems across the planet.

Legal systems informed by ideas of tika (just, fair, appropriate, proper) and utu (reciprocity, balance) as well as Western jurisprudence, and health systems that bring together ideas of ora (health, thriving, well-being) with the best medical insights, might deliver much more equal outcomes to tāngata (persons) and whānau (families). An education system grounded in love of learning, vigorous debate and rigorous inquiry, which draws upon the best of Western science and arts along with ideas such as pono (truth) and the insights and artistry of wānanga and mātauranga, might explore these philosophies more deeply, generating unique contributions to the wide world of knowledge.

Governance structures based on whakapapa and whanaungatanga, that recognise the independence of hapū and marae and the mana and tapu of their existential links with ancestral places and taonga, while acknowledging the innate dignity of all tāngata and the links forged over generations with those who came later, might offer a new kind of democracy that truly honours the promises of te Tiriti.

In a democracy, as on the marae, as O'Sullivan has suggested, matters of collective interest should be decided by robust, inclusive and respectful debate. Rather than top-down decision making, 'racially' unilateral discussions or the toxic 'rabbit holes' of social media, thoughtful exchanges in which 'we do not make decisions until we understand each other' (O'Sullivan, 2022, p.15) are more likely to be constructive.

In our small, intimate society, it would be timely to abandon old, illusory, destructive neo-colonial ideas about 'race', for our own sakes as well as those of our children and grandchildren. What better place to start than by returning to the original promises of te Tiriti, and its non-racial framings, and to honour the wairua (spirit) in which they were made? What better inspiration than the idea of gift exchange (tuku) and the chiefly generosity that runs through its text? As the saying goes, 'Nā tou rourou, nā taku rourou, ka ora ai te iwi. With your food basket and mine, the people will thrive.'

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1 Quotes from Colenso, Waitangi, 5 February 1840, MS-Papers-003103, Alexander Turnbull Library. For a discussion of the events leading up to and including the northern Tiriti discussions, see Salmond, 2017, pp.55–290.

2 Note that Sir William Martin, New Zealand's first chief justice and a fluent speaker of Māori, also translates kāwanatanga as 'governorship' (Martin, 1860, p.10). See also Ned Fletcher's recent discussion of the nature of sovereignty as understood by the key British officials who drafted Hobson's instructions, which included its coexistence wth tikanga (Fletcher, 2022).

3 See also George Clarke, chief protector of aborigines, in 1845: 'I am quite ready to admit that they had not a correct and comprehensive idea of all that was implied in ceding the sovereignty of their land; and that there was a consequent discrepancy between their intentions in the act, and our views and interpretations of it, is, I think, very probable' (Clarke to colonial secretary, 1 July 1845, Great Britain Parliamentary Papers, 1846 (337), p.133).

4 The Court of Appeal declared 'that the transfer of assets to State enterprises without establishing any system to consider in relation to particular assets or particular categories of assets whether such transfer would be inconsistent with the principles of the Treaty of Waitangi would be unlawful'. For a discussion of 'the principles of the Treaty', see Waitangi Tribunal (n.d.). Reflecting on the case years later, one of the judges, Sir Ivor Richardson, observed that, 'The legal answer in 1987 required the orthodox application of well-settled principles governing judicial review of the exercise of statutory powers of decision by Cabinet Ministers' (Richardson, 2008, p.17). Many thanks to Professor Mark Hickford for clarifying these points.

5 Although it must be noted that the Treaty of Waitangi Act 1975 provides a precedent for a race-based reading of te Tiriti, in 4(2A) referring to 'the partnership between the 2

parties to the Treaty' (i.e., in the preamble to the Act, Queen Victoria and 'the Maori people of New Zealand'), and in section 2 defining 'Maori' as 'a person of the Maori race of New Zealand; and includes any descendant of such a person'.

6 As Mark Hickford has pointed out (personal communication, 2022), however, this arose because the judges were interpreting the statutory phrasing 'principles of the Treaty of Waitangi' appearing in section 9, and directed themselves to the official statutory references to the Treaty in the first schedule of the Treaty of Waitangi Act 1975, which cites the English text and then the Māori text in succession. For this reason, as Cooke noted, 'the principles of the Treaty of Waitangi are to be applied, not the literal words. As is well known, the English and Maori texts in the first schedule to the Treaty of Waitangi Act 1975 are not translations the one of the other, and do not necessarily convey precisely the same meaning' *(New Zealand Maori Council v Attorney General* [1987] 1 NZLR, at 662). Although the interpretive strategy in the 'Lands' case follows this direction and may thus be legally orthodox, the role of the English draft of te Tiriti in New Zealand law (which goes back to the adoption of the English draft as the official version of the Treaty immediately after the signing of te Tiriti) must still be questioned. For the contextual background of what became section 9, see Palmer, 2008, pp.3–94, 137–8, 400–1, and Hickford, 2019, pp.107–10.

7 Again, this arose because the court had been directed to the 'principles of the Treaty' in section 9 of the State-Owned Enterprises Act. Nevertheless, one would expect that the actual words of te Tiriti would be vital in interpreting its nature and intent.

8 'Politicians and lawyers have really confused things by talking about Treaty principles and the different meanings in Te Tiriti and the Treaty, but if everyone … just remembered that at Waitangi and nearly everywhere else the rangatira only talked about and signed Te Tiriti, there shouldn't be any confusion'(Mutu and Jackson, 2016, p.56).

9 See also Mutu and Jackson, 2016, who cite the French political philosopher Jean Bodin's argument that sovereignty marked a progress from barbaric to civilised societies, and that 'proper political power could only exist once "man ... purged himself of his troubling passions" and moved up "the great chain of being ... and its hierarchical order"' (p.32).

10 See Fletcher, 2022 for a deeply researched assessment of these assurances, and the role of James Stephen in drafting Normanby's instructions.

11 Te Rangikāheke, 'Rangatiratanga', GNZMMSS 85, Auckland Public Library.

12 Rakorako, Ngamiro, Tikiku, Pakihautai and Arama Karaka in Whareroa to Sir Donald McLean, 6 November 1850, MS-Papers-0032-0674F-03, Alexander Turnbull Library.

13 Rēnata Kawepō to Governor Gore-Browne, in Caselberg, 1975, pp.91–4. For an account of the fate of some of Kawepō's land, see Te Rito, 2007.

14 This contradicts a key statement by the Waitangi Tribunal, which claimed that 'ownership' is the nearest legal equivalent to ancestral relationships with rivers: 'We agree with the Whanganui River Tribunal, which found in respect of that river: *... it does not matter that Maori did not think in terms of ownership in the same way as Europeans*. What they possessed is equated with ownership for the purposes of English or New Zealand law' (Waitangi Tribunal, 2012, p.67). See also Parsons, Fisher and Krease, 2021; Salmond, Brierley and Hikuroa, 2019; Salmond, 2018.

15 On this transformation, see also Salmond, 2007, pp.46–67; Strack, Mick and Goodwin, 2017.

16 'The Crown imposes a range of requirements on the rules and structures of PSGEs, and yet none of these rules addresses standards that derive from Māori legal traditions or Māori conceptions of leadership and accountability. The result is that PSGEs are based on Western ideas of governance' (Jones, 2016, pp.138–9).

17 See also Hutchinson, 2021, quoting the Taranaki kuia Matarena Raumati Rau Kupa (Aunty Marj), who similarly argued that tangata whenua is not a status, but a job description.

18 This kind of binary logic is radically different from the relational logic that underpins te Tiriti, with its complex networks. In relational logic, as T.M.S. Evens explains, it is the relations, rather than the entities linked by them, that are primary: reality is an unbounded whole, where 'boundaries [are] conceived of as thresholds rather than impervious dividers: [and] the whole denotes a global connectivity, thus rendering all things relative, and intimating infinity in both space and time … If the whole is what is basically real, then the ultimate identity of everything that is anything rests in its connection to the whole … It is the medial or third term [in other words, the relation] and not the things linked by it that enjoys ontological primacy' (Evens, 2015, p.10). Relational logic is reflected in ideas of 'the web of life' in the Enlightenment, and complexity theory in contemporary science. In te ao Maori, this 'global connectivity' is expressed in whakapapa, with its all-inclusive, ramifying kin networks. This is reflected in the text of te Tiriti, with its focus on relationships among the different parties, and how they are to be conducted.

Entitative logic, on the other hand, 'cuts up the world', generating distinct units (or 'basic particulars') with the use of binary oppostions at different scales, based on the classic law of identity (i.e. identical with themselves, but separate and different from each other). Here, the entities are primary, while relations are secondary, simply links between different and distinct entities – a 'bridge' across existential divides. As Evens notes: '[When A = A], 'identity' denotes essential oneness. Clearly, since by definition the basic particular is a unity, an individual, it makes identity. Accordingly, in a reality keyed to the basic particular, everything that is anything must be an individual. In determining identity, the basic particular projects the possibility of a pure boundary, a boundary that separates but does not connect ... In other words, in this ontology, mutual exclusion or absolute dualism [eg. A] is given in the nature of the case.' Although binary logic is ubiquitous in modernity, and seductive in its simplicity, in human relations it can be dangerous, as the comparative literature attests. For further discussion of these philosophical questions, see Salmond, 2012.

19 From kingdom, phylum or division down to class, order, family, genus and species in hierarchical order.

20 For a recent analysis of the deep entanglements between ideas of 'race' and colonialism, 'settler' and 'native' and their role in a range of postcolonial states, see Mamdani, 2020.

21 If 'Pākehā' require 'Māori' to accept an inferior status, this deepens the schism, and vice versa, inviting mutual resentment and resistance. As Bateson observes, schismogenesis 'results in mutual hostility … and must end in the breakdown of the system'. In tikanga, a requirement to abase oneself equates with taurekareka or mōkai (slave, war captive) status, a loss of mana that is impossible to willingly accept, while non-Māori New Zealanders react in a similar fashion. According to Bateson, only symmetry and reciprocity can break the cycle and restore balance, whereas Mamdani insists it is necessary to give up these race-based dichotomies altogether.

22 Te Rangikāheke, GNZMMSS 31:9, Auckland Public Library.

23 For an account of the experiences of the Scottish Highlanders, who were treated as 'barbarians' and 'savages', had their Gaelic language and customs suppressed and their lands taken, and many of whom were forced into exile, see, for instance, Hunter, 1995.

24 For a fine study of kin group dynamics through time, see Ballara, 1998.

25 Rangatira to William IV, 5 October 1831, CO 201/211.

26 While 'rite tahi' has often been translated as 'exactly the same', 'rite' is a relational concept whose semantic range centres upon equivalence and balance (see Williams, 1971: 'rite: alike, corresponding in position, balanced by an equivalent'); while 'tahi' indicates an exact balance or equivalence – thus 'exactly equal'.

27 This reading is in keeping with Lord Stanley's 1845 speech in relation to tikanga relating to land (or indigenous land rights) in New Zealand, quoted in Fletcher, 2022 (p.521): 'That law and that custom are well understood among the natives of the islands. By them we have agreed to be bound, and by them we must abide. These laws – these customs – and the right arising from them on the part of the Crown – we have guaranteed when we accepted the sovereignty of the islands; and be the amount at stake smaller or larger; so far as native title is proved – be the land waste or occupied – barren or enjoyed, those rights and titles the Crown of England is bound in honour to maintain; and the interpretation of the Treaty of Waitangi, with regard to these rights, is, that, except in the case of the intelligent consent of the natives, the Crown has no right to take possession of land'.

28 As quoted in Mutu and Jackson, 2016, p.80: 'Te Tiriti was about everyone belonging and having a place here that was equal … to me that has always been the most important thing about it … that we are all in this together'.

29 Although one might say here 'whanaungatanga' instead of 'brotherhood', since te reo is often non-specific as to gender.

30 For a discussion of the idea of 'sovereignty' and its relations with indigenous peoples, see Brown, 2007.

31 For a thoughtful exploration of these issues for local anthropologists, see Metge, 2006.

32 'Bi-cultural agents are heavily burdened. Hiwi Tauroa's grim picture of their conflicts, rivalries, ambitions, jealousies and financial sacrifices is probably not over-drawn.'

33 See, for example, the *Bassett, Brash & Hide* website in New Zealand.

34 In Aotearoa, this kind of polarisation often happens online, as Rangi Kemara explains: 'Following colonisation (there should always be a mandatory pause after stating those two words), we have the arrival of the mindset of the binary, a rudimentary process where opposite views are formed and extreme positions are taken on each side of any dichotomy. Combine that with the dumpster fire that is social media, and tino rangatiratanga ā tāngata is nowhere to be seen ... And if you don't see it my way, then you are cursed as kūpapa or abused as pōkokohua ... The dogmatic cry, "You're either for me or against me," inevitably results in fragmentation and the sullying of the other's mana ... until everyone is isolated and alone' (Kemara, 2020).

35 See also O'Sullivan, 2020, p.27: 'A report commissioned by the New Zealand Iwi (Tribal) Chairs Forum demonstrates how much is given away when a politics of self-determination through separation from the state is proposed. The report, *He whakairo here whakaumu mō Aotearoa*, recommended a constitutional order that maintained rigid distinctions between Maori and Crown authority which are referred to, with reference to the Treaty of Waitangi, as rangatiratanga and kāwanatanga, respectively. In the report, rangatiratanga was depicted as belonging to Maori (i.e. "us") and kāwanatanga to the Crown (i.e. "them"). Conflated with New Zealanders of Anglo-Celtic descent (i.e. Pakeha citizens) the Crown was thus given an ethnic character that made it the site of only some citizens' political authority'; see also pp.197–221.

36 'The political objective is to transform the postsettler states in which indigenous peoples reside such that they lose their colonial character.'

37 Speaking of Africa and the United States in particular, Mamdani states: 'Ethnic political communities were created by colonisers drawing lines between culturally distinct peoples and subjecting them to law said to be customary. The tribal governance that activists seek to protect reflects the politicisation of cultural identity. These are not the political communities of pre-colonial times' (p.328).

38 Mamdani's strategies to address postcolonial nationalism and the violence it often engenders by creating 'non-racial democracy' are reminiscent of te Tiriti: 'First, granting only one class of citizenship, and doing so on the basis of residence, rather than identity. Second, denationalising states … in which local autonomy allows diversity to flourish. Third, to loosen the grip of nationalism by … bolstering democracy in place of neo-liberal human rights remedies.'

39 'Speeches of Hokianga chiefs', encl. in Shortland to Stanley, 18 January 1845, *Great Britain Parliamentary Papers*, 1845 (108), p.10.

40 As Tūhourangi philosopher Carl Mika remarks, 'from a Māori vantage point, where all things are interconnected or "one" – a Māori text does not essentially connect with its English translation' (Mika, 2022; see also Salmond, 2012).

41 Many thanks to Vivian Hutchinson for drawing this article to my attention.

42 For an extended, authoritative discussion of whakapapa, see Ngata, 2021.

43 It is important that these balances, with highly respected elders and non-Maori citizens as well as lawyers and Treaty experts, are upheld in the membership of the Waitangi Tribunal, to ensure that these different perspectives are represented and respected. According to the Tribunal website, 'About half the members are Māori and half are Pākehā'; at present it's about 14:6. For a comment about Tribunal hearings on marae, see Kawharu, 2008.

44 Note O'Sullivan's 2022 discussion of hapū and iwi as independent political communities. As Mark Hickford has pointed out, in the 1846 'Bill to make further provision for the government of the New Zealand Islands', 'separate political-institutional and legal areas of competence' were entertained for 'particular districts' where the 'laws, customs and usages of the aboriginal or native inhabitants of New Zealand, so far as they are not repugnant to the general principles of humanity' might be 'maintained for the government of themselves' (Hickford, 2018, p.689). The vexed challenge then, as now, is how to balance ancestral with contemporary tikanga and ideas of justice.

45 The former attorney-general, Chris Finlayson (interviewed on RNZ, 15 August 2022), has noted a terminological confusion between 'co-governance' and 'co-government', terms that readily slide from one to the other, despite their very different constitutional implications. 'Parallel governance' avoids that confusion.

46 For examples of the image of te Tiriti as a 'bridge', see statements by the prime minister, Jacinda Ardern, and the minister for Treaty relations, Kelvin Davis (Ardern, 2022; Moir,

2022).

47 O'Sullivan argues strongly against this kind of aggregation, proposing instead that a principle of 'subsidiarity' should 'protect against iwi being absorbed by the modern construction "Maori", hapu being absorbed by iwi, and against whanau being absorbed by hapu' (O'Sullivan, 2007, ms, p.88).

48 This critique of bilateral polarities is decisively prefigured by O'Sullivan (2007), especially chapter one, 'Assimilation, biculturalism and rangatiratanga', although he focuses on 'bicultural' rather than 'bi-racial' approaches.

49 E.g., 'The government will set up a process for the Crown to determine how it should partner with Māori in a Tiriti-based constitution' (Charters et al., 2019, p.9).

50 Again, Tamati Kruger offers a trenchant critique: 'After 178 years of colonisation, we are a true reflection of the Crown ourselves, and often, we create imposter tikanga by giving Māori words to Crown infrastructure and to Crown models, and then pretending its Māori all of a sudden, ... and we misinterpret terms like tangata whenua, mana whenua as new code words for "it's mine" and "I own it", when these terms do not mean that at all' (Kruger, 2018).

51 For recent examples, see Hapukuniha Karaka of Rangitukia, who told the Waitangi Tribunal about two sons of the local saddler, the only Pākehā in the area, who grew up speaking Māori and joined the Maori Battalion in World War Two (affidavit, Waitangi Tribunal, WAI 272), while Moana Jackson, in the 2022 documentary film Moana Jackson: portrait of a quiet revolutionary (dir. Moana Maniapoto), described how his mother insisted on registering her Pākehā friend to vote in a Ngāti Kahungunu tribal election.

52 For some of the challenges faced in American Indian contexts, see Jacobs, 2006.

53 These complexities are explored in a growing literature, including Haze, 2019; Wanhalla, 2010; Kukutai, 2007; O'Regan, 2001; Anderson, 1991.

54 Because of these complexities, 'racial' or 'ethnic' self-identification is highly relational, and often shifts in different contexts and over time: see Carr et al., 2022.

55 Responses range from anti-Māori racist comments, to Pākehā commentators being urged to 'stay in their lane', although these matters affect all New Zealanders. Like the parallel 'train tracks' in demography, the idea of race-based 'lanes' in thought and debate reifies and essentialises 'racial' divisions. See Le Bas, 2018, p.61 on the dangers of this kind of binary polarisation, and the earlier discussion in this article of 'pernicious polarisation', with its intensifying reciprocal dynamic of aggression leading to a breakdown in social relations. When this kind of critique happened in the 1980s, it led the historian Michael King to withdraw from engagement with Māori and propose that 'Pākehā' (i.e., 'European New Zealanders') were also 'indigenous', although this view was strongly contested (King, 1985). For an incisive commentary on this 'settler–native' dynamic, see Mamdani, 1998.

56 As many lawyers would agree, the law is dominated by binary oppositions (in court, the polarity between prosecution and defence; in styles of argument and judgments) and habits of mind.

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Appendix: Te Tiriti o Waitangi, transcript from parchment

Ko Wikitoria te Kuini o Ingarani i tana mahara atawai ki nga Rangatira me nga Hapu o Nu Tirani i tana hiahia hoki kia tohungia ki a ratou o ratou rangatiratanga me to ratou wenua, a kia mau tonu hoki te Rongo ki a ratou me te Atanoho hoki kua wakaro ia he mea tika kia tukua mai tetahi Rangatira – hei kai wakarite ki nga Tangata maori o Nu Tirani – kia wakaaetia e nga Rangatira maori te Kawanatanga o te Kuini ki nga wahikatoa o te Wenua nei me nga Motu – na te mea hoki he tokomaha ke nga tangata o tona Iwi Kua noho ki tenei wenua, a e haere mai nei.

Na ko te Kuini e hiahia ana kia wakaritea te Kawanatanga kia kaua ai nga kino e puta mai ki te tangata maori ki te Pakeha e noho ture kore ana.

Na kua pai te Kuini kia tukua a hau a Wiremu Hopihona he Kapitana i te Roiara Nawi hei Kawana mo nga wahi katoa o Nu Tirani e tukua aianei, amua atu ki te Kuini, e mea atu ana ia ki nga Rangatira o te wakaminenga o nga hapu o Nu Tirani me era Rangatira atua enei ture ka korerotia nei.

Ko te tuatahi

Ko nga Rangatira o te wakaminenga me nga Rangatira katoa hoki ki hai i uru ki taua wakaminenga ka tuku rawa atu ki te Kuini o Ingarani ake tonu atu - te Kawanatanga katoa o o ratou wenua.

Ko te tuarua

Ko te Kuini o Ingarani ka wakarite ka wakaae ki nga Rangatira ki nga hapu – ki nga tangata katoa o Nu Tirani te tino rangatiratanga o o ratou wenua o ratou kainga me o ratou taonga katoa. Otiia ko nga Rangatira o te wakaminenga me nga Rangatira katoa atu ka tuku ki te Kuini te hokonga o era wahi wenua e pai ai te tangata nona te wenua – ki te ritenga o te utu e wakaritea ai e ratou ko te kai hoko e meatia nei e te Kuini hei kai hoko mona.

Ko te tuatoru

Hei wakaritenga mai hoki tenei mo te wakaeetanga ki te Kawanatanga o te Kuini – Ka tiakina e te Kuini o Ingarani nga tangata maori katoa o Nu Tirani ka tukua ki a ratou nga tikanga katoa rite tahi ki ana mea ki nga tangata o Ingarani.

[signed] W. Hobson Consul & Lieutenant Governor

Na ko matou ko nga Rangatira o te Wakaminenga o nga hapu o Nu Tirani ka huihui nei ki Waitangi ko matou hoki ko nga Rangatira o Nu Tirani ka kite nei i te ritenga o enei kupu, ka tangohia ka wakaaetia katoatia e matou, koia ka tohungia ai o matou ingoa o matou tohu.

Ka meatia tenei ki Waitangi i te ono o nga ra o Pepueri i te tau kotahi mano, e waru rau e wa te kau o to tatou Ariki.

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Bonnie Holster and Matthew Castle

Between Innovation and Precedent

the Treaty of Waitangi exception clause in Aotearoa New Zealand's free trade agreements

Abstract

New Zealand includes a Treaty of Waitangi exception clause in all its free trade agreements. The clause aims to protect Māori interests arising from the government's Treaty of Waitangi obligations. But despite changes to New Zealand's trade agreements, an evolving relationship between the New Zealand government and Māori, and debate over the adequacy of the clause, the exception clause has remained unchanged for 20 years. We suggest that the reproduction the same text helps New Zealand negotiators to credibly argue that inclusion of the clause is required for domestic political reasons. Yet this textual stability also hinders innovation. At the international level, FTA partners might balk at any widening of policy discretion afforded by a revised clause. At the domestic level, revising the clause would require difficult debate over the extent of appropriate protections for Māori in New Zealand's trade agreements. As calls to change the exception clause grow, New Zealand trade policymakers will need to carefully balance innovation and precedent.

Keywords trade policy, Treaty of Waitangi, path dependence, New Zealand, Crown–Māori relations

Since the 2001 agreement with Singapore, the Treaty of Waitangi exception clause has featured in all of Aotearoa New Zealand's free trade agreements (FTAs). The Treaty exception is designed to ensure that an FTA's terms do not prevent the New Zealand government from granting preferential treatment to Māori in areas relating to the FTA, including as part of meeting its obligations to Māori under the Treaty of Waitangi (see Figure 1). The clause is a 'general exception' to FTA rules, as it provides an allowable escape from commitments in any of the issue-areas

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covered by the FTA. From the perspective of Aotearoa's Crown–Māori relations, such a clause would seem an important part of the Crown's protection of Māori interests in relation to international trade and a reinforcement of Crown commitments to Māori under the Treaty of Waitangi.

Yet, since its inception, the clause has attracted controversy. The (opposition) National Party opposed its first use in the Singapore FTA, with leader Jenny Shipley vowing to rescind the clause should National win the next election (Hoadley, 2002, p.50). In 2015, backlash from the New Zealand public and Māori against the Trans-Pacific Partnership (TPP) included concern about the adequacy of the government's ability to protect Māori rights and interests. Debate over the Trans-Pacific Partnership culminated in a Waitangi Tribunal inquiry (Waitangi Tribunal, 2016). Meanwhile, New Zealand has begun to include 'indigenous trade' clauses and chapters in its FTAs, indicating the growing importance of acknowledging, advancing and protecting Māori economic and trade interests. The 2022 New Zealand-United Kingdom and New Zealand-European Union FTAs go furthest in this regard.[1] Despite these shifts in the domestic social and political context and questions over the adequacy of the exception, the clause has remained almost identical since 2001.

There have been several legal analyses of the Treaty exception (Kawharu, 2016, 2020), as well as evaluation by the Waitangi Tribunal (2016, 2021). There has been less discussion of the clause from a politics perspective. Given debate over the adequacy of the clause and the growing incorporation of Māori economic and trade interests in FTA negotiations, we ask two questions: why was the Treaty exception developed; and why has it remained unchanged? We suggest that the reproduction of the same text helps New Zealand negotiators to credibly argue that inclusion of the exception is required for domestic political reasons. But textual stability also hinders innovation. At the international level, FTA partners might challenge a widening of the policy discretion afforded by a broader clause. At the domestic level, retention of the status quo sidesteps debate over the extent of appropriate protections for Māori in New Zealand's trade agreements. These competing incentives for change and stasis mean New Zealand trade policymakers are caught between innovation and precedent. We discuss New Zealand's FTA programme and the creation of the Treaty exception, before developing our argument.

Figure 1: The Treaty of Waitangi exception clause, as proposed during negotiations for the Digital Economic Partnership Agreement (Ministry of Foreign Affairs and Trade, 2019)

Text for DEPA: Treaty of Waitangi

1. Provided that such measures are not used as a means of arbitrary or unjustified discrimination against persons of the other Parties or as a disguised restriction on trade in goods, trade in services and investment, nothing in this Agreement shall preclude the adoption by New Zealand of Maori in respect of matters covered by this Agreement, including in fulfilment of its obligations under the Treaty of Waitangi.

2. The Parties agree that the interpretation of the Treaty of Waitangi, including as to the nature of the rights and obligations arising under it, shall not be subject to the dispute settlement provisions of this Agreement. [Cross reference TBC] shall otherwise apply to this Article. A panel established under [Cross reference TBC] may be requested to determine only whether any measure referred to In paragraph 1 is inconsistent with a Party's rights under this Agreement.

New Zealand's FTA programme

New Zealand's first contemporary FTA was the 1983 Australia–New Zealand Closer Economic Relations and Trade Agreement (ANZCERTA, commonly known as CER). CER marked a policy shift by the Ministry of Foreign Affairs and Trade towards unilateral, bilateral and regional liberalisation as complements to multilateralism, the latter having failed to produce meaningful agricultural market liberalisation (Castle, Le Quesne and Leslie, 2016, p.50; Ministry of Foreign Affairs and Trade, 1993; Leslie, 2015). New Zealand subsequently negotiated a comprehensive trade agreement with Singapore between 1999 and 2000, followed by agreements with Thailand (2005), Chile and Brunei (and Singapore again) in the P4 Agreement (2006), China (2008), Malaysia (2010), Hong Kong (2011), ASEAN (jointly with Australia, 2012), Taiwan (2013), South Korea (2015), 11 other Asia-Pacific partners in the Trans-Pacific Partnership (signed in 2016; renamed and slightly revised as the 2018 Comprehensive and Progressive Agreement on Trans-Pacific Partnership (CPTPP) following the withdrawal of the United States),[2] members of the Regional Comprehensive Economic Partnership (RCEP, 2020),[3] Pacific Island countries in the trade and development-focused Pacific Agreement on Closer Economic Relations Plus (PACER Plus),[4] members of the Digital Economic Partnership Agreement (DEPA, 2021),[5] the United Kingdom (2022) and the European Union (2022).

Several themes are evident in New Zealand's trade politics. First, trade negotiators have enjoyed broad public support for liberalisation. New Zealand is a small country whose economic prosperity has relied on market access for its exports, and trade negotiations have largely been a bipartisan affair between the major National and Labour parties, although smaller parties (notably the Green Party) have opposed trade agreements, and bipartisanship was eroded during the TPP

negotiations (Hoadley, 2017; Kawharu, 2016, p.295).

Second, in line with global trends (Dür, Baccini and Elsig, 2014; Milewicz et al., 2018), New Zealand's FTA commitments have become increasingly 'deep', addressing behind-the-border, or non-tariff, issues. The 1983 CER agreement was a comprehensive, but standard, agreement to liberalise trade in goods. Subsequent agreements have become increasingly ambitious in their effort to address non-tariff barriers to trade (in goods and services) and investment.

Third, domestic opposition to further liberalisation has largely focused on these new, behind-border issues, and negotiators have sought to balance liberalisation of trade and investment with safeguards to ensure domestic policy space (Kawharu and Nottage, 2017, pp.468–9). This increasing reach of FTAs behind borders has animated trade politics in New Zealand, as it has globally (Castle and Pelc, 2019). Illustratively, investor–state dispute settlement (ISDS) has become one of the most hotly contested issues in the contemporary trade regime (Pelc, 2017), and there was considerable domestic opposition to the inclusion of ISDS in the investment chapter of the 2015 Korea–New Zealand FTA. New Zealand negotiators reportedly opposed the clause, but Korean negotiators insisted on its inclusion, citing the need for consistency with their prior FTAs (Foreign Affairs, Defence and Trade Committee, 2015, p.5). ISDS, as well as other non-tariff issues, such as indigenous flora and fauna and digital trade, were also of central concern for opponents of the TPP, including claimants before the Waitangi Tribunal.

Development of the Treaty exception

The development of the Treaty of Waitangi exception clause can be seen in the context of the desire to balance liberalisation with safeguards for domestic policy space. As New Zealand's modern FTA negotiation programme was being launched in the late 1990s, another set of negotiations was gaining momentum: those to settle breaches of the Treaty of Waitangi. Following the 1985 decision to allow the Waitangi Tribunal to hear historic Treaty claims and the growing number of claims in the early 1990s, policymakers were increasingly aware of a shifting domestic political landscape in which the precise nature of the relationship between Crown and Māori was evolving, and in which the political import of the Treaty was still becoming apparent. For instance, a 1990 Waitangi Tribunal report (WAI 26, WAI 150) recommended the provision of FM radio frequencies for Māori broadcasting in Auckland and Wellington; parliamentary debate in 2000 pointed to preferential access for Māori to the radio spectrum as rationale for the 'more favourable treatment' wording of the exclusion clause (although, as noted below, this wording has an antecedent in the GATS).[6]

The National Party opposition argued that Māori interests arising out of governmental Treaty obligations would be better managed within a domestic setting, rather than through international rules ...

In this context, policymakers needed to ensure that they did not unintentionally limit the Crown's discretion, since '[t]he Treaty is … useful as a political framework for self-determination *only to the extent that governments are effective agents of change*' (O'Sullivan, 2008, p.319, emphasis added). The desire to retain policymaking discretion was evident as early as the mid-1990s. The contemporary clause dates to the late 1990s and the (re)launch of New Zealand's FTA programme with Singapore (Hoadley 2002, pp.48–50; Kawharu, 2020, p.278). But it was foreshadowed in New Zealand's schedule of commitments to the World Trade Organization General Agreement on Trade in Services (GATS), which carves out as a general exception to national treatment obligations 'current and future measures at the central and sub-central levels according more favourable treatment to any Maori person or organisation in relation to the acquisition, establishment or operation of any commercial or industrial undertaking' (World Trade Organization, 1994, p.6).

The National Party opposition argued that Māori interests arising out of governmental Treaty obligations would be better managed within a domestic setting, rather than through international rules (Kawharu, 2020, p.279, note 1). Yet momentum had built up around the development of the exception clause, notably during a period of active consultation between the government and Māori, advocated by Māori. Consultation hui were held in relation to multilateral and bilateral trade agreements (including the Singapore FTA), and in 2000 Cabinet approved an engagement strategy with Māori on international treaties (jointly developed by Te Puni Kōkiri and the Ministry of Foreign Affairs and Trade) (Jones et al., 2015). The strategy acknowledged Māori rights and interests in areas such as foreign investment, genetic resources, intellectual property, flora and fauna, use of natural physical resources and indigenous rights. Subsequent to this engagement, the modern Treaty exception was developed and debuted in the New Zealand–Singapore FTA in 2001.

While the Treaty exception has been replicated in all New Zealand FTAs, it has also attracted criticism. Claims were lodged against the New Zealand government through the Waitangi Tribunal during the domestic backlash against the Trans-Pacific Partnership.[7] The issues before the Tribunal were:

- whether or not the Treaty of Waitangi exception clause is indeed the effective protection of Māori interests it is said to be; and

- what Māori engagement and input is now required over steps needed to ratify the TPPA (including by way of legislation and/or changes to Government policies that may affect Māori). (Waitangi Tribunal, 2016, pp.2–3)

The government contended that the TPP had minimal effect on Māori interests as they were not central to the TPP, and that where Māori interests were impacted, it affected only interests held as investors, businesses and landowners. The Crown stated the TPP was 'a natural progression from previous trade agreements, albeit on a larger scale' (ibid., p.3), and Crown counsel maintained that the Treaty exception would provide a sufficient degree of protection for Māori interests if a legal challenge arose through ISDS. Meanwhile, the Māori claimants argued that the TPP differed significantly from other international treaties, which could be prejudicial to Māori. Claimants were also concerned that 'entry into the TPPA will diminish the Crown's capacity and willingness to fulfill its Treaty obligations to Māori' and worried about 'the potential chilling effect such actual or potential litigation may have on Government action' (ibid, p.34).[8]

While the Crown maintains that the Treaty exception provides sufficient protection, legal experts have questioned this. Kawharu has argued that the Treaty exception is flawed because the meaning of 'more favourable treatment to Māori' is unclear, as there is no 'relevant comparator' available for proposed measures, and it is uncertain whether the Treaty exception would protect Māori interests if faced with ISDS proceedings. Moreover, the wording of the exception restricts its scope, and may not cover measures that are 'distinct' but do not equate to 'more favourable treatment' to Māori. Finally, the term 'more favourable treatment' fails to recognise the status of Māori as a Treaty partner (Kawharu, 2016, pp.304–6).

The Tribunal decided that, in its current form, the Treaty exception does provide 'a reasonable degree of protection to Māori interests by the TPPA'. However, the Tribunal also expressed its concerns that the government 'had misjudged the nature, extent and relative strength of Māori interests put in issue under the TPPA' (Waitangi Tribunal, 2016, pp.51–4). While it made no recommendations, the Tribunal encouraged dialogue between the New Zealand government and Māori to establish procedures if an ISDS dispute were to eventuate, which would require the Treaty exception (ibid., p.57). This position was largely reiterated in a subsequent (2021) Tribunal report.

The Waitangi Tribunal (and some legal experts) commended the New Zealand government on the Treaty exception in the first instance, and in particular on ensuring its acceptance during the TPP negotiations ...

Why no change to the Treaty exception?

Why has the Treaty exception remained virtually the same, despite contention over the adequacy of the clause and substantial innovation elsewhere in New Zealand's tree trade programme? We argue that while there are demands for change to the clause (as referenced above), there are also considerable costs associated with changing it. The concept of 'path dependence' provides a useful framework for understanding the challenges of changing the Treaty exception, and insights from new research on international treaty drafting suggest how the power of established legal text supports countries' bargaining positions.

Paul Pierson has described how (even imperfect) policy may be replicated when diverting from a chosen policy path is perceived as too costly (Pierson, 2000, p.252). Pierson emphasises the notion of increasing returns: that is, the longer a policy is in place, the more the beneficiaries of that policy stand to lose from change. This accords with recent research on trade negotiations. States replicate (often verbatim) prior text that aligns with domestic preferences (Allee and Elsig, 2019). Indeed, prior legal text can create a powerful 'precedent' that can shape negotiating outcomes (Castle, 2022; Crump and Moon, 2017), for instance by acting as a focal point and signalling to negotiation partners what will be agreeable to domestic audiences (Castle, 2022, pp.5–7).

We see the power of precedent at play with the Treaty exception. First, there is ongoing support (albeit qualified in some quarters and tacit in others) for the New Zealand government's approach. The Waitangi Tribunal did not call on the New Zealand government to revise the clause, which has allowed the retention of the Treaty exception in its current form. There have been no further Tribunal claims lodged involving the Treaty exception; thus there is no imminent threat of domestic litigation to compel the New Zealand government to review the clause. Indeed, it is noteworthy that the New Zealand government has been successful in establishing the clause and in ensuring its replication (presumably against at least some degree of reluctance from trading partners). The Waitangi Tribunal (and some legal experts) commended the New Zealand government on the Treaty exception in the first instance, and in particular on ensuring its acceptance during the TPP negotiations, 'given the number and diversity of the participating states' (Waitangi Tribunal, 2016, p.43).

Precedent, and the re-use of established text, helps to explain New Zealand negotiators' success in retaining the Treaty exception. In 'non-papers' prepared for

FTA partners, Ministry of Foreign Affairs and Trade negotiators emphasise how the Treaty exception is a non-negotiable aspect of New Zealand's FTA practice, and stress that the clause has remained the same in all New Zealand FTAs. The relevant paper for the DEPA negotiations, for instance, notes that 'the text used for DEPA is the same as text in the P4, CPTPP and Singapore–New Zealand FTA', and that all 'of New Zealand's free trade agreements (FTAs) since 2000 include a provision (referred to as the "Treaty of Waitangi exception")' that addresses the need for New Zealand to 'retain flexibility for successive governments to implement domestic policies of their choice in relation to Māori, including in fulfilment of the Crown's obligations under the Treaty, without being obliged to offer equivalent treatment to persons of other countries' (Ministry of Foreign Affairs and Trade, 2019). Such appeals to precedent and to genuine domestic preferences strengthen New Zealand negotiators' hand when pushing for inclusion of a clause that provides an unparalleled degree of policy discretion for New Zealand: no other country has a comparably broad general exception to their trade commitments.

Were New Zealand negotiators to negotiate a new (even broader) clause, they would not be able to rely on the power of precedent; opening up the exception's wording to negotiation might enable other countries to 'impos[e] changes which might be harmful to Māori interests' (Waitangi Tribunal, 2016, p.37). As Crown counsel explains, precedent is central to acceptance of the clause during negotiations: New Zealand negotiators '[use] that previous acceptance by other states to encourage further states to accept [the clause]' (ibid.). There may additionally be some risk that amending the clause would cast uncertainty about the nature of the protections afforded by the previous wording.

There are costs to change associated with domestic politics as well. The 2011 WAI 262 Tribunal report *Ko Aotearoa Tēnei* established that the New Zealand government should achieve 'a reasonable degree of protection [for Māori interests] when those interests are affected by international instruments entered into by the New Zealand Government' (Waitangi Tribunal, 2011, 2016, p.8). Yet there is lively debate over the exact mechanisms by which such protection should be achieved. Indeed, proposed changes to the Treaty exception range from relatively small amendments aimed at reducing ambiguity and clarifying scope (suggested by Amokura Kawharu) to a complete rejection of the current clause and replacement with a new clause that even omits the exception's 'chapeau', which establishes a good faith obligation on the use of the clause (suggested by Jane Kelsey: see Waitangi Tribunal, 2016, pp.35–7). Given the uncertainty of any process to revise the clause, governments may wish to avoid re-politicising trade negotiations and the protection of Māori interests in New Zealand's trade agreements.

> As the response to WAI 262 (in particular) further emerges, New Zealand negotiators may need to overcome the barriers to changing the established Treaty exception text to ensure the guarantee of those rights and interests.

A changing Crown–Moāri relationship in trade?

Thus far we have discussed how precedent both supports the continued inclusion of a Treaty exception, yet also limits change to the clause. We now offer two considerations regarding changes to the Crown–Māori relationship in trade, one positive and one cautionary. First, New Zealand's approach to including Māori economic and trade interests does appear to be changing in ways that may (provided this continues) allow for a more meaningful incorporation of Māori interests beyond the general carve-out of the Treaty exception. There has been an increase in consultation with Māori to identify Māori economic and trade interests, notably in the context of FTA negotiations with the EU and with the UK. This aligns with recommendations from the Waitangi Tribunal (2016), which called for more meaningful Crown–Māori engagement, in the spirit of the Treaty of Waitangi principle of partnership. There has also been a more substantive incorporation of Māori economic and trade interests in the FTAs with the UK and the EU.

While a full evaluation of those FTAs is beyond the scope of this article, there is explicit emphasis on the importance of the Treaty of Waitangi as a founding document for New Zealand in the agreement preambles, recognition of the importance of Māori leadership and the Māori economy, and acknowledgment of the (disproportionate) challenges faced by Māori in accessing international trade and economic opportunities. The agreements have chapters devoted to Māori trade and economic cooperation, which call for various cooperation activities aimed at improving the ability of Māori-owned enterprises to make use of the FTAs. Chapter 15 of the UK FTA (on digital trade) notes the 19 November 2021 release of the Waitangi Tribunal's WAI 2522 report and affirms that the New Zealand government will engage with Māori to ensure Treaty of Waitangi obligations are met and that Māori can 'exercise their rights and interests' in the context of any review of chapter 15. The digital trade

chapter of the EU FTA retains this commitment, but also notes an exception for digital trade measures relating to New Zealand's protection or promotion of 'Māori rights, interests, duties and responsibilities' (including pertaining to mātauranga Māori).[9] We view this sort of additional, targeted protection as a welcome complement to the general Treaty exception.

Second, and as a counterpoint, we discourage complacency about the fact that New Zealand has not yet had to rely on the Treaty exception in a trade dispute. As the Waitangi Tribunal has cautioned, 'given the long-term nature of trade and investment treaties, foresight is needed to ensure that the Treaty exception clause properly responds to the changing international context and the particular agreement under negotiation' (2016, p.37). Indeed, the WAI 262 report was issued by the Tribunal in response to claims made by Māori around indigenous flora and fauna, mātauranga Māori (Māori traditional knowledge) and intellectual property issues. The Tribunal made recommendations across many different areas where Māori interests are affected by Crown policy. But implementation of the WAI 262 recommendations across government has been slow and uneven. If the implementation of WAI 262 progresses further in changing Crown policy, and if the implementation is considered discriminatory against foreign parties, this could set in motion potential legal challenges against New Zealand. A test of the Treaty exception may be yet to come. Such considerations may warrant pre-emptive revision of the Treaty exception to ensure that it covers actions in line with the changing Crown–Māori relationship, including in previous FTAs.

Conclusion

New Zealand's free trade agreements have evolved over the last 20 years. In contrast, the Treaty of Waitangi exception clause, which purports to protect Māori rights and interests in trade agreements, has remained unchanged. We argue that the New Zealand government simultaneously benefits from and is hindered by the precedent that the unchanged clause constitutes. There has been considerable 'positive feedback' to support continued use of the clause. There is no impending threat of further litigation from Māori interest groups against the government for the Treaty of Waitangi exception clause; the Waitangi Tribunal has offered (qualified) support for the clause; there have been no international legal challenges that require reliance on the Treaty exception; and the re-use of prior language helps New Zealand negotiators to include what remains an unrivalled general exception.

Continued reliance on established text stands negotiators in good stead. Yet government policy as it relates to Māori rights and interests is still developing. As the response to WAI 262 (in particular) further emerges, New Zealand negotiators may need to overcome the barriers to changing the established Treaty exception text to ensure the guarantee of those rights and interests. In doing so, the New Zealand government will need to carefully navigate the space between precedent and innovation.

1 The NZ-UK FTA, signed on 28 February 2022, included a dedicated Māori trade and economic cooperation chapter, and New Zealand's Ministry of Foreign Affairs and Trade notes that Māori 'economic and trade interests were prioritised in negotiations and are reflected across the Agreement' (Ministry of Foreign Affairs and Trade, 2022).
2 The original TPP members comprised Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States and Vietnam. The UK is negotiating to accede to the CPTPP, and China and Taiwan have both applied to initiate negotiations.
3 RCEP comprises ASEAN plus five of its prior FTA partners, Australia, China, Japan, New Zealand and the Republic of Korea, following the withdrawal of India from negotiations in 2019.
4 Parties to PACER Plus include Australia, the Cook Islands, Kiribati, Niue, Samoa, Solomon Islands, Tonga and New Zealand.
5 DEPA includes Chile, New Zealand and Singapore.
6 *Parliamentary Debates (Hansard)*, vol. 588, 7 November 2000, https://www.parliament.nz/en/pb/hansard-debates/historical-hansard/#2000-2009.
7 For critical analysis of TPP see, inter alia, the expert paper series at TPP Legal: https://tpplegal.wordpress.com/.
8 'Frivolous' claims by foreign investors have risen markedly; such claims may be lodged precisely with the aim of inducing a chilling effect on legislation (Pelc, 2017).
9 At the time of writing, the texts of the EU FTA await legal revision.

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Michael Bunce and Allan Freeth

Looking Further and Deeper into Environmental Protection, Regulation and Policy Using Environmental DNA (eDNA)

Abstract

DNA sequencing technologies are transforming how environments are monitored. In this article, we pose the question: is environmental DNA (eDNA) the tool that Aotearoa New Zealand needs, but does not yet realise it does? The step change with eDNA is that genetic 'breadcrumbs' left behind in the environment can identify every living thing, from microbes to mammals, thus providing a more nuanced and holistic lens on ecosystems. Using eDNA, we can explore the biological networks that underpin healthy environments. Here we explore whether changes in policy setting, guidance, or pathways for uptake of eDNA are needed. Can eDNA help us make better decisions, inform policy and protections, track restoration, and act as a deterrent to reduce environmental harm?

Keywords eDNA, biomonitoring, environmental protection, environmental policy, ecosystems

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The field of genetics is developing quickly

The use of real-time genomics has played a central role in Aotearoa New Zealand's ability to track and trace outbreaks of Covid-19 around the country (Jelley et al., 2022). Just a few years ago, this would not have been possible. To put the speed of change into context, the first-ever human genome was announced in the year 2000, having taken about a decade to be completed at a cost of approximately US$4 billion (International Human Genome Sequencing Consortium, 2001). The same can be done now for about US$1,000 using a benchtop instrument the size of a microwave. While these DNA sequencing instruments that unravel the A, T, C and Gs[1] are transforming medical genomics and tracking the evolution of viral variants, they are also, using environmental DNA (eDNA), catalysing a change in how environments are monitored, protected and restored.

Pick up any recent New Zealand state of the environment report (e.g., Ministry for the Environment and Statistics New Zealand, 2022) and read it alongside the recent Intergovernmental Panel on Climate Change (IPCC) report (IPCC, 2021) – it's a sobering read. New Zealand's land and ocean ecosystems are increasingly under stress, and we are all to blame, directly or indirectly. We don't contend that we can live without impact, but most of us, Māori and Pākehā alike,

would agree that there are environmental bottom lines that have become, at best, a little fuzzy and, at worst, ignored.

At the core of this problem is the fact that it is difficult to make decisions when you cannot measure or track biotic impacts, especially when relating to ecosystem health. In his 2019 report Simon Upton, the Parliamentary Commissioner for the Environment, lamented the fragmented nature of environmental reporting across the motu and advocated for dedicated research funding and more joined together thinking (Parliamentary Commissioner for the Environment, 2019). How can our team of five million respond to this challenge? While arguably not as immediate as a pandemic scenario, the ongoing decline in ecosystem health is also in need of a 'surveillance strategy' and science-informed interventions to limit, and perhaps reverse, impacts.

For hundreds of years, the way we have monitored the animals and plants around us has followed, through necessity, a 'catch, look and (sometimes) kill' approach.

From morphology to molecules

For hundreds of years, the way we have monitored the animals and plants around us has followed, through necessity, a 'catch, look and (sometimes) kill' approach. We literally catch our target and look at it via field surveys (or, more recently, using cameras). This approach has served us well for centuries as we have attempted to catalogue the huge diversity of life on our planet. However, such an approach has limitations – among them, the need to become an expert across a wide range of taxa. While the 'twitchers' out there might be able to identify any New Zealand bird from a hundred paces, such a skill is beyond most people. However, those same expert twitchers would struggle to identify insects from a nearby stream. Increasingly, we want to look at a wide spectrum of biodiversity at a given site (the basis of ecosystem-based monitoring, EBM), but do not have the expertise to identify everything we might find. Added to this, some organisms can be difficult to identify without sacrificing them. Enter eDNA.

The morphological features of an organism are not its only identifiers; inside the cells of each organism lie its genetic code. Akin to a barcode on any supermarket item, there are DNA regions (known as DNA barcodes) that can definitively distinguish one species from another. From some parts of our genomes we can tell individuals apart (for example, forensic DNA analysis conducted at crime scenes), but DNA barcoding works at a higher level than this: it is about telling species apart. In most cases, a small segment of DNA just a few hundred A, T, C and Gs in length can, for example, distinguish all the mammals in New Zealand, from native bats to invasive stoats. As an example, here is a short, but unique, DNA barcode for the long-tailed bat (pekapeka-tou-roa): TTTAATTAACTAACTTACATGACCATA TACACTCTCTATAAGAAATAACAC AAACATGATTAAGTTAGCAATTTAG – which is very different from that of any bird, despite the bat controversially winning the 2021 Bird of the Year contest (Forest & Bird, 2021).

By combining the power of morphology, which sets up the taxonomic playing field, with insights from DNA, we have developed a pathway to building more complete inventories of biota. The importance of this is paramount: put simply, we cannot confidently protect what we cannot measure. Moreover, if we measure the wrong things and make decisions on the basis of these data, we might not be doing the environment any favours.

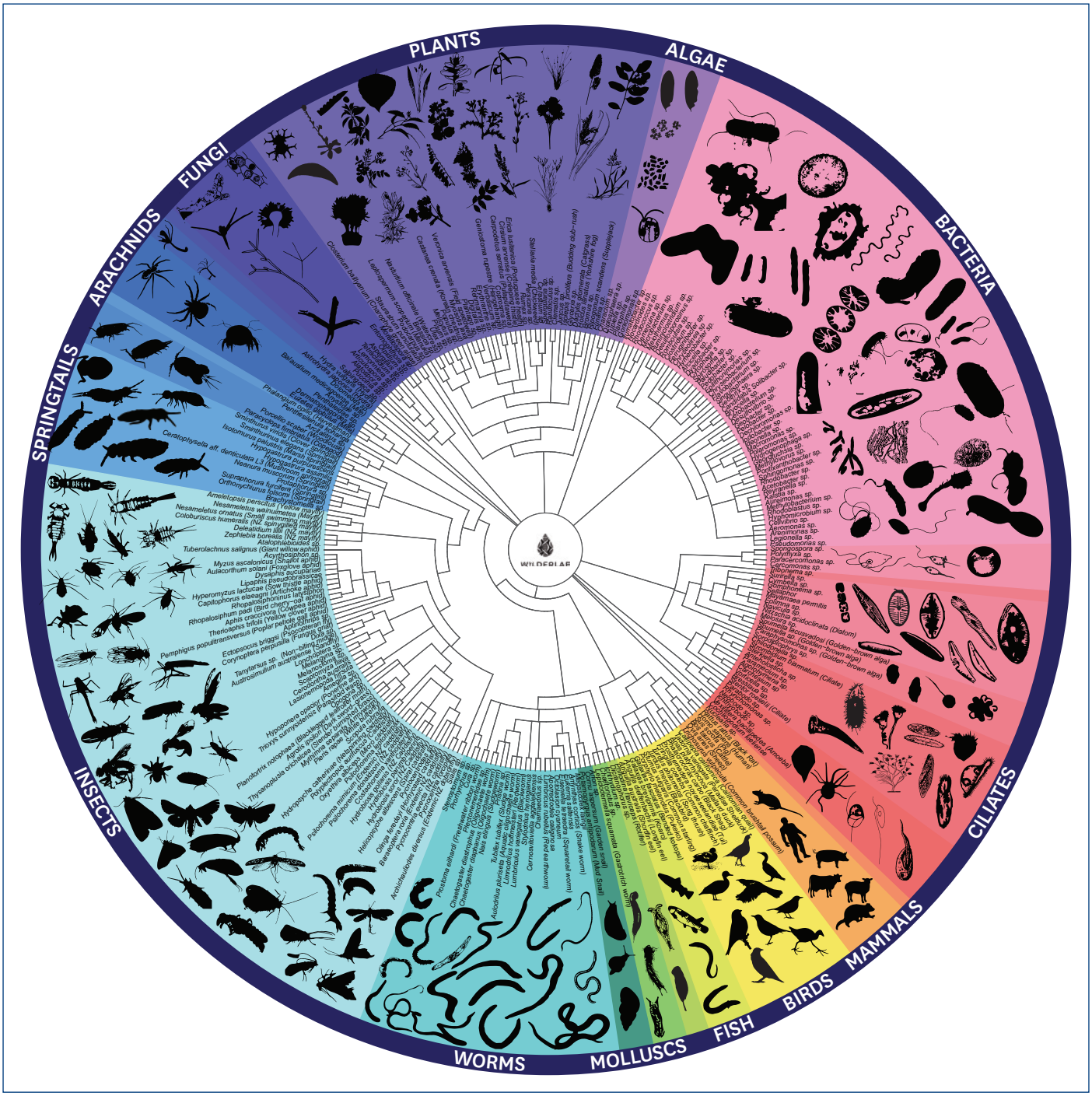
The use of distinct species as biological indicators has long been established; for example, the often-cited canary in the coalmine idiom. But as we broaden our ability to identify taxa, the question of what combinations of species are the best barometers (across a variety of potential disturbances) comes into play. The easy solution is to measure everything; however, until eDNA came on the scene, this was impractical from both logistical and financial perspectives. While eDNA still can't measure 'everything', it can measure a wide diversity of biota from which many indicators can be selected and then refined. Figure 1 provides a window into what is now possible using eDNA recovered from just a few litres of river water. While this 'tree of life' does not capture all the diversity present in the waterway (the bacteria and viruses are missing, but could be added), it gets far closer to an ecosystem-wide picture, and thus opens the potential for us to be able to measure, monitor and better understand the biological networks that underpin a range of environments.

The 2020 National Policy Statement for Freshwater Management specifically emphasises this need, in stating that we must 'recognise the interconnectedness of the whole environment, from the mountains and lakes down the rivers to hāpua (lagoons), wahapū (estuaries) and to the sea' (New Zealand Government, 2020, p.13). Environmental DNA has the ability to respond to this challenge, but for it to be utilised to its full potential, an overhaul of existing monitoring approaches and reporting is likely required.

Why we need eDNA

The reason eDNA is gaining traction around the globe (Compson et al., 2020) is because it places a 'Swiss army knife' within our environmental monitoring tool kit. Like all tools eDNA has limitations, but it also has multifaceted applications. Take, for example, the scenario where the Environmental Protection Authority (EPA) might want to explore the impact of a given chemical, 'X', on the environment. While it might be straightforward to measure the concentration of chemical X in, for example, a river, the more nuanced (and biologically meaningful) approach might be to explore how the biota of

Figure 1: An eDNA 'tree of life' recovered from 6 litres of water from Pāuatahanui stream by the Mountains to Sea Wellington educational community group (sampled on 15 April 2022 at the coordinates –41.098943, 174.990792)



Source: Wilderlab

that river is changing in response to the rising amount of chemical X. For example, maybe chemical X is ecotoxic to one type of insect that is a core food for a native fish. Alternatively, it would be possible to use eDNA to rapidly detect the point at which a given ecosystem reaches a chemical tipping point that might be detrimental to the biota and/or the underpinning food webs.

To cite a real-world example, researchers at the Cawthron Institute have developed an eDNA index of when an aquaculture facility (depositing nutrients into the sea) might be approaching nutrient levels that are detrimental to the surrounding environment (Pochon et al., 2020). These same researchers are also developing a better eDNA biosecurity safety net to quickly detect invasive marine species at our ports (Bowers et al., 2021), and using eDNA to assess the health of lakes across 10% of the lakes within Aotearoa (see the eDNA section of Cawthron's Lakes380 project: Cawthron Institute and GNS Science, n.d.). In the medical space, the Institute of Environmental Science and Research (ESR) has also used eDNA (actually eRNA) to detect SARS-CoV-2 in our waste water to track not just the amount of viral RNA, but also the variants.

As with the science of anthropogenic climate change, the science of eDNA is settled. It is a powerful tool that has the potential to change how we monitor environments around the globe. Why, then,

is there a lack of urgency to deploy this new technology? To extend the climate change analogy (a bit) further, we would suggest that it is largely because it requires some changes in how we do things, and such changes never come easily. Arguably, it involves dialling back some things (for example, morphological-based surveys for benthos or invertebrate surveys for routine monitoring) and learning new ways. It may also involve deploying our environmental monitoring toolkit in a different order.

Environmental DNA, as an environmental monitoring or compliance tool, is fundamentally simpler than having to undertake physical counts or sampling, but requires a technological laboratory 'back end'. Some practitioners, especially those in more traditional environmental consulting, may resist this new technique as a threat because they don't yet have the know-how or connections to the right laboratories to enable processing and interpretation of their samples. The arguments that eDNA technologies are 'unproven' or 'experimental' or that it is 'too early to implement' are ever present. This is the gauntlet that the new techniques often have to run; the international literature (reviewed in Compson et al., 2020) is now full of exemplars that demonstrate the utility of eDNA across a wide variety of applications. There are even moves afoot to make the data much more accessible (Berry et al., 2020). Some good reading on this topic is by the US Environmental Protection Agency's John Darling, who wrote the paper 'How to learn to stop worrying and love environmental DNA monitoring' (Darling, 2020).

There is an urgent need to monitor our environments more efficiently and holistically across many biological domains, including drinking water, waste water, rivers, oceans, soils and air. This requires a significant shake-up in the way we collect samples and generate and store data. New Zealand could be leading the way in this area, but we need to address the fragmented nature of environmental funding and reporting to do so (Parliamentary Commissioner for the Environment, 2019).

Getting the eDNA ball rolling: how best to communicate the eDNA revolution

In the last few years, in the shadow of a pandemic, science has been very much in the public eye; thinking back, perhaps not since the Apollo missions have we witnessed such widespread interest in science. Throughout the Covid-19 pandemic, science has again come into the spotlight, with commentators like Siouxsie Wiles, Michael Baker and Ashley Bloomfield becoming household names. Readers may also remember University of Otago professor Neil Gemmell's mission in 2019 to use eDNA in the hunt for the Loch Ness monster. The aim of Gemmell's project was not really to find monsters; it was to promote eDNA as a technique for exploring and recording biodiversity, using as an example a story that might engage people and excite their imagination.

Environmental DNA, as an environmental monitoring or compliance tool, is fundamentally simpler than having to undertake physical counts or sampling ...

Within central and local government an all-too-common response to our explanations about eDNA technology (and its potential) is that it is 'magic' and 'too good to be true' and 'too experimental'. Rather than undertake further academic research (the literature on eDNA is growing exponentiality) or write position papers, we decided that the first step should be to generate a groundswell of understanding, curiosity and support, with a focus on iwi and hapū. After wānanga on eDNA (including sharing of data) within the EPA's national Māori network, Te Herenga, and with Ngā Kaihautū Tikanga Taiao (the EPA's statutory Māori advisory body), we embarked on a new eDNA-based mode of environmental engagement.

Our approach has been surprisingly simple: we let people use eDNA at a place that means something to them, namely their own backyard. In 2020, the EPA partnered with Wilderlab (a commercial eDNA provider) to launch Wai Tuwhera o te Taiao – Open Waters Aotearoa. It was our attempt to get the eDNA ball rolling. We figured that if eDNA could capture the interest and imagination of the communities, iwi and hapū around New Zealand, it could be the catalyst needed to trigger a wider shift in how we monitor our precious waterways, taonga species and wider ecosystems.

The response to the programme has been overwhelming (you might want to explore an eDNA sample from a waterway close to you – at www.wilderlab.co.nz/explore). It turns out that New Zealanders have the eDNA exploration gene, and you only need to put a syringe filter in their hand for their eDNA journey to begin. Without exception, the eDNA data prompts the next set of questions: Can we get more tests? Can eDNA tell abundance? How long does the DNA last? Can we use eDNA to track changes over time? And can we use it to monitor the impact of 'X'? Anecdotal reports from councils confirm that they are being asked by their communities to adopt these eDNA approaches after gaining a glimpse of the power of eDNA to reveal the huge amount of biological diversity hidden in their own backyards – from taonga species to bacteria that even Google will struggle to provide information on.

Through Wai Tuwhera o te Taiao, the narrative we are hearing is that, when it comes to environmental monitoring, we need to change what we are doing. Every year our report card seems to get worse, yet we think that the status quo will suffice. We advocate that it is time for environmental practices (and policy settings) to catch up with the technologies, including eDNA (and remote sensing), and that these data types need to start informing better predictive models.

In turn, these models should underpin our decision making and rapidly shine a spotlight on the trajectories of the environments we are all charged with protecting. The universality of the genetic

code (A, T, C and G) might also serve to 'defragment' the environmental monitoring system (the challenge set by the Parliamentary Commissioner for the Environment) and get New Zealand to generate datasets that are truly comparable across time and space.

To flesh this out a little more, while there might not be policies or practices that prevent or block the uptake of eDNA, neither is there a clear pathway to promote their uptake. The small footprint of eDNA within the National Science Challenges is a case in point. We advocate that local and central government, including the EPA, signal more clearly a shift towards the uptake of this new generation of biomonitoring tools. The eDNA ball is starting to roll, albeit slowly: recent eDNA pilots led by Waikato and Hawke's Bay regional councils to explore the utility of eDNA as a fish monitoring tool (compared with electrofishing) have been successful (David et al., 2021) and prompted a nationwide pilot at around 45 sites across New Zealand. Likewise, an eDNA 'barometer' has been approved for use in aquaculture environmental monitoring after years of benchmarking by Cawthron (Pochon at al., 2020).

Start with a few drops of water

The poet and philosopher Kahlil Gibran once wrote: 'In one drop of water are found all the secrets of all the oceans.' With eDNA, this vison is coming to life (although experimental design dictates that we need a few more replicates than a single drop). The power of eDNA to profile the biota from a few litres of water is astounding (again, see Figure 1). However, this is nothing compared with the insights that can be obtained from time-stamped data. Put simply, time is often the missing data from our environmental decision making. Without good baseline data, how is it possible to observe change? And how can we attribute a given activity to the change in biota as opposed to natural variation?

The absence of baselines has, without a doubt, clouded many a debate on environmental impact, or lack thereof. The 2021 *Policy Quarterly* article by Mike Joy is a case in point (Joy, 2021). What are the natural levels of nitrate in each of our rivers? How are these numbers changing? Looking through an eDNA lens, we might also ask the question: at what level of nitrate are the underpinning biotic networks beginning to shift, and are these shifts temporary or permanent? Without a time machine, it's impossible to know.

We contend that a set of environmental samples systematically taken through time, where changes in biological communities can be observed, would likely have achieved a more complete picture of the impact of nitrate levels on ecosystem composition/health. We simply do not have water, sediment or air samples, let alone the eDNA profiles, going back in time, but perhaps we could start now? Indeed, we advocate that the archiving or 'biobanking' of environmental samples (for example, filtered water or soil) or the DNA extracts is a key part of any eDNA solution and should perhaps be front and centre of environmental policy reform.

In a move that might surprise some, a number of global resource companies are taking and storing environmental samples for their own baselines so that, in the event of an incident (for example, an oil spill), they can assemble an enhanced picture of the 'before and after' biota. Whether these biological snapshots are for insurance purposes or to truly do the 'right thing' for the environment, there are increasingly compelling arguments for bioarchiving facilities. Should New Zealand be exploring environmental sample archives? Is it part of our journey towards better environmental stewardship and kaitiakitanga?

From decisions to deterrents

On the global stage eDNA is already informing environmental decision making. As a field it is maturing, with an increased understanding of sample collection, storage, workflows, false positives/negatives, contamination and data accessibility. This maturation is needed if eDNA is going to withstand the scrutiny of (often contentious) environmental decision making. The legal scrutiny might even be stepped up a few notches if eDNA were used in legal proceedings in the areas of environmental compliance, monitoring and enforcement.

There is nothing in the current New Zealand environmental legislative framework that we believe will prevent the application of eDNA as a regulatory control or monitoring technique. While there will be a need for policy work around some aspects (e.g., sample archiving), the EPA is seeking participants with environmental footprints to 'sign up' to the use of eDNA for baseline and ongoing monitoring of the impacts of their activities.

In much the same way as forensic DNA analysis has transformed modern criminal investigations, eDNA will, if given sufficient support, funding, and stature as a biomonitoring tool, be a catalyst in transforming the environmental sector.

There are a lot of parallels between eDNA analysis and its genetic cousin, forensic DNA analysis. In much the same way as forensic DNA analysis has transformed modern criminal investigations, eDNA will, if given sufficient support, funding, and stature as a biomonitoring tool, be a catalyst in transforming the environmental sector.

As a technique, forensic DNA analysis started off as a research tool, but was quickly adopted by forensic labs across the globe. Hard lessons were learnt about controls and contamination and the need for standard operating procedures. Over about a decade around the turn of the century, forensic DNA cemented itself as a

cornerstone of the crime-fighting toolkit. Forensic DNA analysis continues to be innovated on, refined, and adapted to the social context in which it is applied.

One final parallel between eDNA and forensic DNA is in the area of deterrents. Research suggests that increasing the likelihood of getting caught for a crime has a bigger impact on future behaviour than changing the severity of a sentence. Once offenders know their DNA profile is on a central database, they are less likely to commit a crime. What we find surprising is that, for each convicted felon profile added to a US DNA database, a cost saving of between US$1,500 and $20,000 was realised (Doleac, 2017). Such is the impact of a good deterrent. Might this hold true for environmental crime as well?

In much the same way as a drug tester can turn up at the house of an elite athlete to take a sample, the same system might be used for an eDNA test at, for example, a discharge point on a river. Unless caught in the act or via whistleblowers, environmental crime has been difficult to prove, and even more difficult to determine are the short- and long-term impact(s) on the receiving environment. Environmental DNA-based surveys, coupled with spot inspections, might provide some much-needed evidence to prosecute those who chose not to follow the rules. In some applications, the source of discharge may be difficult to pinpoint (for example, nitrates in agriculture), but in other applications (for example, aquaculture fish farms) the link will be clear.

Environmental DNA might also provide a way of tracking the progress of remediation efforts. Better still, samples held in a bioarchive could be enough to act as a deterrent so that environmental impacts do not occur in the first instance, or can at least be detected more rapidly. Indeed, in the future, environmental approvals might stipulate that environmental samples be collected and stored in a bid to create the necessary deterrent. Such an approach, especially if environmental data is shared, may have the added benefit of reassuring the public that environmental footprints are being monitored and that robust data underpins a decision to start, stop or control activities with a footprint on the receiving environment. Rather than be seen solely as a 'big stick' approach, this might also provide companies with the social licence they need to continue or modify their operations to minimise environmental harm.

Rather than simply highlight the scope of the problem(s) across New Zealand, it is vital that we explore technological solutions that can address our poor environmental report card.

The challenges and potential

With pending environmental policy reforms (for example, of the Resource Management Act), coupled with the recent National Policy Statement for Freshwater Management and the advice of the Parliamentary Commissioner for the Environment (on the fragmented nature of environmental reporting), we argue that the time is right for a shake-up of the types of environmental data we gather and how it is reported and shared. Further, we advocate that the power of eDNA is such that it needs a far greater presence in the environmental management landscape across New Zealand than it currently has.

The so-called 'catch, look and (sometimes) kill' approach to biomonitoring will always be present in the biomonitoring and decision-making toolkit, but there is overwhelming evidence that it is time for some of these functions to be complemented and/or replaced by eDNA. This position, we believe, is not controversial to the public, who likely see that a step change is needed. In contrast, anecdotally, some of our scientists, consultants and policymakers see the move into a DNA 'world' as being a radical departure from the status quo, and one in which a degree of retraining, time and investment is required.

Is the uptake of eDNA an issue of policy setting, slow implementation, or both? The 2020 National Policy Statement for Freshwater Management specifically mentions techniques, of which eDNA is not currently one. Likewise, it is difficult to envisage a shift into archiving of environmental samples occurring without a change in policy that enables the samples to be collected and stored. The Lakes380 project is showing the power of this approach, using eDNA in sediment cores to travel back in time to understand how lakes have changes over the past millennia.

Abroad, large initiatives, such as the European Union-funded DNAqua-Net project, have turbocharged the eDNA field and provided researchers with the legal, regulatory, policy and quality assurance/control frameworks that an eDNA toolkit needs to comply with. There are discussions around forming a southern eDNA society across Australasia to build both capacity and cohesion. The EPA's Wai Tuwhera o te Taiao eDNA programme in the community is about building bridges between people and the environment; the Lakes380 project has similar aspirations by connecting people to the wellbeing of lakes across the motu. We hope that these programmes, and others, are the catalyst needed to build further bridges into the policy and environmental management space. The benefits of a concerted shift into eDNA are many – cost, speed, data transferability and resolution among them. But there are also issues to discuss. Who has sovereignty over the data? (a topic debated by the Waitangi Tribunal (Waitangi Tribunal, 2011)). In many respects the same question could be asked of existing environmental survey data; should eDNA data be any different? What can data be reused for? And do guidelines (Hudson et al., 2021) formulated around sequencing entire genomes of native taonga apply to short barcodes recovered from environmental samples?

ESR's ability to sequence a whole SARS-CoV-2 genome in a few hours (contributing to pandemic contract tracing) is a prelude

to the near real-time capability of these technologies to enable more rapid decision making. As DNA sequencing technologies get faster, cheaper, more portable and automated, the utility will improve further. While we are still some way off an environmental Star Trek tricorder device,[2] it is not the pipe dream it once seemed.

Ongoing efforts to sequence the barcodes of more biota from around New Zealand and the globe mean that we are rapidly developing the ability to assign every species' DNA barcode (noting that sequencing a barcode is not the same as compiling an entire genome). In other words, the data we generate today may become even more useful in the future. There are still eDNA challenges, to be sure, principle among them being the question of how the abundance of DNA barcodes correlates to actual abundance in the sampled environment (in some applications, there are strong correlations; in others, the correlation is not so great).

In sum, we have written this article to highlight the potential applications of eDNA and to help shift thinking around environmental monitoring, policy settings and regulation. Rather than simply highlight the scope of the problem(s) across New Zealand, it is vital that we explore technological solutions that can address our poor environmental report card. Ideally, these solutions will provide pathways to better measure the impacts we are having on the receiving environment. We advocate that eDNA become part of this pathway.

Finally, whether, as a biomonitoring technique, you look at eDNA through a glass half full or a glass half empty lens, the ability of eDNA to sequence the microbes in your half glass might one day save you from drinking something you shouldn't.

1 A, T, C and G are the 'building blocks' of DNA: adenine (A), cytosine (C), guanine (G) and thymine (T).

2 The tricorder is a science fiction creation from Star Trek. It is a handheld prop that is used to scan environments to sense, record and compute multiple features of that environment.

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Mike Joy, Lisa Marriott and Simon Chapple

Levelling the Grazing Paddock

Abstract

This article assesses the financial contribution made by the primary sector in terms of taxes paid. It also reports on some of the subsidies, concessions and other forms of assistance that the primary sector receives from the government. We provide illustrative examples of indirect subsidies to intensive farming. We also provide examples of farmers being paid to de-stock their land. In highlighting the significant direct and indirect financial subsidies to the agriculture sector, and concluding that national and local governing bodies are reluctant to take direct action that results in costs to farmers, we propose the radical solution of paying the polluters to stop polluting. This approach has recently been adopted in Europe and is also already in place in Taupō and Rotorua. While it will be unpalatable to many who do not pollute, it overcomes the current self-interested stymieing of reform by polluters. As a one-off payment, it could provide a quick resolution to mitigate ongoing harms. It also addresses the privatisation of profits for polluters and the socialised costs that are otherwise passed on to future generations.

Keywords agriculture, emissions, option for change, pollution, subsidies, taxation

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In 2021 we saw large public protests organised by Groundswell over several new policies, including a 'ute tax', freshwater policy, and increased environmental regulation (see Box 1 for more information on each of these). All these policies are intended to improve environmental outcomes for all people in Aotearoa New Zealand, including the many living in rural areas.

So, why the protests? The protestors' argument is that environmental regulation hurts parts of the primary sector and therefore hurts the rest of the country. We are unconvinced of this argument. This article makes a counterargument: that some farmers are directly damaging the rest of the country with their lack of willingness to acknowledge and internalise the full costs of their activity.[1] This unwillingness is facilitated by an apparent lack of appetite from the government and regional councils to hold the agriculture sector to account for harm to the environment and hence to other New Zealanders. The problem is partly a classic collective action one of large, concentrated benefits from environmental degradation for the few and individually small and dispersed environmental costs on the many, including the yet to be born (Olsen, 1965).

It is also a problem exacerbated by the benefits of degradation being immediately observable in terms of money in the polluters' pockets, while the costs of degradation typically take time to emerge and are often difficult to observe and costly to measure.

In this article, we highlight the financial contribution that the primary sector makes to the country by way of tax paid, alongside some of the financial benefits that the primary sector receives by way of subsidies, concessions and other forms of assistance. The extent of the financial and other support provided to the sector is not well recognised. The same could be said, at least until relatively recently, of the ecological subsidy that is made from society to the sector. This lack of recognition of the ecological subsidy has constrained effective decision making and embedded poor land and water use. Recognising the need to transition farms in selected catchments away from intensive farming or farming unsuited to the biophysical capacity of the catchment, we propose the radical solution of compensating farmers to change their land use to a purpose that is less polluting, to address the environmental damage done by the sector. Despite the direct and indirect assistance that farming has received over decades, it may be necessary for society to incur a one-off compensatory expense – a full and final pollution settlement – to ensure that future generations do not continue to pay the financial and social costs associated with farming-generated pollution. Such a full and final settlement would recognise the benefit that the sector contributes to society, while acknowledging the unsustainability of the status quo.

Concessions and subsidies (direct and indirect)

There are several unique tax concessions offered to parts of the agricultural sector that are not extended to other industries. They include:

- Special rules for deductibility of farmhouse expenses, such as full deductibility of rates and interest expenses, for some farmhouses.[2]
- Deductibility from income of some long-lived expenditure that would be classified as capital expenditure in other industries, and therefore not be tax deductible (e.g., fence construction for farming purposes).[3]
- An income equalisation scheme that allows income smoothing. This scheme allows primary sector businesses to deposit money into the scheme and treat this as a deduction in the year of deposit, with the money treated as income in the year it is withdrawn. This approach allows primary sector businesses to make deposits to the scheme in years where they have higher income (as the deposit is treated as a deduction, it reduces taxable income) and withdraw it in years where income is lower, and the funds may be taxed at a lower rate. Interest on deposits is paid at 3%, except where it is withdrawn within 12 months; deposits may be held in the scheme for five years.[4]
- A tax exemption for income derived by a herd improvement association or society established mainly to promote an improvement in dairy cattle.[5]

The sector also receives financial and other support from the government. Some of this is ongoing and some of it relates to specific events.

- Support is provided for adverse events such as flooding, biosecurity incursions and drought. By way of example, Ministry for Primary Industries annual reports show expenditure of $137 million on *Mycoplasma bovis* eradication in 2018/19, $149 million in 2019/20 and $82 million in 2020/21 (Ministry for Primary Industries, 2020). Additional costs are incurred for compensation of farmers: $151 million over the three years.[6] The recovery is intended to be partly funded by industry, with an agreed split of 32/68 between industry and the ministry. At 30 June 2021, the ministry reported recoverable costs of $172.6 million, of which $72.4 million remains outstanding.
- The agricultural sector is currently excluded from the Emissions Trading Scheme (ETS), having reporting but no surrender obligations.[7] While the agriculture sector may be included in the ETS from 2025, this is likely to have minimal cost for the sector.
- Government spending on the primary services in 2019/20 was $961 million and forecast to increase to $1.3 billion in 2020/21 (Treasury, 2021).[8] These expenditures include biosecurity risk management, food safety and fisheries management.

An example of the consequences of the current indirect subsidy to intensive farming can be found in Te Waihora (Lake Ellesmere) in Canterbury. Like most of our lowland lakes in intensive agricultural catchments, it is dying due to excess nutrient inputs. To save the lake from further deterioration, the amount of nutrient entering the lake must be reduced, which requires curtailment of farming intensity in the catchment. Analysis by Environment Canterbury (ECan) and the Ministry for the Environment of two actions to reduce the pollution concluded that the land use intensity reduction

BOX 1

The 'ute tax' is part of the government's Clean Car Programme aimed at reducing CO2 emissions of light vehicles. New Zealand is many years behind the rest of the world in its provision of incentives/disincentives for purchases of low/high- emitting vehicle purchases (Marriott and Mortimore, 2017). The Clean Car Programme adopts a polluter-pays approach: if an individual wishes to drive a high-emission vehicle, the individual will incur a higher cost than someone driving a low-emission vehicle.

There is no shortage of evidence attesting to the degradation of waterways. Freshwater policy is intended to introduce measures to improve water quality in lakes, streams and rivers. These include pragmatic measures such as limiting stock access to, and fencing, waterways.

Increased environmental regulation includes greater controls on nitrogen pollution and enforceable farm environmental plans.

Table 1: Emissions from sectors, New Zealand, 2019

Sector	Emissions (kt CO_2-e)	Percentage	@ $76.20/tonne ($000)
Energy	34,263.06	41.6%	$2,610,845
Industrial processes and product use	5,115.91	6.2%	$389,832
Agriculture	39,617.71	48.1%	$3,018,870
Land use, land use change and forestry (LULUCF)	–27,425.09		–$2,089,792
Waste	3,316.91	4.0%	$252,749
Agriculture minus LULUCF (net)	**12,192.62**		**$929,078**

Source: Ministry for the Environment, 2019b

Table 2: Cost of nitrate leaching to water

Animal type	Nitrate-nitrogen leached kg/yr	Nitrate-nitrogen leached kg/yr @ $400/kg/yr
Beef cattle	37,244,652	$14,897,860,859
Dairy cattle	129,806,132	$51,922,452,800
Deer	1,644,536	$657,814,491
Sheep	30,493,616	$12,197,446,477
Total	**199,188,937**	**$79,675,574,627**

required to stop the lake declining would result in a revenue loss of $250 million for the dairy farmers, the source of 95% of the problem nutrients (Ministry for the Environment, 2019a). The study's conclusion was that ECan should take no action as the economic impact for farmers was too high. The lake continues to die.

ECan's decision is similar to those made by other councils: privatise profits for polluters and socialise the costs onto all New Zealanders, both current and future generations, by not charging the polluters for this harm. It is effectively a vast public subsidy to dairy farmers in this catchment to the tune of a quarter of a billion dollars a year.

The harm caused by agricultural nitrate is not just to freshwater ecosystems, but also to drinking water. A recent study by Christchurch City Council estimated the costs to remove the nitrate from dairy farming from their drinking water to protect human health at $1.5 billion, or almost $4,000 per person in the city (Christchurch City Council, 2020).

Now consider greenhouse gasses. Almost half of New Zealand's greenhouse gas emissions come from agriculture in the form of methane and nitrous oxide from farmed livestock. However, as livestock is exempt from New Zealand's ETS, this amounts to another subsidy to the sector, paid for in this case by the global community, including future generations, in terms of its impact on planetary heating. To give an indication of the value of this subsidy, in 2019 the minimum annual net emissions from agriculture (giving the country's total sequestration from land use, land use change and forestry (LULUCF) to agriculture) at today's carbon price ($76.20/tonne CO2e) amounts to $929 million[9] (see Table 1).[10]

Yet another example of publicly subsidising harm by not making the polluter pay is visible in two iconic North Island lakes, Taupō and Rotorua. To halt ecosystem health declines in these two lakes, taxpayers and ratepayers are paying farmers in the lake catchments to de-stock. The price tag was calculated in 2015 at around $80 million for Taupō (Monge et al., 2015) and $40 million for Rotorua (Bay of Plenty Regional Council, 2015). The amount paid was based on the amount of nitrate reduction required to stop the decline. For Rotorua a reduction of 100 tonnes of nitrogen per year was achieved, which works out at $400 to prevent each kilogram of nitrate from reaching the lake. We observe similar policy recently announced in the Netherlands, where farmers will be paid to remove animals to protect the environment (Levitt, 2021).

If we applied the same preventive approach to protecting the rest of our lakes, rivers and groundwater as we have with Lake Taupō and Lake Rotorua, the eyewatering indirect subsidy to farming nationally would become clear. The total amount of nitrate leached to water from dairy farming in the 2017 year for the whole country was 130m kg (Statistics New Zealand, n.d.). If we add sheep, beef and deer farming, it comes to 200m kg/yr. Thus, at $400/kg leached per year, annual costs would amount to $52 billion for dairy and a total of $79 billion to include sheep, beef and deer. Given December 2021 GDP of about $350 billion in current prices, we would need to make a one-off payment of over one fifth of our annual market incomes. Instead, we allow the harm to occur, thereby effectively subsidising agriculture to the tune of $79 billion per year (see Table 2 for the calculation).

These issues are not new. Reports from the Ministry for the Environment have shown worsening nitrate-nitrogen levels in the majority of monitored river sites for many years (Ministry for the Environment, 2017), alongside academic research highlighting the main causal factor – increasing intensive agricultural practices adversely affecting water quality (Joy, 2015; Monaghan et al., 2007; Quinn and Stroud, 2001; Wilcock et al., 1999). Just one example is provided by Snelder, Larned and McDowell (2017) who show that the anthropogenic increase in nitrate loads exported from our rivers is three times higher than natural nationally, and four times higher in Canterbury and Southland, areas where intensification has been most profound.

Alongside clear evidence of deterioration of water quality, research has demonstrated the public's concern about pollution of rivers and lakes. For example, a Colmar Brunton survey undertaken for Fish & Game New Zealand in 2018 reported that 82% of respondents were very or extremely concerned about water pollution (Colmar Brunton, 2018). A huge number of submissions – 17,500 – responding to consultation by the Ministry for the Environment in 2019 on proposals to stop further degradation of freshwater resources and address historic damage were largely supportive of a stronger conservation direction (Ministry for the Environment, 2020).[11]

Contribution to society

The primary sector employs people – about 5.5% of total New Zealand jobs were in agriculture, forestry and fishing in March 2019, according to the Household Labour Force Survey (Statistics New Zealand, 2019a). While it is not as large as many people may think, it also contributes to market incomes – 10.6% of GDP in the year to March 2019 (Statistics New Zealand, 2019b). The higher share of GDP than employment to a large extent reflects the sector's very high relative use of the natural environment – land, freshwater and sea – to produce its output.

Income taxes paid by the sector are outlined in Table 3. Taxes have been relatively stable over the period shown: for agriculture, forestry and fishing between 1.6% and 1.8% of total tax revenue collected. Dairying contributed 0.5%, 0.5% and 0.7% to total tax revenue over the 2017–18, 2018–19 and 2019–20 years respectively. The total tax paid by the dairy industry of $531.7 million in 2019–20 covers a mere 1% of costs of nitrate leaching to water attributable to that sector (as per Table 2).

There are few incentives for much of the agricultural sector to change its behaviour, which is why regulation is required.[13] But in the apparent absence of political appetite to fully implement a polluter-pays approach, the rest of society continues to subsidise poor environmental practice.

Table 3: Income taxes paid in the primary sector

Industry	2017–18 ($ million)	2018–19 ($ million)	2019–20 ($ million)
Viticulture	36.8	36.0	41.3
Other horticulture	140.9	141.7	146.6
Dairying	379.1	367.3	531.7
Other livestock farming	332.6	317.6	317.1
Services to agriculture	115.8	129.1	126.8
Forestry and logging	159.8	180.7	137.2
Aquaculture	6.7	7.0	7.7
Fishing	64.0	72.5	60.6
Hunting and trapping	2.0	1.7	2.0
Total (agriculture, forestry and fishing)	1,237.7	1,253.6	1,371.0
Total tax revenue	72,100	77,900	77,700
Agriculture tax paid as a % of total tax revenue	1.7%	1.6%	1.8%

Source: Inland Revenue[12]

BOX 2 The Netherlands situation

The Netherlands has the highest density of livestock in Europe, with an average 3.8 livestock units per hectare, nearly half of which is cattle (Eurostat, 2019). This contrasts with the average livestock density in the European Union of 0.8 livestock units per hectare of agricultural area (ibid.). Intensive farming has made the Netherlands the world's second-biggest agricultural exporter by value (after the United States) (Kotkamp, 2021).

In December 2021, the Dutch government announced a plan to buy out farmers to reduce nitrogen pollution: €25 billion is allocated to the long-term plan to reduce the numbers of pigs, cows and chickens in the country.

The policy is the result of decisions from courts in the Netherlands and the European Court of Justice determining that farming emissions, among other activities, breach European Union legislation (Kotkamp, 2021; Schaart, 2019). The majority of the nitrogen that ends up in the environment comes from farms and 70% of the country's surface area exceeds critical limits for nitrogen (Schaart, 2019).

The proposal is intended to work on a voluntary basis, with farmers compensated for relocating, leaving the industry or transitioning to less-intensive methods of farming (Levitt, 2021). However, the Netherlands is not alone in emitting phosphates and nitrogen that are problematic within EU directives. Reports suggest that Denmark, Belgium and Germany may have to consider similar (or alternative) proposals (Kotkamp, 2021).

For context, the dairy stocking rate in the Netherlands is lower than in New Zealand, at 1.77 cows/hectare compared to 2.85 cows/hectare here (Statistics Netherlands, 2021; Tupu, 2019).

An option for change

The first necessity is a trustworthy, regular, robust, transparent and independent provision of information to New Zealanders about the non-market costs which the sector is imposing on current and future generations. While the provision of such high-quality information alone is highly unlikely to solve the problem, it is the necessary bedrock on which any rational and enduring solution must be built.

We acknowledge that government action to make the users pay for their environmental damage is unlikely. The figures presented here reveal how the failure to limit the environmental harm resulting from agricultural intensification has shifted the real costs of this harm away from the polluter to wider society and future generations. Moreover, the harm has been facilitated by ongoing direct and indirect subsidies and concessions. Now that the damage done to freshwater and the climate by agricultural intensification is becoming clearer, calls for change have become more urgent. Intensive agriculture in New Zealand is, however, in a quandary because, in the absence of limits, farmers have maximised intensity and land values have grown based on an embodied 'right

to pollute'. Removing this right will mean a one-off loss of land value.

A rarely contemplated alternative solution is that that part of the current national community who are non-polluters pay the polluters to stop polluting for the sake of global citizens and future generations. This approach overcomes the stymieing of reform by polluters in their self-interest, but it also entails a one-off transfer of monetary wealth from non-polluters to polluters. At a stretch, it may be argued that an element of fairness resides in this solution, whereby, while society has incurred much of the cost of the environmental damage generated by agriculture, it has also gained from agriculture's presence. Therefore, one-off compensation is a redistributional bullet, we suggest, that we may have to bite, no matter how unpalatable.

The precedent here has been set in the Taupō and Rotorua lakes example of paying farmers to de-intensify farming to make up for the loss in land value. The clear advantage of this payment is that it is a one-off payment, whereas doing nothing means ongoing harms and effective subsidisation of one sector.

We propose some form of sliding scale for agricultural landowners. Some land values are inflated due to recent increases in dairy intensification. Deliberate polluting activity such as this should not be treated the same as dairy farmers who have been operating for decades under more traditional methods.

The argument against 'buying off' polluters will be the net output loss resulting from such a policy. However, intensive livestock dairy farming is not the only use for land, so the net loss is likely to be considerably less than the gross loss. In the Netherlands, land acquired under its new policy to reduce nitrogen emissions may be designated for other agricultural usage, or returned to a natural state where it produces a good to society which is not exchanged in a market. (See Box 2 for more detail on this initiative.)

A benefit of adopting a policy like that for lakes Taupō and Rotorua, or the Netherlands, is timing. These policies can be implemented within short time frames that result in almost immediate results. This is preferable to further time-consuming consultation, report writing and incremental policy changes that have little impact on water quality in practice.

Conclusion

This article has assessed the significant direct and indirect financial assistance provided to the agriculture sector. We have also reported on the significant environmental damage resulting from the sector's activities. As the majority of the sector remains (rationally) unwilling to internalise the costs associated with their farming activity, we propose a radical solution: that farmers are compensated for loss of land values when the land use is changed to a less environmentally damaging activity.

This approach addresses the self-interest present in the sector, alongside the ongoing harms generated by, and subsidisation of, this sector. Moreover, there is precedent for this action, as illustrated in the case of Lake Taupō and Lake Rotorua. Importantly, this approach recognises that this is a societal problem. Ultimately, whether farmers don't pay for the cost of their pollution and society suffers, farmers directly pay for the cost of their pollution and society indirectly pays, or society directly pays, it is the economy that bears the cost.

1 We acknowledge the complexity of the sector, with a wide range of approaches to farming, from large corporations using conventional methods through to regenerative farms. We also acknowledge that some farmers make proactive attempts to mitigate the environmental impacts of their farming practices.
2 Inland Revenue Interpretation Statement 17/02: Income tax – deductibility of farmhouse expenses.
3 Income Tax Act 2007, sDO4.
4 Income Tax Act 2007, subpart EH – Income equalisation schemes.
5 Income Tax Act 2007, sCW51.
6 This cost increased to $220 million in compensation claims over the four-year period (Farmers Weekly, 2022).
7 Note that the sector does pay for farm inputs involving CO2, although this is a small component of the sector's emissions, in the order of 10%.
8 This spending is on the broader primary sector, rather than just agriculture.
9 https://www.carbonnews.co.nz/story.asp?storyID=23813.
10 Methane is a short-lived greenhouse gas distinct from long-lived greenhouse gases such as nitrous oxide and carbon dioxide. The first two come predominantly from agriculture, but all are combined to give carbon dioxide equivalent for the emissions profiles in Table 1.
11 The proposals included taking a broader approach to manage all aspects of ecosystem health and improving farm practices.
12 Information received in response to an Official Information Act 1982 request, 13 December 2021.
13 We acknowledge that some farmers are motivated to change their behaviour. Research suggests that drivers of this include farmers' view of their role as stewards of the land, social norms in their community, and reference to the public's concerns. Reasons for not engaging in environmentally friendly practices include competition to have a productive and financially successful farm, a perceived imperative to provide food for society, and environmental concerns seen as a distraction (Mills et al., 2017).

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Luiza Brabo-Catala, Eva Collins
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Fuel Poverty or Energy Hardship?

Analysing the literature, the proposed official definition, and the views of experts in Aotearoa New Zealand

Abstract

Fuel poverty is a serious condition in New Zealand, caused by the inability to afford sufficient energy services and resulting in detriment to health and wellbeing. Inconsistent ways of describing and measuring fuel poverty affect the perception and depth of the issue and the proposed interventions. This article analyses the proposed definition and indicators of energy hardship developed by the Ministry of Business, Innovation and Employment, in addition to the literature and the perspectives of five New Zealand experts. Findings suggest that the proposed energy hardship description and measures are well-aligned with the recommendations given by the interviewed experts and the literature findings on fuel poverty, which bodes well for effective interventions to minimise the issue.

Keywords fuel poverty, energy hardship, energy poverty, energy wellbeing, energy policy, New Zealand

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In 2017 it was estimated that over 100,000 households in New Zealand struggled to afford energy services (New Zealand Government, 2019; Statistics New Zealand, 2017), representing approximately 6% of all New Zealand households in that year (Statistics New Zealand, 2017, 2020). Fuel poverty can cause severe health and wellbeing repercussions, mainly associated with insufficient heating (Baker, Mould and Restrick, 2018). Consequently, fuel poverty was one of the main topics explored in the final report of the Electricity Price Review in 2019 (New Zealand Government, 2019). One of the report's recommendations was to define the issue in order to standardise its measurement, align it with other frameworks (such as the Wellbeing Budget and child poverty measures) and evaluate progress. Unfortunately, there is no standard definition or set of indicators of fuel poverty internationally; however, some countries adopt standardised official

ones according to their priorities and context (Boardman, 2013; Thomson, Snell and Liddell, 2016).

This study analysed the issue of fuel poverty in New Zealand from three different perspectives to find the best practice for the definition, leading to meaningful indicators. The first was an analysis of the international and national literature on fuel poverty, including journal articles, reports, websites and books. In addition, the proposed definitions and measures contained in the Ministry of Business, Innovation and Employment (MBIE) discussion document *Defining Energy Hardship* (Ministry of Business Innovation and Employment, 2021) were evaluated.

Finally, the views of five experts on fuel poverty in New Zealand were solicited. The experts had diverse backgrounds, including academia, government, an energy company, an independent consultancy, and a non-governmental organisation (NGO). Four of them were selected for being currently engaged in regional and national energy hardship projects, with three participating in the Energy Hardship Forum organised by MBIE in March 2021. Additionally, one expert was chosen for having produced a significant study on fuel poverty in New Zealand. The initial contact was made via email, and the interviews were carried out via Zoom in 2021.

Experts were asked about eight critical areas relating to fuel poverty, which are discussed below in comparison with the MBIE discussion document and the literature:

- differences between fuel poverty and energy hardship;
- who are the actors engaged with initiatives on fuel poverty in Aotearoa?;
- how is it defined?;
- how is it measured?;
- how can current definitions and indicators be improved?;
- what are the causes of fuel poverty?;
- other issues associated with fuel poverty; and
- the reason behind eradicating fuel poverty.

Fuel poverty versus energy hardship

Isherwood and Hancock first used the term fuel poverty in 1978 (Liddell et al., 2011). It is the primary term used in the United Kingdom and Ireland (leading countries in fuel poverty research and policies) (Bouzarovski and Petrova, 2015; Li et al., 2014). The term energy poverty is often used in the European Union to denote energy unaffordability, even though it can be considered a different issue, relating to the lack of access to modern energy infrastructure (Li et al., 2014). Both energy and fuel poverty can have overlapping causes, resulting in similar outcomes, and often coexist (ibid.).

> Three [experts] associated fuel poverty with the inability to afford energy services connected to health, quality of life, safety and comfort.

In the MBIE discussion document, the term energy hardship is used for both affordability and availability issues, even though the former is considerably more relevant to Aotearoa, which is this article's focus. The selected experts for this study were asked if they saw a difference between the terms fuel poverty and energy hardship. According to three experts, fuel poverty and energy hardship have been used interchangeably in New Zealand. However, three experts believe that energy hardship can be considered a broader term associated with vulnerabilities related to the issue.

Three experts associated the term poverty with economic poverty, which connects to income as an indicator and cause. However, the overlap between fuel poverty and economic poverty depends on the definitions and indicators chosen for those two conditions (Boardman, 2013). For example, some fuel-poor households are more affected by poor housing quality, home under-occupancy, and/or having high energy expenditure rather than having low incomes (Hills, 2011; Legendre and Ricci, 2015).

Three experts said that the term poverty has a negative connotation, and that can push people away from seeking assistance, with one stating: 'We've gone the hardship way because we try to be probably PC [politically correct], but whether that's right or wrong, I don't know.' Two experts believe that fuel poverty can be specifically associated with petrol for fueling a car. However, transportation fuel is not traditionally included in fuel poverty discussions (Mattioli, Lucas and Marsden, 2017), and it was not included in the proposed MBIE definition.

Actors involved with fuel poverty in Aotearoa

Experts were asked what groups of actors are involved with the issue of fuel poverty in New Zealand. All emphasised the importance of the government managing the problem, mentioning agencies such as MBIE, the Energy Efficiency and Conservation Authority, the Ministry of Health, the Electricity Authority and Kāinga Ora.

Four experts said that energy companies, especially retailers, are also responsible for preventing fuel poverty. NGOs and community groups were highlighted by four experts, including curtain banks, financial mentoring services and charities. Three experts mentioned landlords, as they are responsible for ensuring that the quality of the housing they provide is up to health and efficiency standards; failing to do so results in increased energy consumption and extenuating health concerns for the tenants (Ambrose and McCarthy, 2019).

It is crucial to create protections for vulnerable populations, such as disabled people, the elderly and young children (O'Meara, 2015), and the commitment from various organisations can be more efficient in targeting those groups. None of the experts believed that a single actor should be responsible for fuel poverty mitigation initiatives, with one saying:

> And I think an advisory board, again … from all the different organisations,

not only the main one set, that looks at [it] from a very different angle, how their particular organisation can help minimise this for people. Looking at the context of the people, the cohorts that we often don't think about, like we talked about, the sick and the disabled and elderly … So I think it's a lot of different interventions at different stages but underlying it all is a strong political commitment from all the parties working together and also changing the lens that we look at it through: energy is a basic right in order for us to improve the quality of life and drive that [equality].

Defining fuel poverty

Experts were asked how they define fuel poverty. Three of them associated fuel poverty with the inability to afford energy services connected to health, quality of life, safety and comfort. This is similar to Lewis's 1982 definition of fuel poverty as 'the inability to afford adequate warmth in the home' (Lewis, 1982, p.1). Even though affordable warmth is still an essential component of modern concepts of fuel poverty, it is generally accepted that fuel poverty comprises a household's energy use for its overall everyday needs in its dwelling, such as electricity, firewood and cooking gas (Simshauser, 2021).

One expert responded that they were satisfied with the proposed MBIE definition. It considers that energy hardship is a continuum, with energy wellbeing at the other end of the spectrum. Energy wellbeing is expressed as a condition in which 'individuals, households and whānau are able to obtain adequate energy services to support their wellbeing in their home or kāinga' (Ministry of Business Innovation and Employment, 2021, p.vii). The proposed definition includes various energy services, but excludes transportation fuel (ibid.). It also acknowledges cultural differences in living arrangements in Aotearoa, which is highly relevant, as Māori whānau traditionally consist of various family units (Boulton et al., 2021), and they are over-represented in fuel-poor homes (O'Sullivan et al., 2017; Teariki et al., 2020).

One expert associated fuel poverty with being denied the right to energy, which they represented as missing bills and disconnections, saying that those households need immediate support.

In 1991, Boardman defined 'fuel poor' as having energy expenditure above 10% of the household's income (Boardman, 1991), which was referred to by one expert:

> We define that as spending more than 10% of your wage, in a month, on energy or fuel. That is how we defined it. Whether I agree with that or not, but that is what we are defining it as at this current stage.

However, Boardman considered the estimated energy expenditure *required* to supply the household's needs (Boardman, 1991, 2013). Considering actual expenditure instead of required expenditure ignores the issue of self-rationing energy consumption due to limited financial resources, meaning that many homes can be experiencing the harmful effects of under-consuming energy without being considered in fuel poverty (Lacroix and Chaton, 2015). Indicators of fuel poverty are discussed further in the following section.

Measuring fuel poverty

The MBIE document proposes a set of indicators that includes both objective and subjective indicators, with the primary ones being: the proportion of income after housing costs spent on energy being two times the median or more; putting up with feeling cold frequently; and the presence of dampness and mould problems. The interim indicator for energy consumption is based on actual expenditure, as the indicators for estimating energy needs (e.g., dwelling and household characteristics) have not been established yet.

With subjective indicators, the danger of overlooking self-rationing is minimised (Lawson, Williams and Wooliscraft, 2015). Furthermore, capturing the lived experiences of fuel poverty can be extremely valuable in understanding and improving the associated systemic issues; looking solely at technical aspects gives a limited perspective on the causes and consequences of the problem (Mould and Baker, 2017).

Experts were asked how they would measure fuel poverty. Two of them discussed specific household needs and vulnerabilities, as some groups, such as disabled people and children, may require higher temperatures at home, due to their higher sensitivity to the effects of energy deprivation (McChesney, 2013; Snell, Bevan and Thomson, 2015). One of those experts also emphasised the need to model the household's required energy consumption based on the characteristics of its dwelling and the energy efficiency of its appliances. In England, the Standard Assessment Procedure has been used to measure the energy efficiency of a dwelling, and the required energy consumption for a household is based on that thorough assessment of their home (Department for Business Energy and Industrial Strategy, 2021).

One expert stated that including subjective parameters is important. Subjective indicators are commonly associated with the surveys used for the European Union Statistics on Income and Living Conditions, which ask households questions such as, 'Can your household afford to keep its home adequately warm?' (Thema and Vondung, 2020). That parameter is also a secondary indicator included in the MBIE discussion document.

Another expert said that in their organisation, income and actual energy expenditure are the only parameters used (based on Boardman's definition) and that 'low socio-economic' people are targeted. Using the 10% definition has the benefit of it being relatively easy to obtain data on the income and expenditure of a population (through reports from energy retailers, census data, or by conducting surveys), being simple to calculate on small and large scales, and not depending on comparisons with other households' data (since it is an absolute measure) (Moore, 2012; Romero, Linares and López, 2018). However, the 10% threshold was based on data from 1988 in England, associated with the poorest 30% of the population and their energy expenditure (Liddell et al., 2012), meaning it is region-specific and outdated. Some authors also argue that Boardman's definition overestimates the importance of energy prices (Moore, 2012; Romero, Linares and López, 2018).

One expert associated fuel poverty with being denied the right to energy, which they represented as missing bills and disconnections, saying that those households need immediate support. Data on the prevalence of missing bills and disconnection can be obtained from energy retailers or self-reported through surveys. For example, Thomson and Snell (2014) conducted an online survey in Europe that included the questions: 'In the last 12 months, how often was your household unable to pay energy bills on time?' and 'In the last 12 months, has your household's energy supply been disconnected because of unpaid bills?' MBIE proposes to use 'Could not pay electricity, gas, rates, or water bills on time (more than once)' as a secondary indicator (Ministry of Business Innovation and Employment, 2021, p.35).

One expert declared their preference for a multi-indicator approach and a sum of indicators:

> If a household ticks the box on, say four out of four, or about four out of six, they would be regarded to be in severe energy hardship. And if they maybe did two or three, that would be moderate and maybe just zero or one, they probably would not be considered to be in any major risk category. So I think, their approach is not without its own problems, because depending on the indicators that you choose and your approach to how you add indicators together and how you group them, if you have two indicators that are quite similar, you may actually tend to weight your indicator, sorry, your approach to energy hardship, according to those two indicators, which start to dominate the way in which you see energy hardship, even though you've got this multi-indicator approach.

The capabilities concept says that fuel poverty is caused by the lack of opportunities ... to fulfil needs and desires ... that are powered by energy, associating energy with wellbeing ...

This type of approach has been used not to identify fuel poverty as an absolute condition but to identify risks and severity (Bosch et al., 2019; März, 2018), which can help prioritise certain groups and create appropriate interventions for each one (Healy and Clinch, 2004). This relates to MBIE's continuum of energy hardship and energy wellbeing.

Improving existing definitions and indicators of fuel poverty

Experts were asked if they had issues with the current ways of defining and measuring fuel poverty, and how they would improve them. Common fuel poverty definitions include: 10% of income going on energy expenditure (Boardman, 1991); energy expenditure being more than twice the median (Isherwood and Hancock, 1979); and energy expenditure above the median and households falling below the poverty line after that expense (Hills, 2012). Income, age and number of household members, types of fuel used, presence of insulation, and ability to afford heating are some indicators used for measuring fuel poverty (Boardman, 2013).

Three experts highlighted the importance of considering the physical characteristics of the dwelling. Understanding the energy practices of the household – e.g., hours of heating; temperature (Stephenson et al., 2010) – was brought up by two of them. These types of indicators can help estimate the household's required energy expenditure (Boardman, 2013). However, as observed above, at the time of writing MBIE had not yet established indicators for estimating energy needs.

The use of both subjective and objective indicators was emphasised by two experts. The MBIE document considers that both primary and secondary indicators include subjective and objective parameters. Two experts highlighted the issue of under-consuming energy (especially for heating) to save money, which is a common problem in New Zealand (McKague et al., 2016). Indicators such as 'Put up with feeling cold to keep costs down a lot' and 'Not heating own bedroom in winter' relate to this issue (Ministry of Business Innovation and Employment, 2021, pp.33, 35).

Two experts felt that the definition should be broader rather than more specific, aligning with the energy wellbeing spectrum (Ministry of Business Innovation and Employment, 2021). One expert talked about having flexibility in the indicators but not in the definition:

> I think the indicators should always be open to review. It's a combination of determining whether they are still relevant to the way we define energy hardship and/or whether we have now better information, which enables us to tweak indicators or to change them or

> to add new indicators in, because we're basing it now on better and newer information. So, yeah, I think that's where I would prefer the review and change comes in. That's more at the indicator level. I think we should try and set a definition that is not going to be too changeable over time.

Using the capabilities perspective was highlighted by one expert:

> [My previous work used] the Bouzarovski and Petrova definition, which is more based around their inability to access or afford, but focusing more on the capabilities of households by doing that, are they being deprived of participating in something as a result of that? So I really liked that definition, and I think that issues with the other ones were their focus on participation in society, the capabilities, which they lack had they spent that amount on energy, for example. So I think a definition is going to be very hard. Like I said, it's very contextual, but around those capabilities and participation should be taken into account.

The capabilities concept says that fuel poverty is caused by the lack of opportunities (referred to as capabilities) to fulfil needs and desires (referred to as functionings) that are powered by energy, associating energy with wellbeing (Bouzarovski and Petrova, 2015; Day, Walker and Simcock, 2016). According to Day, Walker and Simcock, '[p]romoting capabilities maximises opportunities, but leaves the individual free to decide what kind of life they value' (p.258). This framework significantly relates to energy wellbeing in the MBIE document.

Causes of fuel poverty

The experts were asked what causes fuel poverty. The literature attributes the issue to the energy efficiency of appliances, dwelling quality, household needs and income, and energy prices and sources (O'Sullivan and Viggers, 2021). Problems with the quality and the increasing costs of housing were discussed by four experts. Energy prices were seen as a cause by four experts. Earning a low income was mentioned by four experts as well.

> Fuel poverty is associated with cardiovascular and respiratory morbidity and mortality ... as well as mental health issues ...

Lack of economic resources not only makes it challenging to afford energy costs; it also correlates with renting instead of owning the property, living in low-quality housing, being unable to perform or pay for energy efficiency retrofits and home repairs, being food insecure, and delaying medical care (Barton, 2014; Cook et al., 2008; Healy and Clinch, 2004; McKague et al., 2016). The overlap between households earning low incomes and households being in fuel poverty in the United Kingdom was discussed by Boardman (2013):

> in 2006, 89 per cent of the fuel poor (2.1 million) were in the 30 per cent of households with the lowest incomes … There are virtually no fuel poor households above median income, although some are only just below, in the fourth and fifth deciles. (Boardman, 2013, p.31)

Still on the financial aspect, the case of predatory loans was brought up by one expert, who had organised focus groups to discuss energy issues:

> One of the other major areas they brought up is irresponsible lending that's related to energy debt. So, someone might go out and get a high-cost loan to pay off an energy debt, which ultimately compounds their hardship over time. So, they become less and less likely to be able to pay because of the pressure put on them. They took out a loan that was unsuitable, and the responsible lending laws did not protect them from getting this predatory lending. Also, just that generally that irresponsible lending puts people into poverty in the first place.

Three experts mentioned the lack of information, meaning households having difficulty understanding their bills and finding the best and cheapest energy plans. Increasing energy awareness and literacy have also been addressed by MBIE in their discussion document, relating to improving understanding of energy habits and how the energy retail sector operates.

Other issues associated with fuel poverty

Fuel poverty is associated with several adversities, such as issues related to health, housing, finances and structural racism (McKague et al., 2016; O'Sullivan, Howden-Chapman and Fougere, 2012). Experts were asked about the non-causal issues associated with fuel poverty. Food insecurity associated with fuel poverty, known as the 'heat or eat dilemma' (choosing food over energy payments or vice versa (Cook et al., 2008)), was discussed by four of them.

Health issues were the initial concern in early fuel poverty discussions (relating to insufficient heating) (Boardman, 1991), and they were brought up by three experts. Fuel poverty is associated with cardiovascular and respiratory morbidity and mortality (World Health Organization, 2018), as well as mental health issues (Baker, Mould and Restrick, 2018). In addition, one expert mentioned domestic violence. A 2021 study in Australia found that being fuel poor increases the chances of experiencing physical violence, and that the mechanisms of influence are social capital, psychological distress and substance use (Hailemariam, Sakutukwa and Yew, 2021).

Two experts cited the educational attainment of the household, which can also be affected by the stress caused by financial issues associated with fuel poverty (Baker, Mould and Restrick, 2018). Additionally, a study from France demonstrated that households with greater educational attainment are at minimal risk

of being in fuel poverty, due to earning higher incomes (Legendre and Ricci, 2015). In Aotearoa, Māori and Pasifika groups present lower educational attainment and incomes than the Asian or white populations (Ministry of Social Development, 2016).

Cultural and behavioural aspects were cited by two experts. One noted that combining energy advice with budgeting advice has become an important strategy for managing fuel poverty. Educational attainment and energy habits are correlated with service literacy and household circumstances and practices, facets of energy wellbeing mentioned by MBIE. They may result in inefficient energy use and more expensive or inappropriate plans.

One expert discussed an issue associated with pre-payment, which is more costly and less convenient than regular plans, but used by many low-income households (O'Sullivan, Howden-Chapman and Fougere, 2011): 'I'm particularly very concerned about pre-pay metering or pre-pay use and how that would be a safe reconnection, whereas there are requirements around checking things like the oven off and heaters are off before reconnecting on post-pay.' A study showed that Māori and Pasifika households using pre-payment presented higher odds of being self-disconnected compared to non-Māori and non-Pasifika households (O'Sullivan et al., 2013). Ethnicity was discussed by two experts, as Māori and Pasifika populations are over-represented in fuel-poor homes (O'Sullivan et al., 2017; Teariki et al., 2020), as are refugees.

One expert acknowledged the issue of household crowding, which disproportionately affects Pasifika, African, Māori, Asian and Latin American populations (Statistics New Zealand, 2018). According to the MBIE document, the 'three most challenging housing issues for Māori are that homes are cold, mouldy and in urgent need of repairs' (p.9), with an unequal representation of Māori and Pasifika children being hospitalised due to those circumstances.

Ethnicity on its own is not a cause of fuel poverty, but systemic racism exacerbates material differences between different ethnicities that relate to the causes of fuel poverty (e.g., inferior housing quality and income). Approaches aiming to eradicate the issue must acknowledge cultural and language barriers that ethnic minorities have to face regarding energy services. Similar to the New Zealand context, African-American households are more likely to live in energy inefficient homes and present higher fuel poverty rates than Asian or white households in the United States (Lewis, Hernandez and Geronimus, 2019; Wang et al., 2021).

A study showed that Māori and Pasifika households using pre-payment presented higher odds of being self-disconnected compared to non-Māori and non-Pasifika households ...

It is about wellbeing

The selected experts were asked about the purpose of eradicating fuel poverty. Increasing happiness and wellbeing were brought up by all of them. The MBIE document affirms that '[l]iving in energy hardship affects the quality of life of the household and impacts their wellbeing physically, mentally, and socially' (Ministry of Business Innovation and Employment, 2021, p. 8). Four experts talked about achieving a more equitable society.

Four experts talked about economic reasons, as solving fuel poverty will increase disposable income in the affected households and financial savings for the government. A study estimated that poor housing conditions (e.g., damp, cold, mould, crowding) cost NZ$141 million annually in hospitalisations (Riggs et al., 2021). There is a strong association between poor dwelling conditions and poor health in children (Howden-Chapman, Baker and Bierre, 2013). Positive health impacts were mentioned by four experts, and an improvement in children's lives was mentioned by two, with one saying:

> People's health and wellbeing are affected, but we know that there's people who are hospitalised and children every year with housing-related illnesses. So the Ministry of Health, in combination with academic researchers, have looked at things. They've got a category of housing sensitive hospitalisations. And so they've actually been able to kind of calculate the financial cost as well to the country or people living in really inadequate housing. That's damp, cold and mouldy. So, things like fever, asthma, bronchitis, et cetera.

One expert mentioned environmental benefits associated with higher energy efficiency (e.g., replacing older appliances and installing insulation), which requires less energy and thus results in fewer emissions. While not detailed in the MBIE discussion document, the framework is also connected to the Climate Change Response Act 2002 (Ministry of Business, Innovation and Employment, 2021, p.8). In addition, as the seventh United Nations Sustainable Development Goal is to 'ensure access to affordable, reliable, sustainable and modern energy for all' (United Nations, 2021), fuel and energy poverty actions are essential for a socially, environmentally and economically sustainable future.

Conclusion

The MBIE discussion document of November 2021 advanced thinking and policy on defining energy hardship in Aotearoa New Zealand, a condition that includes both fuel and energy poverty.

The proposed definition of and indicators for energy hardship and energy wellbeing consider multiple facets of insufficient energy consumption in the country, and are adequate and well-aligned with five experts' opinions and the literature. Even though the primary focus of this article and the MBIE document is fuel poverty (relating to energy affordability), as it is the predominant issue in this country, the terms energy hardship and fuel poverty are not synonyms. Properly estimating the energy needs of households, considering the needs of the households and the dwellings where they live, is an important step for the future, as selecting the proper indicators is crucial for identifying the presence and depth of fuel poverty. The government, energy companies, landlords and NGOs need to work together to target vulnerable groups for efficient interventions necessary to eliminate the issue in this country. When this article was written, MBIE was seeking public feedback on its discussion document. Eradicating fuel poverty is of critical concern, considering the potential improvement in the health and wellbeing of New Zealanders, as well as the environmental and financial benefits.

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Malcolm Menzies

Long-term Insights Briefings
a futures perspective

Abstract

The Public Service Act 2020 requires departmental chief executives to give a long-term insights briefing (LTIB) to the appropriate minister at least once every three years. In an increasingly uncertain world, there are several ways to explore the future that will unfold over the next decades. At this stage of their development, questions can be asked as to how well the current suite of 19 LTIBs are likely to perform as instruments to help identify implications of probable, possible and preferred futures so that policy responses can be made more anticipatory, adaptable and robust. This article provides a futures-thinking context for considering LTIBs and posits a framework for evaluating (and potentially improving) the full set of LTIB documents once they are all published.

Keywords futures thinking, long-term insights briefings, scenarios, evaluation

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Futures thinking in Aotearoa

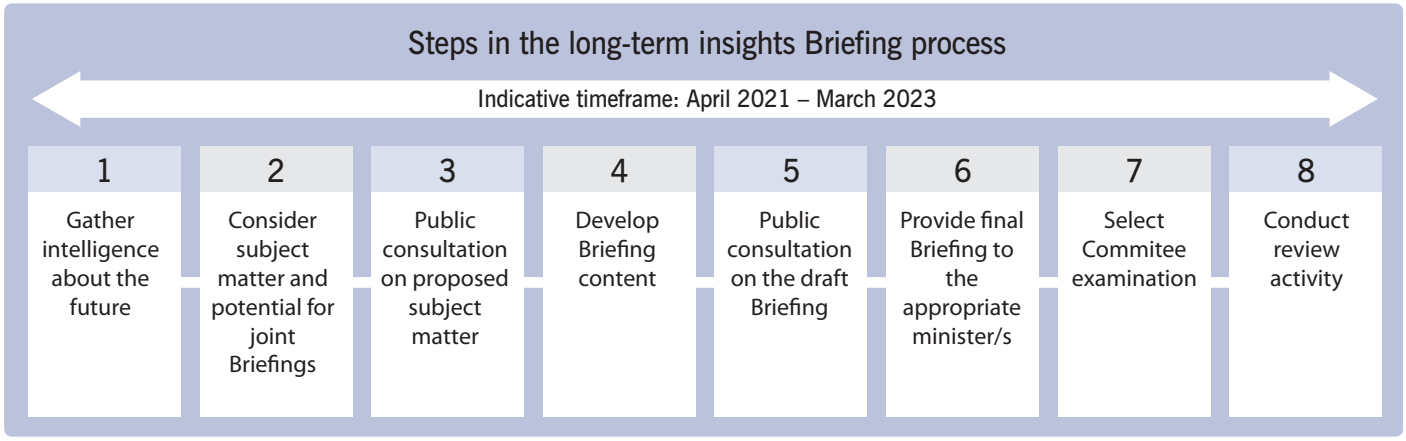
Aotearoa has tried several times to mainstream futures thinking (Menzies, 2018). The latest attempt is embedded in the Public Service Act 2020, which requires departmental chief executives to give a long-term insights briefing (LTIB) to the appropriate minister at least once every three years (schedule 6, clauses 8 and 9). This must be done independently of ministers. The purpose of an LTIB is to make available in the public domain (via the House of Representatives):

(a) information about medium- and long-term trends, risks, and opportunities that affect or may affect New Zealand and New Zealand society; and

(b) information and impartial analysis, including policy options for responding to matters in the categories referred to in paragraph (a).

A briefing may set out the strengths and weaknesses of policy options, but without indicating a preference for any option, and two or more chief executives may give a joint briefing. In the words of Brook Barrington, head of the policy profession: 'The Long-term Insights Briefings require the public service to look over the horizon,

Figure 1: Overview of the steps in the long-term insights briefing process



Source: Department of Prime Minister and Cabinet

for the common good' (Department of the Prime Minister and Cabinet, n.d.-b).

The Department of the Prime Minister and Cabinet (DPMC) has offered guidance, resources and some training to support the LTIB process. No additional funding has been provided to departments, so any additional costs of preparing LTIBs have had to be met from their baselines.

In May 2022, Parliament's Governance and Administration Committee issued a briefing on progress of the first round of LTIBs and noted that they 'are intended to enhance public debate on [long-term] issues, and contribute to future decision-making by government, Māori, business, academia, not-for-profit organisations, and the wider public'. The committee noted that there were 18 LTIBs in preparation and one already completed, with most of the others expected to be finished by the end of 2022. It also reported that DPMC 'will be conducting a system-wide review of the briefings after the first round of briefings is completed'. The department had pointed out to the committee that '19 long-term insights briefings is a large number, particularly when public engagement is required for all of them. The department will be examining the number and sequence of briefings as part of its review' (McKelvie, 2022, pp.5, 6).

The Governance and Administration Committee intends to produce a final report once other select committees have had the opportunity to report back to the House of Representatives on the first round of LTIBs. Presumably the final report will include consideration of both the process and whether the LTIBs have met their collective and individual objectives.

Given that the 2021–23 LTIB process is at its midpoint, the following discussion places the LTIBs in a futures-thinking context and provides a preliminary overview of the extent to which they are on track to achieving the aims of the Public Service Act. Suggestions are also offered for future evaluation of the LTIBs and ways to improve them (setting the scene for a possible follow-up paper in 2023).

The purpose of futures thinking

Given the number of current challenges society is facing, it is legitimate for New Zealanders to ask: 'why futures thinking?' or, 'what's it for?' For the public service, it's to promote stewardship:

> The New Zealand public service has a duty of stewardship, to look ahead and provide advice on future challenges and opportunities. Achieving this requires organisational commitment to develop the capacity and capability to not only respond to the issues of the day, but also take a long-term stewardship role. It requires a public service that values foresight – to think, anticipate and act with the future interests of people in New Zealand front and centre. (Department of the Prime Minister and Cabinet, n.d.-b)

However, in a world of policy and decision making that aspires to draw on advice that is evidence based, the absence of evidence coming from the future presents a major challenge.

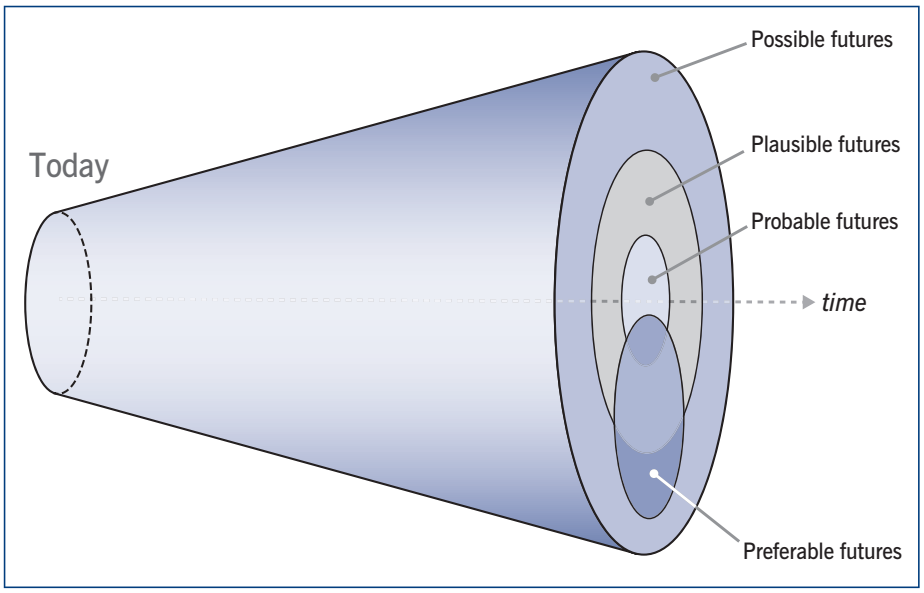
It is widely accepted that it is not possible to predict the future with any certainty, and history provides many humorous examples of predictions that have been wide of the mark. Prophets have had a rough time of it. In Greek mythology, Cassandra was given the gift of foretelling the future, along with a curse that no one would understand or believe her. The Biblical Jeremiah was known as the 'weeping prophet' who foretold a dismal future. No one listened to him either, although things didn't turn out so badly for Jeremiah in the end. However, futurists are still often regarded as doomsayers, which is a little unfair, as they can also find scope for optimism about the future.

Some things can be extrapolated from past and present trends, and preparations made for a *probable* future. For example, projections can be made of the likely costs of New Zealand Superannuation in the 2060s based on analyses of demographic trends. Such trends indicate that the number of people aged 65 years and over will grow from around 0.8 million in 2020 to between 1.65 and 2.06 million by 2073, or from around 16% of the population to a possible 32% (at the high end of projections) (Statistics New Zealand, 2022). As a policy response, the New Zealand Superannuation Fund has been set up to help smooth the future fiscal costs.

Probable futures are the realms of forecasting (say, with a five-year horizon), projections (beyond five years) and risk assessment (a variable time frame, depending on context). Simply extrapolating from past trends is fraught with its own set of risks. For example, the Muldoon era 'think big' projects assumed continual increases in fuel and energy prices, and these didn't come to pass. Neither did 410,000 new jobs.

But there are also *possible* futures, which can be difficult to imagine without some prompting or deep reflection. Some of these futures may seem ridiculous to us

Figure 2: Types of futures



Source: International Transport Forum, 2021

now but become more *plausible* as time goes on.

Looking back can illuminate the scale and rate of possible change. For example, in 1977 Carmen Rupe, a transgender woman, campaigned for the mayoralty of Wellington on a platform that included the legalisation of same-sex marriage and other policies that seemed impossible at the time. Yet within a decade homosexuality was decriminalised, and nearly 20 years after that the Civil Union Act was passed into law. Carmen wasn't claiming to be a futurist, but she was a harbinger of change.

In addition, futures thinking must also allow for the possibility of 'black swan' events or 'bifurcations', which take things in an entirely different, unexpected direction. Barack Obama in 2016 may have opined that 'now' is the best time in the course of human history to be alive (Obama, 2016), but just six years later the times have become more turbulent and the future is increasingly uncertain. Climate change is starting to have an impact in ways that have been predicted by scientists for at least 30 years, and there have been shocks – a murderous terrorist attack in Aotearoa, a new war in Europe, a pandemic, and a protracted occupation of our Parliament grounds with a violent end – that were previously unimaginable to most of us.

Despite the inherent unreliability of predictions, many futures-thinking techniques still boil down to attempts at these, which often then become fuel for competitive, noisy debate. By contrast, used well, *scenarios* instead promote conversation through development of a shared language, while at the same time challenging prevailing mental models and sensitising participants to signals of the emergent future. They provide hypotheses which are either substantiated or falsified as evidence of the actual future emerges (Menzies and Middleton, 2019).

The actual future may or may not map onto a particular scenario. More likely, it will contain elements of several scenarios. It is a common mistake to make one scenario *preferred* and effectively convert it into a *vision* of the future. But 'visioning' is a different process, incorporating values and purpose, and the first step in creating an imagined future (Mäntysalo et al., 2022; Menzies, 2000). The corollary of this kind of normative approach is 'backcasting': working back from a preferred future state to see what must be done to get there.

Space does not allow for discussion here of other futures-thinking techniques and tools, such as horizon scanning or cross-impact analysis, but a comprehensive set of these can be found on the DPMC website (Department of the Prime Minister and Cabinet, n.d.-a). Figure two shows the relationship between different types of futures.

A comprehensive purpose for futures thinking, rather than trying to predict the future, may be defined as:

> To identify key trends and uncertainties and probable, possible and preferred futures and their implications for the present, so that strategies, policies and plans can be made more anticipatory, adaptable and robust in the future that eventually emerges.

This definition makes a distinction between futures thinking and planning, which are often treated as if they are the same. In addition, although the LTIBs' horizons are national, there is an increasing focus on futures thinking at the regional, city and local level (Dixon et al., 2022; Mäntysalo et al., 2022).[1]

The above definition resonates with the view of the Centre for Strategic Futures in Singapore, a country which has a history of systematic, applied futures thinking:

> The Centre for Strategic Futures (CFS) produces a compendium of 'driving forces' (DFs) – key forces of change that will shape the operating context in the next 20 years, and the ways in which they might play out – every three to five years. These explorations are not predictions and are not intended to be exhaustive. Rather, they offer alternative ways to think about the future. *The objective is to spark conversations around navigating a turbulent world and preparing for an uncertain future.* (Centre for Strategic Futures, 2021, emphasis added)

And the OECD's International Transport Forum (2021) has this to say:

- deep uncertainty requires a new way of thinking as well as doing;
- there is need for an open-mindedness to different futures and appetite to shape a preferred future;
- formal and informal institutional frameworks can hold back progress;
- the challenge is to develop target-oriented transformative governance processes, even in fragmented institutional contexts.

The late director general of health, George Salmond, wrote that:

> whereas scenarios are 'futures for the head,' visions are 'futures for the heart'. To be effective, visions must touch and move us. Scenarios provide flexibility in the face of uncertainty. Visions

inspire us, commit us and give us energy and something to work for. For a vision to be effective two conditions must be met. First, it must be developed with and owned by the principal stakeholders. They must be willing to stretch themselves and their organisations to make the vision happen. Second, those involved must believe that, by their own efforts, they can make it happen; a shared vision can become a palpable force for change when people truly believe that they can shape the future. (Menzies, Newell and Peren, 1997, p.43)

The context for futures thinking in 2022

A recent *Policy Quarterly* editorial described some of the contextual issues for 'looking over the horizon' towards the next 40 years (Boston, 2022). They include:

- Changing demands on government (from changing demographics, other social and cultural changes, scientific, technological and environmental changes, and different economic and geopolitical systems).
- A legacy of significantly increased public debt, higher rates of poverty, greater socio-economic inequality, disrupted educational opportunities, and heightened pressures on healthcare systems. Fiscal stresses, too, will be exacerbated in most countries for many years, if not decades, especially as interest rates on public debt begin to rise. Inevitably, this will reduce the public resources available for long-term investments, whether for public infrastructure, environmental protection and conservation, climate change mitigation and adaptation, or research and development.
- Prudent long-term governance, both global and local, faces numerous other challenges: the rise of nationalist, populist and illiberal movements; increasing political polarisation, dysfunction and gridlock; declining societal trust; the mounting economic and social impacts of climate change, pollution, and biodiversity loss; the growth of surveillance capitalism; the distorting echo-chambers of social media; the fraudulent manufacturers of 'alternative facts' and 'fake news'; and deliberate efforts by autocratic regimes to undermine democratic institutions and processes in various parts of the world. In some countries, the threats to democracy are at least as great from within as without.

BOX 1 Definitions

The futures thinking terms used in this article are open to differing definitions and interpretations. The discussion herein assumes the following:

Vision describes how the world (or part of it) will be in the future. Organisations might add: "as a result of our work" (Collins and Porras, 1994). Vision is a desired (aspirational) outcome or set of outcomes, describing a preferred future. It might or might not be achieved in the end, but that's not necessarily the point. A vision provides direction and motivates action.

An example is Waka Kotahi's vision of zero deaths and serious injuries on New Zealand roads. "It might sound impossible, but Aotearoa has a plan to get there. It's called Road to Zero" https://nzta.govt.nz/safety/what-waka-kotahi-is-doing/nz-road-safety-strategy/

Scenarios are plausible stories about possible futures (what ifs). They are "focused descriptions of fundamentally different futures presented in coherent script-like or narrative fashion" (Schoemaker, 1993) or "a set of hypothetical events set in the future constructed to clarify a possible chain of causal events as well as their decision points" (Amer, Daim and Jetter, 2013). This definition and use of scenarios differs from another that is common in the public and private sectors, wherein different scenarios are created through changes in parameters, such as demographic projections, that underly a model of a system.

*Risk** is defined as the effect of uncertainty on objectives, often characterized by reference to potential events (probabilities) and consequences (impacts) or a combination of these. There are many different types of risk (such as financial, health and safety, and environmental goals) and risk can apply at different levels (such as strategic, organisation-wide, project, product, and process). Risks are commonly viewed as negative, but there can also be "upside risks" or opportunities, such as in new markets.

*Uncertainty** is the state, even partial, of deficiency of information related to, understanding or knowledge of, an event, its consequence, or likelihood.

Source: abridged from International Organization for Standardization, 2009
* As defined by the International Organization for Standardization

This is a sobering list, but not one that exists in isolation. The World Economic Forum compiles an annual report on global risks (World Economic Forum, 2022) and the New Zealand government has produced a national climate change risk assessment (Ministry for the Environment, 2020). There have been, and are still, many other futures-thinking exercises carried out within Aotearoa New Zealand and across the world by individual governments, international bodies, non-governmental organisations and universities. Space does not allow for them to be covered here, but there is much scope for Aotearoa New Zealand to share with and learn from these initiatives and the knowledge base on futures thinking, built up over many decades.[2]

Various forms of futures literature also paint a big picture. For example, McRae (2022) describes themes that he believes will shape the world over the next 30 years and identifies a core tension between the forces of globalisation and nationalism. McRae's work is interesting for another reason: in 1990 he wrote a similar book about how the world might look in 2020, and he is now able to reflect on what he missed seeing 30 years ago and what he got 'right' – a reflection on the efficacy of futures thinking, albeit suffused with predictions. A similar look forward to 2020

BOX 2: Other initiatives

Some Crown entities have already been producing futures-oriented documents in advance of, or parallel to, the LTIB process. For example, Te Waihanga, the New Zealand Infrastructure Commission, has produced a strategy which sets out a path for a thriving New Zealand. The vision for this strategy is: 'Infrastructure lays a foundation for the people, places and businesses of Aotearoa New Zealand to thrive for generations' (New Zealand Infrastructure Commission, n.d.).

In 2020 the Ministry for the Environment published the first *National Climate Change Risk Assessment for New Zealand: Arotakenga Tūraru mō te Huringa Āhuarangi o Āotearoa* (Ministry for the Environment, 2020). This report identifies a set of 48 priority risks with extreme or major consequence ratings in at least one of three assessment timeframes (now; by 2050; by 2100). It identifies:

- where early action would avoid being locked into a current pathway;
- actions needing long lead times; and
- actions with long-term implications.

Two responses in 2022 have been:

1. The Emissions Reduction Plan, which sets out the direction for climate action for the next 15 years, including targets and actions to meet those targets across every part of government and every sector of the economy, from transport, energy, building and construction, waste, agriculture and forestry (Ministry for the Environment, 2022b);
2. The National Adaptation Plan, which looks at the impacts of climate change now and into the future and sets out how Aotearoa New Zealand can adapt (Ministry for the Environment, 2022a).

Te Puna Whakaaronui is described as a fully independent, New Zealand government-funded think tank. It has high-level private sector representation and is tasked to provide insights and thought leadership to support the Ministry for Primary Industries to transform the food and fibre sector. One of its programmes is Fit for a Better World (see https://fitforabetterworld.org.nz/), a programme of work towards 2030 committed to meeting some of the sector's greatest challenges. The ten-year time frame is relatively short-term, but some high-quality futures thinking is involved – for example, about the prospects for entirely different food production systems.

Other examples of futures-thinking work include Koi Tū: the Centre for Informed Futures (based at the University of Auckland), the McGuinness Institute, and the Strategic Futures Group, a network of public servants coordinated by Inland Revenue.

was carried out in Aotearoa New Zealand in 1997 (Menzies, Newell and Peren, 1997).[3]

Boston (2022) poses the question of the LTIB process: are the big long-term challenges facing the international community – whether social, economic, ecological, technological or geopolitical – receiving the attention they deserve? A supplementary question might be: given the context described above, how well are the LTIBs performing as instruments to help people in Aotearoa New Zealand prepare for probable, possible and preferred futures?

Box 2 outlines some other futures-oriented initiatives in Aotearoa New Zealand. The LTIBs can thus be seen as part of a broader tapestry of futures thinking (and planning) and the diversity of effort must be viewed in a positive light. However, the LTIBs remain as a significant, explicit process of futures thinking and it is vital that they continue to be fostered as such.

The list of LTIBs

As of 23 June 2022, 18 LTIBs were either completed or due to be completed by the end of the calendar year, and there was one other whose completion date was still to be determined (see Table 1). Four are joint briefings, involving between two and seven agencies (Department of the Prime Minister and Cabinet, 2022). At the time this article was written, two had been published on the Public Service Commission's website (the commission's own and that of the Treasury).

What the LTIBs should do

Evaluative questions that might be asked of each LTIB, and of the collective set, include several points raised by Boston (2022), along with some others.

Content

- Does the LTIB look across many years, beyond the realms of forecasting and projections, to where uncertainty abounds?
- Does it take account of other relevant national and international futures assessments?
- Does it take a broad, sector-wide view, or is it narrowly focused?
- Have the right issues been identified?
- Are assumptions and prevailing mental models rigorously tested so that key uncertainties, and their potential implications for us in the present, are identified?
- Or are assumptions already embedded, and the implications of future challenges and opportunities predetermined in the objectives and areas of improvement?
- Has the full range of critical long-term policy challenges been tackled, or, instead, has the LTIB played 'safe' and avoided politically sensitive topics (e.g., are the documents bland, cautious and innocuous, or rigorous, candid and forthright)?
- Are various policy options outlined with proper analysis of their respective advantages and disadvantages?
- Boston (2022) poses this question of the LTIB process: are the big long-term challenges facing the international community – whether social, economic,

Table 1: Long-Term Insights Briefings Topics as at 23 June 2022

Agencies	LTIB Title/Topic
The Treasury	*He Tirohanga Mokopuna 2021: The Treasury's combined Statement on the Long-term Fiscal Position and Long-term Insights Briefing*
Public Service Commission*	How can we better support public participation in government in the future?
Inland Revenue Department	Tax, investment and productivity
Ministry of Transport	The impact of (sic) autonomous vehicles operating on New Zealand roads
Department of Internal Affairs	How can community participation and decision-making be enabled by technology?
Ministry of Business, Innovation and Employment (MBIE)	*The future of business for Aotearoa New Zealand: an exploration of two trends influencing productivity and wellbeing – purpose-led business and use of blockchain technology*
Department of Conservation; Land Information New Zealand (Joint)	How can we help biodiversity thrive through the innovative use of information and emerging technologies?
MBIE; Ministry of Education; Ministry of Social Development; Ministry for Women (Joint)	Youth at risk of limited employment: Preparing all young people for satisfying and rewarding working lives
Ministry of Housing and Urban Development	The long-term implications of our ageing population on the future of housing and urban development in Aotearoa New Zealand
Department of the Prime Minister and Cabinet; Ministry of Foreign Affairs and Trade; Government Communications Security Bureau; Ministry of Business, Innovation and Employment; Ministry of Defence; New Zealand Customs Service; New Zealand Security Intelligence Service (Joint)	Engaging an increasingly diverse Aotearoa New Zealand on national security risks, challenges and opportunities
Ministry of Justice; Department of Corrections; Crown Law Office; Serious Fraud Office; Oranga Tamariki (Joint)	Long-term insights about imprisonment and what these tell us about future risks and opportunities
Ministry for Culture and Heritage	Into the future, what are some of the key areas that will influence the vibrancy and resilience of the cultural sector ecosystem?
Statistics NZ	Data as a driver of economic growth and improved wellbeing
Te Puni Kōkiri	Thriving Whānau 2040
Ministry for Pacific Peoples	Improving Pacific Data Equity: Opportunities to enhance the future of Pacific wellbeing
Education Review Office	Embracing Diverse Cultures: School Practices
Ministry for the Environment	People and place: Ensuring the wellbeing of every generation
Ministry for Primary Industries	The future of New Zealand's Food and Fibre Sector: Exploring new demand opportunities for the sector in the year 2050
Ministry of Health	Considering subject matter options for the Briefing before going out for public consultation Ministry of Health

Source: From McKelvie (2022)
* The writer of this article made a joint submission on this LTIB and participated in two related webinars.

ecological, technological or geopolitical – receiving the attention they deserve?
- Are the questions posed more akin to simple research questions or has the department configured business as usual to be the LTIB?

The process
- Has the public consultation been open-minded?
- Has it been adequately resourced?
- Have MPs, journalists, researchers, political advisers, and a broad range of interested New Zealanders, including those not usually consulted, had an opportunity to pose important questions, and to contribute feedback?
- How are the LTIBs linked together? Are they complementary or are there instances of duplication or gaps?

The response

When the time comes, the role of parliamentary select committees in reviewing the briefings will also warrant scrutiny. Under Parliament's standing orders (as revised in 2020), subject committees will have up to 90 working days to report on any briefings referred to them by the Governance and Administration Committee.

- Will the preparation and publication of multiple departmental briefings be worth the effort? For instance, will they affect policy decisions and outcomes?
- Will they influence departmental advice and ministerial priorities?
- Will important issues receive political attention that might otherwise have been ignored?

If not, should a different approach be adopted? This round of LTIBs is the first and there will be lessons learned about where improvements might be made: for example, with a much smaller number of briefings and greater interdepartmental coordination, or with a greater role for independent and autonomous entities and offices with a mandate to look to the future, such as the commissions for climate change, productivity, infrastructure, retirement income policy and the environment, or Te Puna Whakaaronui. Of course, answering such questions will not be easy. Assessing 'impact', for example, poses difficult methodological issues, not least establishing appropriate counterfactuals (Boston, 2022).

The 2021 combined Treasury document focuses on Aotearoa New Zealand's long-term fiscal position in the context of demographic change, especially that brought about by an ageing population ...

Three LTIBS

The number of LTIBs and the unfinished state of most of them precludes a comprehensive assessment at this stage, but it is illustrative to consider three that are well advanced in addressing aspects of Aotearoa's economic and business futures:

- The Treasury: *He Tirohanga Mokopuna 2021* (already published) (Treasury, 2021);
- Ministry of Business, Innovation and Employment: *The Future of Business for Aotearoa New Zealand: an exploration of two trends influencing productivity and wellbeing – purpose-led business and use of blockchain technology* (Ministry of Business, Innovation and Employment, 2022b); and
- Inland Revenue: *Tax, Foreign Investment and Productivity: draft long-term insights briefing* (Inland Revenue, 2022).

In the same business and economics domain, Statistics New Zealand has produced a consultation document on data as a driver of economic growth and improved wellbeing (Statistics New Zealand, 2021), and in mid-2022 the Ministry for Primary Industries was preparing for public consultation on the proposed subject matter to be included in their briefing on the future of New Zealand's food and fibre sector (Ministry for Primary Industries, 2022).

The Treasury

The Treasury's was always going to be the first finished, largely because they have conflated their LTIB with the long-term fiscal statement, which has been a three- or four-yearly commitment since 2006. The long-term fiscal statement is required to relate to a period of at least 40 consecutive financial years, commencing with the financial year in which the statement is prepared, and be accompanied by:

- a statement of responsibility signed by the secretary stating that the Treasury has, in preparing the statement, used its best professional judgement about the risks and the outlook; and
- a statement of all significant assumptions underlying any projections included in the statement.

For the Treasury, long-term fiscal projections represent scenarios which illustrate different possibilities. They 'are, by their nature, very uncertain, and should be viewed as an illustration of the trajectory of the fiscal position rather than a forecast' (Treasury, 2021, p.23).

The 2021 combined Treasury document focuses on Aotearoa New Zealand's long-term fiscal position in the context of demographic change, especially that brought about by an ageing population (although the implications of possible radical changes in the way we age are not canvassed). It also factors in uncertainties and risks arising from the impacts of different interest rates, economic shocks, a major earthquake and climate change. Some future trends affecting long-term revenue sustainability are embedded within the text rather than given a section of their own, such as lower smoking rates reducing tax revenue, globalisation, and the changing nature of work (ibid., p.69).

As required for an LTIB, the Treasury canvasses different options for responding to long-term fiscal trends without favouring any one option or set of options, although the document is not entirely neutral; for example:

> The COVID-19 pandemic has also highlighted the importance of managing risks by investing in health protection functions (e.g. public health units), which involve upfront costs but have an impact on fiscal resilience and sustainability over the long term by improving the speed of our response and managing the impacts of any future outbreaks or resurgences. (ibid., p.51)

More generally, readers are counselled that 'it is important that we as a country are thinking about these changes now. Small and gradual changes in the nearer term could help to minimise the cost of fiscal pressures across generations, preventing higher debt and a larger adjustment in the future' (ibid., p.7). This is a form of 'backcasting'.

The document is more circumspect in addressing Aotearoa New Zealand's future debt levels, healthcare expenditure, retirement income policy and approaches to taxation. However, as seen over the last

decade, low levels of debt help make the country more resilient, and able to bounce back from shocks such as earthquakes and pandemics.

Left out of the analysis are trends and potential shocks to Aotearoa New Zealand's economy such as from new foods (which may equally provide opportunities), a major biosecurity breach, or permanently disrupted supply chains. But those omissions are reasonable in a document with a fiscal focus and might be expected to be remedied by other economic ministries' LTIBs, particularly those of the Ministry for Business, Innovation and Employment and the Ministry for Primary Industries, not to mention Te Puna Whakaaronui.

Consultation

The Treasury website[4] describes how submissions were invited over a four-week period on a ten-page consultation document that outlined the proposed subject matter for the 2021 statement. Five written submissions were received, and interviews held with eight subject matter experts in fields such as retirement, productivity, economic forecasting and business. These provided a range of feedback on both the proposed topics of the statement and on possible policy directions government could take.

In the second phase of consultation public feedback was invited on a draft of the combined long-term fiscal statement/LTIB, again over a four-week period. In this phase, 21 submissions were received. In addition, Treasury officials met with a range of stakeholders representing Māori, Pasifika communities and youth interests. They also met with academics, economists and other subject matter experts to get in-depth feedback on key themes, such as demographic change, retirement policy and climate change. Some experts were met individually and some as a group.

Ministry of Business, Innovation and Employment

MBIE's approach to its LTIB involved an initial ten-page backgrounder (Ministry of Business, Innovation and Employment, 2021a) and a short consultation process. The foreword in the consultation document identifies some high-level global trends, such as climate change, technology change and demographic change, along with challenges to productivity, inclusion, equity and the environment. It acknowledges the interaction of pae mahara (the past), pae herenga (the present) and pae tawhiti (the future), and proposes some potential case studies for future business models, including stakeholder capitalism, Māori business, Pasifika business, social/purpose-driven enterprises, circular business, and advanced digital businesses. In contrast to Treasury's focus on matters fiscal, MBIE is concerned with possible forms of businesses, how they might operate and what the regulatory environment might be. Questions of the context within which business may operate – e.g., the possible future composition of the economy – are not considered.

In contrast to Treasury's focus on matters fiscal, MBIE is concerned with possible forms of businesses, how they might operate and what the regulatory environment might be.

Consultation

Feedback on MBIE's consultation document (phase one) from 31 individuals and organisations provided some genuine futures thinking, alongside a mix of predictions (e.g., 'There will likely be a shift towards sustainable finance'), normative statements ('Future KPIs are not going to be about profitability, but cultural capital') and exhortations ('We need to culturalise our commerce, not commercialise our culture') (Ministry of Business Innovation and Employment, 2022a). This LTIB eventually evolved into a 58-page document published in mid-May 2022, incorporating another set of feedback questions to be responded to by 24 June. The opening summary acknowledges that '[g]lobal megatrends, like climate change and technological change, are creating enormous challenges as well as opportunities for societies', then goes on to focus on the two identified trends:

> At a business level, two trends occurring in this context of change are: the growth of purpose-led business and the emerging use of blockchain technology as part of increased digitalisation. Looking into these trends provides long-term insights into how business in Aotearoa New Zealand may change over the next 10 years and beyond. (Ministry of Business Innovation and Employment, 2022b, p.3)

It is not clear how an eventual focus on blockchain technology emerged from the consultation process. Somewhat paradoxically, the first question to guide feedback is wide-ranging – 'Question one: In what ways are you or your business responding to big challenges, like COVID-19, climate change or technological change? (p.4) – while the following questions and narrative focus on the LTIB topics of purpose-led business and blockchain technology.

Inland Revenue

Inland Revenue's LTIB starts with a consultation on tax, investment and productivity (Inland Revenue, 2021). It 'is narrower [than MBIE's] but aims to be complementary to and supportive of other work in this area'. This aim is to be applauded, and time will tell whether it has been achieved.

The 'key question to consider' is: 'Is tax and its impact on investment and productivity a worthwhile subject to investigate further through an LTIB?' It is difficult to argue that this is not an important question that should be

addressed by Inland Revenue, but surely it could be simply reworded as a research question to be addressed as part of business as usual: 'What is the impact of tax on investment and productivity?' Indeed, the rest of the consultation document already starts to address this question. On the other hand, perhaps the LTIB has provided Inland Revenue the space to safely address a tricky topic.

There is no discussion of increasing inequity, the concentration of wealth in fewer hands and the nature of sustainable productivity in a world of constraints, nor of the big questions about the role of taxation in this context. Instead we read: 'The first part of the LTIB will be aiming to establish the facts. We will benchmark costs of capital and EMTRs [effective marginal tax rates] against other countries drawing on the work of the OECD': i.e., topic and methodology are already narrowly prescribed. The draft LTIB itself (Inland Revenue, 2022) contains a highly technical discussion about options for tax changes and how these might be implemented.

Consultation

Inland Revenue's consultation went through three stages: first, a scoping document and feedback on that, comprising eight submissions, one from an individual and seven from consultancy firms and other business groups. Perhaps unsurprisingly, submissions received on the initial scoping of the LTIB were mainly supportive of Inland Revenue's proposal that its 2022 LTIB should focus on tax, investment and productivity.

The next two stages comprise a draft LTIB and feedback, and a final draft LTIB. The number and content of submissions on the two draft documents have not been reported, and, at the time of writing, a copy of the final draft is not to be found on Inland Revenue's website.

Discussion

There are many positive elements to build on. The Treasury writes about probable and possible futures for Aotearoa New Zealand as a whole country, and this writer knows that, for example, the Public Service Commission process (second to publish) aimed at a wider, multi-phased and more transparent consultation (Public Service Commission, 2022). There is no doubting the commitment and enthusiasm of many of the officials and respondents involved, and there are clearly examples of futures-thinking capability in many parts of the public service.

The requirement in the Public Sector Act 2020 for government departments to prepare long-term insights briefings is a welcome development, and considerable effort has been put into preparing the 2021–23 round of documents.

However, this interim review indicates that there is no overarching futures narrative within which the LTIBs can be located. Each LTIB has provided its own piece of the story, in its own way. The stewardship purpose for the LTIBs naturally emphasises the role of the public service as intermediary in the process of futures thinking, rather than the spark for national conversations, as in Singapore. Unsurprisingly, the lack of extra resources, short time frame and fragmented approach have resulted in quite limited consultation.

This last point seems to have been recognised by the Department of the Prime Minister and Cabinet in its report to the select committee: '19 long-term insights briefings is a large number, particularly when public engagement is required for all of them'. The small, relatively narrow response and the committee's report risks confirmation of the status quo:

> The Standing Orders Committee suggested that submissions could focus on people or organisations who contributed to the initial departmental process. Committees could get valuable insights from these people or organisations on how the departments engaged with their ideas and how they interpret the final report. (McKelvie, 2022, pp.6–7)

This would be an extremely disappointing approach, as it would effectively enable the same (limited) number of people to review their own initial input and may open up the whole LTIB process to charges of 'group think' or elitism. It would most likely see continued the historic cycle of futures-thinking initiatives which fail to match expectations, leading to yet another fallow period before the next attempt to get things right – a dangerous outcome for Aotearoa New Zealand in the current and emerging global context.

Conclusions

In an increasingly uncertain world, Aotearoa New Zealand has a pressing need for sound futures thinking. The requirement in the Public Sector Act 2020 for government departments to prepare long-term insights briefings is a welcome development, and considerable effort has been put into preparing the 2021–23 round of documents. The exercise has undoubtedly contributed to growing futures capability in the public sector. Some departments are ahead of others and, hopefully, learning will continue to be shared.

It bears repetition that the LTIB process is about halfway through its first attempt, and this review is merely preliminary. It is, however, already possible to suggest some changes that would help improve the overall process next time round:

- agreement on the core purpose for futures thinking, the scope of the LTIBs, and a shared language about types of

futures and futures-thinking techniques;
- proper resourcing of future LTIB processes to enable more comprehensive consultation and linkage with other initiatives over a longer time frame;
- specified use of scenarios and other futures methods, particularly ones that systematically identify emerging issues and trends, rather than just focus on obvious, current issues;
- consolidation of the overarching futures-thinking component, including widespread public consultation, within one coordinating agency reporting through a select committee to Parliament, thus maintaining transparent, high-level independence from the public service and the government of the day;
- departments and ministries writing fewer, combined LTIBs in response to the core futures report (still allowing for a diversity of approaches); and
- embedding the LTIBs in processes to guarantee anticipatory governance (Boston, 2016, 2017a, 2017b; Boston, Bagnall and Barry, 2019).

1 An example is the case of the proposed new Nelson public library in the wake of recent severe flooding: see Jones, 2022.
2 See https://www.iffs.se/en/about-us/about-futures-studies/other-institutes/.
3 See also the National Radio Te Papa Debates from 1999: 'Being There in 2021: what will it be like?' (http://www.futuretimes.co.nz/pdfs/National%20Radio%20Te%20Papa%20Debates%201999.pdf).
4 https://www.treasury.govt.nz/news-and-events/reviews-consultation/long-term-fiscal-challenges.

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Cate Roy and George Slim

Connecting Two Worlds

enhancing knowledge sharing between academics and policymakers in Aotearoa New Zealand

Abstract

The Covid-19 pandemic has put the research–policy interface in the spotlight, exposing the synergies and tensions between research and policy. The complexity of responding to Covid-19 has also highlighted the potential for research to inform responses to other major societal challenges. Researchers are enthusiastic about working with policymakers to ensure that policy is underpinned by robust evidence, while many in government see the importance of strong evidence underpinning policy. However, there are also significant challenges associated with connecting the complex domains of universities and central government.

Keywords research–policy interface, evidence-informed policy, knowledge sharing, chief science advisors, public policy

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The Covid-19 pandemic has put the research–policy interface in the spotlight as government responses around the world draw on expert advice, on issues from modelling and vaccinations to youth mental health and misinformation, to manage the pandemic (Ball, 2021). Research has informed and shaped prevention and treatment methods, as well as approaches to tackling wider social and economic issues beyond the health sector (Geoghegan et al., 2021; Williams et al., 2020). In Aotearoa New Zealand there are positive signs of effective engagement at the research–policy interface. Most researchers are enthusiastic about working with policymakers to ensure that policy is underpinned by robust evidence. They see the value in their research being used to inform important policy decisions that will affect the day-to-day lives of New Zealanders (Hendy, 2022). The recent emphasis on impact across the university sector globally is good news for research-informed policy, with universities increasingly expected to demonstrate the 'real world' impact of their research on society (Gamoran, 2018). Many in government see the importance of strong

evidence to underpin policy and there are some excellent examples of collaboration leading to stronger, evidence-based policy advice. Importantly, there is an opportunity to build on current high levels of trust in science among New Zealanders (Morton, 2021).

In the Aotearoa context, there is a broad spectrum of expertise located across the research, science and innovation system. Aotearoa has eight universities, seven Crown research institutes[1] and 18 independent research organisations.[2] Aotearoa also has an independent national academy of sciences. The Royal Society Te Apārangi is a non-governmental organisation representing individual researchers and their professional societies who make up the research community. Aotearoa also has strong links with the International Network for Government Science Advice, providing access to the global science–policy interface and opportunities to improve the potential for evidence-informed policy formation at sub-national, national and transnational levels. This rich ecosystem of expertise offers enormous potential to address the complex challenges facing Aotearoa. However, maximising this potential is highly dependent on greater engagement and knowledge sharing between researchers and policymakers in both local and regional and central government.

Importantly, Aotearoa's unique cultural context must be properly acknowledged and respected to create a research–policy interface that is enabled by, and responsive to, te Tiriti o Waitangi and mātauranga Māori. The current system has drawn criticism for not providing adequate opportunities for Māori to influence the science–policy interface, and there have been calls to adopt a Tiriti-led science policy approach in order to truly enhance societal well-being and tackle the complex issues facing Aotearoa (Kukutai et al., 2021). There is an urgent need to strengthen the evidence base by incorporating te ao Māori and ensuring that our science advice is responsive to the diversity of our community. This means ensuring that science advisors are representative of Aotearoa's diversity (Jeffares et al., 2019).

The focus of this article is on overcoming the challenges associated with connecting the complex domains of academia and central government. While we recognise the broad and diverse range of research entities in Aotearoa, as well as the value in knowledge sharing between different levels of government, the scope of this article is limited to universities and central government. The article is one output from a fellowship with the Office of the Prime Minister's Chief Science Advisor, undertaken to contribute a wider context to a joint project between the prime minister's chief science advisor, Universities New Zealand and the Department of the Prime Minister and Cabinet. The overarching aim of the project was to expand knowledge on potential approaches to strengthening the two-way flow of knowledge between university academia and policymakers in central government. This involved scanning the national and international landscape and conducting in-depth interviews with leading experts both within Aotearoa and in other jurisdictions. The aim was to identify best practice in establishing constructive two-way relationships between academia and policymakers and enhancing opportunities for knowledge sharing.

... Aotearoa's unique cultural context must be properly acknowledged and respected to create a research–policy interface that is enabled by, and responsive to, te Tiriti o Waitangi and mātauranga Māori.

The project was divided into two stages. Stage one was a desktop review of current international developments in the academic–policy interface. Stage two involved targeted, in-depth qualitative interviews with New Zealand and international experts in this area:

- mid–senior policymakers in New Zealand central government departments (10);
- chief science advisors in New Zealand central government departments and agencies (10);
- a former scientific advisor to the European Commission;
- a former chief international science envoy at the UK Foreign, Commonwealth and Development Office;
- the head of science systems and academic engagement in the UK Government Office for Science;
- the Australian chief scientist;
- the Victoria government lead scientist;
- the director of expert advice and publishing, Royal Society Te Apārangi;
- New Zealand academic experts in public policy (7); and
- international academic experts in public policy (3).

A key focus of the study was to present a set of solutions that are implementable in the Aotearoa New Zealand environment. Here, we discuss some of the barriers and enablers at the research–policy interface, before concluding with a set of high-level recommendations for universities and government to consider.

Barriers to better use of evidence and expertise in policymaking

A review of the literature reveals that there are a number of key issues in strengthening knowledge sharing between university academics and policymakers.

Knowledge of public policy process

Lack of understanding of the formal and informal aspects of policymaking can act as a barrier to collaboration between researchers and policymakers. Policymaking can be complex, non-linear, and subject to the vagaries of the political cycle, with policymakers required to take into consideration a broad range of factors when developing policy, over and above research results (Hudson, Hunter and Peckham 2019). Researchers are often not policy literate and can fail to understand

the complexity of the policy environment (Hetherington and Phillips, 2020). Researchers typically receive little training on the inner workings of government, public policy, or communicating research findings to policymaker audiences. The complexity of the policy cycle means that there are times when government will be very open to new ideas and evidence, and others when research or ideas will struggle to get traction (Cairney and Kwiatkowski, 2017). Policymakers often make decisions in a complex environment with limited time for reflection. In contrast, research often gives much more complex answers to long-term challenges (Koolen-Bourke and Peart, 2022).

Skill sets of researchers and policymakers

Influencing policy requires a specific skill set that is separate from other research skills (Oliver and Cairney, 2019). Increasingly, researchers need to be able to write for and speak to a range of audiences. Bridging the disconnect between the language of academia and the language of policymakers is one such skill. Influencing is another critical skill, often requiring a lengthy process of convincing a range of advisors, politicians, select committees, think tanks and pressure groups that help determine which policies do and don't get taken forward (ibid.). Importantly, many research institutions do not prioritise the development of these key skills, or incentivise or reward collaboration with policymakers (Jessani et al., 2020). This is particularly the case for early career researchers, who are often discouraged from engaging in policy work until their career is firmly established. Tenure and promotion criteria in universities still mostly favour publications in academic journals rather than policy briefs and other activities that aim to influence policy (Walker et al., 2019).

Conversely, policymakers often lack the skills to interpret science effectively and rigorously for their purpose, including understanding the quality, limitations and biases of evidence (Oliver and Cairney, 2017). Policymakers may look to scientists to provide certainty. This can lead to situations where researchers may not disclose the full weight of uncertainty in their assumptions and results, or may be unaware of it, or not know how to communicate it to policymakers. Understanding the limitations and the context of research and researchers and the ability to scrutinise evidence are critical skills for policymakers (Arndt et al., 2020).

> … researchers spoke of the scarcity of research skills among policymakers, a lack of rigour around how they used research results, and a tendency to look for research that supports predetermined conclusions rather than open inquiry …

Structural and cultural issues in academia and government

In both academia and the public service there are structural and cultural issues that create barriers even where there is great willingness to engage. In government, some departments lack clear protocol on how officials should engage with academics or for how they assess and use evidence and expertise. Unclear lines of responsibility also hinder the establishment of relationships with researchers and universities (Sasse and Haddon, 2018).

Reward systems in government and academia are also frequently incompatible. Promotion criteria in many universities often fail to reward a broader range of academic activities beyond scholarly publication, including informing policy (Arndt et al., 2020). Researchers' need to publish can be impeded by the policymaking process, in which control over flow of information may be necessary to manage policy change among diverse stakeholders. Conversely, many government departments do not actively encourage involvement of their staff in research (Sasse and Haddon, 2018). Organisational cultures and practices in government departments that value expertise and rigorous evidence are critical to encouraging links with academics (Head, 2016). Senior staff are influential in setting the culture of departments and how they engage with academia.

Strength of relationships

Relationships are central to a successful policy–research interface (Gluckman, 2014; Cvitanovic and Shellock, 2021). In government, high staff turnover and lack of institutional memory within policymaking agencies frequently 'resets' the science–policy relationship, with significant resources required to continually redevelop trusted relationships (Lacey et al., 2018). Researchers and policymakers collaborating to work through problem formulation and solutions can increase research-informed policy advice. However, this type of productive collaboration requires strong underlying relationships which act to lower barriers on both sides (Ausden and Walsh, 2020).

While relationships and trust are central to successful engagement at the interface, there are also risks associated with policymakers forming a reliance on a small group of experts, rather than drawing on advice from a broad range, especially when contentious or difficult issues are involved. Limiting interactions to a trusted few can limit the opportunities to challenge ideas and draw on a diversity of perspectives (Cairney and Wellstead, 2021).

Options for strengthening the research–policy interface

The results of this study's online surveys, focus groups and in-depth qualitative interviews with experts in Aotearoa and overseas revealed a multitude of

opportunities to strengthen the research–policy interface. Some are initiatives that have been implemented successfully in other jurisdictions; others are suggestions from researchers or policy experts working at the interface. They range from relatively simple initiatives, to actions aimed at addressing broader systemic issues. The results provide a range of ideas to ponder, and consider how they might fit the Aotearoa context and how they might be resourced to have an ongoing positive impact on strengthening the interface.

This study acknowledges and builds on the work of the inaugural prime minister's chief science advisor, Professor Sir Peter Gluckman (Gluckman, 2013). While considerable progress has been made, the use of evidence in the policy process remains highly variable (Gluckman, Bardsley and Kaiser, 2021) and, despite interest and motivation to engage on both sides, the mechanisms to enable effective engagement are often ineffective.

The challenge of bridging the two worlds was a dominant theme throughout this project. Commentary among policymakers centred around the inability of researchers to understand the constraints and complexities of the policy context. Similarly, researchers spoke of the scarcity of research skills among policymakers, a lack of rigour around how they used research results, and a tendency to look for research that supports predetermined conclusions rather than open inquiry (Koolen-Bourke and Peart, 2022). This mutual lack of understanding, along with a 'clash of cultures', were considered key barriers.

Ideas for government

Many academics in Aotearoa want to see their research informing the direction of government policy and having an impact. As a profession, researchers are more driven by purpose rather than money or status than many other professions, highlighting the deep motivation among most researchers to make a difference to society (Leeming, 2018). As witnessed during the Covid-19 pandemic, there is huge scope to leverage the knowledge and skills within academia and ensure that government policy is underpinned by the latest research. Here we offer some suggestions for how government can help to overcome the barriers to active engagement and strengthen relationships between policymakers and researchers.

> In some cases, the inability to commission research specific to Aotearoa leads to an over-reliance on international literature, which may not be applicable, at the expense of place-based research.

Ease of access to relevant officials

To the outsider, the inner workings of government can be mystifying. Researchers commented on how difficult it was to understand the roles and responsibilities within individual ministries, or how to contact relevant policy officials. In an attempt to bridge the two spheres, the UK Office for Science recently appointed a strategic academic engagement manager, tasked with strengthening the office's engagement with the university sector. While it is not feasible to provide contact details of policymakers across government, providing one point of contact for each policy area is one proposed solution. In addition, ensuring that there is a chief science advisor or principal scientist in each agency responsible for bridging the research–policy interface across the range of policy domains would be beneficial.

Manage high turnover of policymakers

In Aotearoa, policymakers are incentivised to move around agencies, with junior policymakers often changing roles after 14 months. While this movement allows policymakers to develop breadth of policy knowledge, it discourages the development of deep policy expertise and sector relationships. One chief science advisor commented that knowledge and expertise in a particular area can be a game changer, with policymakers becoming more valuable as their subject matter knowledge improves. The high churn among policymakers is problematic for researchers and chief science advisors when success at the research–policy interface hinges on trust-rich relationships and depth of subject matter expertise. Mitigation strategies could include ensuring that researcher contacts/relationships are retained and shared when a policymaker moves to another role. Government could also consider offering a specialist pathway to policymakers interested in developing deep expertise in a particular policy area.

A clear, public-facing research agenda

Both policymakers and researchers see the value of explicitly stating priority research areas for government agencies. Identifying priority policy areas gives researchers (including postgraduate students) the option of prioritising their research in areas aligned with government policy. A model for this can be found in the UK, where published 'areas of research interest' provide details about the main research questions facing government departments (UK Government, 2022). A public-facing strategic research agenda demands that ministries and agencies develop clearly defined priority areas and ensure that research questions are well articulated. This has the potential to create greater awareness and alignment across government. Departmental chief science advisors could play a pivotal role in helping ministries and agencies shape their research agendas. For example, some government departments have prepared research roadmaps, drawing on stakeholder consultation and with guidance and input from chief science advisors.

It is important to note that the success of such initiatives relies on follow-up and monitoring of implementation and progress. Under the Public Service Act 2020, all New Zealand government departments are required to put together a long-term insights briefing for government. The

briefings are an opportunity to stimulate greater engagement with and input from academia, but they are not well understood within the university sector and would benefit from greater promotion.

Funding for policy research

Lack of ability to fund strategic research to support policy in a timely fashion was highlighted as a barrier. The usual grant cycle can be an obstacle to generating research that aligns with political time frames. In some cases, the inability to commission research specific to Aotearoa leads to an over-reliance on international literature, which may not be applicable, at the expense of place-based research. There is the view among some chief science advisors and policymakers that relatively small amounts of money could be used to pump-prime areas that are under researched but of high strategic priority.

Opportunities for academics to connect with and contribute to the policy agenda

Researchers spoke of the difficulty in finding ways to connect with and feed into the policy agenda, particularly those located outside Wellington. To overcome what some dubbed the 'Wellington advantage', chief science advisors, policymakers and senior officials should schedule regular visits to universities and other research organisations as a way of sharing research and discussing policy priorities. An exemplar of this approach is the Ministry of Transport's annual workshops. The transdisciplinary nature of transport research means that expertise is located in a wide range of departments and faculties. In response to this challenge, the Ministry of Transport and the New Zealand Transport Agency conduct annual workshops across the country. The workshops are an open invitation for researchers interested in transport to connect with ministry staff and learn about government research and policy priorities, while also providing an important opportunity for ministry staff to learn about transport-related research currently taking place in universities.

Leadership and a strong authorising environment

Without the expectation of evidence-informed policy at the top, initiatives at the coalface may struggle to gain traction. Senior leadership needs to demand a high standard of evidence in submissions and incentivise basing policy on strong science and research. The authorising environment within ministries plays a key role in signalling the importance of research-informed policy; senior leadership needs to signal the contribution of research and evidence to the wider public service effort. While there are existing mechanisms in place to ensure that Cabinet papers demonstrate underpinning evidence, they need to be reinforced and adhered to.

The Australian Science Policy Fellowship programme, an initiative of the Office of the Chief Scientist, has created a strong cohort of PhD-trained public servants, with 75% remaining in the government on completion of their fellowship ...

Strengthening policy evaluation

Evaluation helps governments improve policy design and implementation, promotes greater accountability, and increases public sector effectiveness through improved decision making (OECD, 2020). However, interviews with policymakers and senior bureaucrats suggest that policy evaluation is inconsistent, and on occasion subject to bias. While recognising the need to factor in the political context, promoting transparent policy evaluation is considered integral to enhancing the quality of policy in Aotearoa. Policy evaluation is currently carried out internally or by external consultancies and think tanks. There is scope to draw on academic expertise to ensure that government policy is subject to rigorous evaluation.

Secondments, internships, fellowships and scholarships

Direct partnership via secondments, internships, fellowships and scholarships is an excellent way to increase understanding between academia and policymakers (Walker et al., 2019). There are a range of models, including fellowships, fractional appointments, policy postdocs and student internships. Fractional appointments allow researchers to work across the two spheres, maintaining active connections and bringing other researchers into government, and vice versa. Well-defined secondments structured around a clear objective provide broad benefits to both parties. The UK Office for Science has used secondments to great effect, notably as part of the Rebuilding a Resilient Britain project (Boaz and Oliver, 2020).

Scholarships, fellowships and internships can also boost policy awareness among postgraduate students, encourage ongoing engagement and expose them to a diversity of career paths. The Australian Science Policy Fellowship programme, an initiative of the Office of the Chief Scientist, has created a strong cohort of PhD-trained public servants, with 75% remaining in the government on completion of their fellowship (Australian Government, 2022).

There is also interest among policymakers in spending time in academia, providing early-career policymakers with the opportunity to develop and enhance skills in scientific enquiry, literature and evidence synthesis. Senior policymakers see the value in immersing themselves in a policy area in order to develop deep specialist skills and knowledge. The growing emphasis on transdisciplinary research across the research ecosystem, both in Aotearoa and globally, provides impetus for including policy stakeholders

in research teams. Transdisciplinary research is linked with improved decision making, networking and innovation and has the potential to strengthen both academic research and policymaking (Pohl, 2008; Jacobi et al., 2022). Expanding and strengthening interactions between academia and policy could ultimately weave the sectors more tightly together.

Value in multidisciplinary advisory groups

Advisory groups, expert round tables, panels and working groups provide government with access to the latest research and expert advice on a range of topics in Aotearoa and elsewhere. Members hold expertise, skills and/or experience relevant to a particular topic on which they provide advice. Expert advisory groups provide advice and insights from many disciplines, including the natural sciences, technology, medicine, engineering, the social sciences and the arts and humanities. Policymakers in our study highlighted the value and importance of having multidisciplinary teams with expertise and a diversity of viewpoints so that areas of disagreement were apparent.

The Behavioural Science Aotearoa Academic Reference Network was highlighted as an exemplar in the provision of multidisciplinary advice. The network of experienced Aotearoa- and Australia-based researchers and academics provides guidance and advice on the theory behind interventions in the justice system and the methodologies and analysis used to determine effectiveness. Another example of effective use of advisory groups is Australia's Rapid Research Information Forum, led by the Australian Academy of Science, which facilitated rapid information sharing and multidisciplinary collaboration within the research and innovation sector on Covid-19. The realisation that academics could provide current, timely advice was a game changer and resulted in the forum expanding to other government priority areas (Australia's Chief Scientist, 2020).

National academies have long held a central position in providing academic expertise to government decision making. National academies have strong and enduring local and international research and policy networks and draw on these networks to convene multidisciplinary expert panels when required. In Aotearoa, the Royal Society Te Apārangi plays an important role in providing expert advice on public issues to the government and the community. This is done via expert panels which include university academics. The Royal Society also convenes Speaker's Science Forums, which aim to raise awareness of the latest science among parliamentarians. While recognising the limitations posed by current resourcing, there is the view that the Royal Society could be more responsive to current policy agendas and issues of the day, and broaden its reach to include a more diverse range of community perspectives (Jeffares et al., 2019)

Chief science advisors must be prepared to engage in innovative thinking, extend their networks, and take on an active 'broker' role between research institutions and policymakers.

Strengthening the role of chief science advisor

Chief science advisors aim to bridge the realms of science and policy and are used in a number of jurisdictions, including the UK, Canada and Australia. There are two main models: individuals who are appointed to advise the prime minister, individual governmental ministers and/or departmental staff and management; and institutionalised or ad hoc expert committees that are established to provide science advice to government (Melchor, 2020). Chief science advisors are typically active scientists who work in either a secondment or part-time role embedded within a government department.

This study revealed high levels of support for chief science advisors among policymakers and senior bureaucrats. Chief science advisors were described by one high-level government official as 'a force for good', bringing diverse ideas and values, networks, deep knowledge of their research domain and significant opportunities to connect externally to their agencies. They typically have a broad, roving mandate and import critical networks into government. Their role also sends a strong signal from government that science is critical to robust policy making. In the words of one senior bureaucrat, chief science advisors have been 'spectacularly helpful' in bringing a degree of rigour to decision making.

Despite widespread support, there is scope to strengthen the role of chief science advisors and their broader network. While they typically have some exposure to government prior to their appointment, there are strong arguments for more rigorous induction, with the UK model offering suggestions (Government Office for Science, n.d.). For example, they may benefit from training in areas such as 'soft power', communicating and influencing upwards, leadership, and learning the language and mechanisms of government. Chief science advisors must be prepared to engage in innovative thinking, extend their networks, and take on an active 'broker' role between research institutions and policymakers. Skills in diplomacy are also critical; they must learn when it is appropriate to nudge things along, and when to retreat. One of the few criticisms of chief science advisors was a perception of reliance on too small a network of academics. This highlights the importance of chief science advisors making deliberate attempts to expand their networks, consider a broader range of disciplines and go beyond the 'usual suspects', including consulting early career researchers.

Government hierarchy is a barrier to the success of some chief science advisors, with reporting lines dictating the level of influence. Our interviews revealed support for chief science advisors being part of the senior leadership team within their

ministry or agency in order to have any upward influence. To maximise their expertise, there need to be more opportunities for chief science advisors to give free and frank advice. They are not well known in some ministries, suggesting more opportunities to elevate their role and services to the wider policymaker community. Resourcing was also highlighted as an issue. The chief science advisor in the Ministry of Health described the significant benefits of extra resources during the Covid-19 pandemic as they went from an individual to a collective effort.

The lack of Māori science advice within government was flagged as an area of concern and has also been highlighted in a recent report, *Te Pūtahitanga: a Tiriti-led science-policy approach for Aotearoa* (Kukutai et al., 2021). Covid-19 has highlighted the need for greater Māori input and for a Māori-led response to the health crisis (Te One and Clifford, 2021). The same is true for Pasifika communities. While some advocate for a separate Māori advisor in each ministry and agency, others propose appointing a cluster of Māori advisors in the social and natural sciences to provide advice to relevant ministries. This model would create a purposeful space to connect Māori researchers, research, mātauranga and policymakers, as well as promote cross-ministerial collaboration.

Overall, there are compelling arguments to review the chief science advisor operating model to ensure that government is deriving maximum benefits from this highly regarded resource.

Ideas for universities

Academics face a number of barriers to working successfully at the research–policy interface (Gluckman, 2017; Cairney and Oliver, 2020). Working at the interface is time-consuming. Establishing and investing in relationships requires ongoing effort, as does developing policy-friendly research outputs. This is exacerbated by high staff turnover in the policy community. Often there is a tension between timeliness and rigour, with policymakers needing research findings immediately and academics needing time to collect, analyse and consult. In general terms, the lack of formal recognition of policy-related activities is a major disincentive.

… some advocate for a separate Māori advisor in each ministry and agency, others propose appointing a cluster of Māori advisors in the social and natural sciences to provide advice to relevant ministries.

Among policymakers there is the view that researchers do not have an adequate understanding of the policy context, time constraints, or the political implications of how research findings are presented. Policymakers spoke of the value of connecting with researchers who were skilled at making their research easily accessible and relatable to policy. In Aotearoa, the current review of the research, science and innovation sector provides a timely and valuable opportunity to highlight the value of research-informed policy, address longstanding issues and strengthen the research–policy interface (Ministry of Business, Innovation and Employment, 2021).

Recognise and reward policy engagement

For academics, the motivation to work at the research–policy interface comes from a combination of intrinsic and extrinsic factors. Intrinsic factors include the potential for policy engagement to enhance research, improve impact and make a change in the world. These are core drivers for many university researchers. Extrinsic factors include funder requirements and the institution placing value on activities through promotion structures and other forms of recognition. There are suggestions that universities could do more to recognise and reward policy engagement which offers broad individual and institutional benefits, including stronger relationships with government, richer research and increased impact.

Adopt an 'NZ Inc.' approach to policy engagement

Expertise in many fields is spread across Aotearoa. In order to achieve critical mass and avoid duplication and unnecessary competition, researchers working in similar areas could, where appropriate, present a unified front when engaging with policymakers. By establishing a critical mass of expertise, researchers are more likely to gain the attention of policymakers. Chief science advisors could play an important coordination and engagement role. Importantly, bringing together research expertise to work on priority areas or issues will require resourcing.

Early, proactive, ongoing engagement

Early engagement with policymakers increases opportunities for researchers to influence policy (Sasse and Haddon, 2018). Often researchers are working in areas that are highly relevant to government priorities, but policymakers only find out about key research when proposals are fully formed and have been submitted to relevant funding bodies. There is an openness in many ministries and agencies to co-developing research projects with researchers in high priority areas. However, this approach hinges on early engagement.

Working at the policy interface requires academics to take a long-term view and anticipate issues. They must also be willing to provide advice at short notice and to tight deadlines, sometimes based on incomplete, but nevertheless relevant, scientific information. While this approach may conflict with the timescales and norms of academia, it reflects the imperfect realities of some government processes. Policymakers are motivated to keep up to date on emerging research in their field, highlighting the importance of researchers identifying relevant government agencies and proactively seeking out and engaging

with policymakers. Finding ways to profile research in the media is another way to gain the attention of policymakers. To successfully engage at the interface, researchers need institutional support, and universities should consider how to provide this support via their research office or technology transfer/research commercialisation office.

The importance of 'brokers'

The role of 'brokers' was a dominant theme in this project. 'Brokers' are an important part of how academic evidence and expertise enter policy. Knowledge brokerage in its most simplistic description is the process of effectively transmitting the results of evidence synthesis to the policymaker (Gluckman, Bardsley and Kaiser, 2021). Brokers were seen as critical to a flourishing research–policy interface, translating the language of research into the language of policy. Knowledge brokers combine knowledge and experience in academia with an understanding of policy, politics and impact. To be successful, intermediaries or knowledge brokers need to be skilled in understanding, categorising and synthesising evidence and research to ensure that the best research is informing policy, while at the same time understanding which policy levers are best suited to implement change (Goldfeld, 2010).

There is enormous value in those who sit within universities or central agencies and understand the nuances of both spheres (although there is a risk of 'gatekeeping', which would limit the range of advice heard). Brokers can leverage that knowledge to influence and enable, build strong relationships, and ensure the successful translation of academic knowledge into a language that can inform and enhance policy decision making.

While there has been huge growth in the knowledge mobilisation profession, their contribution is often undervalued. Knowledge brokers lack career pathways and professional recognition. There is a general lack of understanding of the importance of key evidence champions who have a foot in both camps (Flinders and Chaytor, 2021).

Conclusion

Strengthening connections between researchers and policymakers is challenging. It requires finding new and creative ways to build understanding and engagement between two complex and disparate spheres, in ways that are mutually respectful and mana enhancing. However, if successful, this merging offers many benefits, including evidence-rich policy advice, ultimately leading to better outcomes for people and communities.

While there are barriers to engagement on both sides, there are also strong signs of a willingness to engage and a growing appreciation of the importance of research-informed policy. Among academics and policymakers there is a strong appetite to forge productive, reciprocal relationships. In some areas, an ecosystem of policy-capable academics working in tandem with policymakers already exists. There is a lot to be learned from areas where this interface is working successfully. The role of chief science advisors is considered a vital resource, but one that has not yet achieved its full potential. Similarly, 'brokers' provide the opportunity to further leverage the potential in boundary-spanning roles.

Covid-19 has brought the importance of research, data, evidence and independent thinking to the fore. Aotearoa's science- and evidence-informed response to the pandemic is widely lauded as world-leading. The speed of the Covid-19 pandemic and its impacts have accentuated the importance and necessity of the policy–research nexus in dramatic terms. It has demonstrated the power of researchers drawn from many disciplines working closely with government, with an urgency characterised at times as a 'wartime' response. We need a similar urgency in 'peacetime' to tackle the raft of challenges facing Aotearoa now.

1 https://www.mbie.govt.nz/science-and-technology/science-and-innovation/agencies-policies-and-budget-initiatives/research-organisations/cri/.

2 https://www.mbie.govt.nz/science-and-technology/science-and-innovation/agencies-policies-and-budget-initiatives/research-organisations/independent-research-organisations/.

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Susan Shaw and Naomi Heap

Health Workforce Planning

an urgent need to link islands of expertise

Abstract

This article provides a snapshot of the legislative framework for, and ministries and agencies involved in or with influence over, the education of the health and disability workforce, including examples of disconnection between the wider health and education sectors. Particular challenges occur between health professional regulators, education providers and clinical (placement) providers because their respective areas of expertise tend to be siloed, thus reducing the capacity for a coordinated and holistic perspective. Four potential 'bridges' for linking these 'islands' of expertise are suggested. The current period of institutional reforms in the health and education sectors presents an opportunity to refine the structures and systems for workforce education and planning, thereby facilitating a more flexible, responsive and resilient workforce which is better equipped to engage with, and improve outcomes for, the wider community.

Keywords health workforce, health and disability, system transformation, education reform

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The complex landscape

The education of the health and disability workforce sits at the nexus of the health and education sectors, both of which are largely centrally funded, regulated and monitored. This gives rise to a range of professional scopes, boundaries and systems, including quality assurance and policy. Educational institutions providing health professional education must comply with multi-agency requirements across both the education and health sectors.

Under the Health Practitioners Competence Assurance Act 2003, 'responsible authorities' are established to regulate professions and protect the public from harm. Regulated professions include medicine, dentistry, nursing and midwifery, and a wide range of allied health professions such as pharmacy, chiropractic, occupational therapy, oral health, osteopathy, paramedicine, physiotherapy, psychology and psychotherapy, and more. The Act outlines a number of functions for responsible authorities, including involvement in education programmes leading to registration in the scopes of practice they oversee. This legislation is administered by the Ministry of Health – Manatū Hauora, which is also

charged with providing support for the government to comply with international obligations and administering approximately 30 pieces of domestic legislation.

The current health and disability system transformation has seen the disestablishment of 20 district health boards, replacing them with two national agencies (Te Whatu Ora –Health New Zealand and Te Aka Whai Ora, the Māori Health Authority) that work alongside the Ministry of Health and the newly established Whaikaha – Ministry of Disabled People. Health professionals, organisations, professional bodies and responsible authorities are all currently navigating the changes to the health and disability sector.

Any interest in health professional education that responsible authorities may enact occurs within the context of a range of tertiary education quality assurance requirements overseen by the Ministry of Education under the Education and Training Act 2020. The Ministry of Education regulates performance, funding and support agencies, including the Tertiary Education Commission and the New Zealand Qualifications Authority (NZQA) (delegated to Universities New Zealand for universities). This results in universities, institutes of technology/ polytechnics, and other providers of health professional programmes being subject to parallel compliance systems.

The reforms across the health and disability sector are taking place alongside an extensive process of change in the education sector. All polytechnics, institutes of technology and work-based (including apprenticeship) education providers have been consolidated into a new, centralised New Zealand Institute of Skills and Technology, known as Te Pūkenga. This new national institute oversees a revised structure for vocational qualifications and how they are accessed by students (Fisher and Leder, 2022; Hannigan and Asmatullayeva, 2022). Several health professional education programmes are offered by education providers within Te Pūkenga, including medical imaging, midwifery, nursing, occupational therapy and physiotherapy, involving a significant proportion of the future workforce.

All of these major sector changes are underpinned by a desire to address inequity, especially for Māori and in the light of the Health Services and Outcomes Kaupapa Inquiry (Waitangi Tribunal, 2019) and critique of He Korowai Oranga (the Māori Health Strategy) (see Came, Herbert and McCreanor, 2021). Critical workforce challenges and the need for high-quality and relevant services, including health professional education, also inform these changes (Health and Disability System Review, 2020; Health Workforce Advisory Board, 2022). The many complexities of this environment are summarised in Table 1, which presents an overview of the legislation, ministries and agencies involved in, or with influence over, health professional education.

As with any large and complex bureaucracy, there is a risk of fragmentation, with many strategies, projects and reports being developed in different areas.

Tertiary education providers offering programmes leading to health professional registration navigate overlapping and duplicated quality assurance systems which traverse the education and health and disability sectors. An example of this is the relationship between programme accreditation and tertiary education sector quality assurance processes. The first function of the responsible authorities defined by the Health Practitioners Competence Assurance Act directly relates to the education of health professionals and states that the authority is empowered 'to prescribe the qualifications required for scopes of practice within the profession, and, for that purpose, to accredit and monitor educational institutions and degrees, courses of studies, or programmes' (s118(1)(a)). This function has been interpreted by the authorities in ways that result in complex and expensive accreditation and monitoring processes, including gazetted fees for site visits (Shaw and Tudor, 2021, 2022). The same education providers are also subject to the requirements of the tertiary education sector quality assurance processes, including accreditation and monitoring of their programmes, which incorporates consultation with and feedback from the workforces the programmes serve. The education and health sector quality assurance processes include very similar requirements, resulting in duplicated activities and costs. This overlap is noted by Universities New Zealand: 'professional registration bodies are ... keenly interested in the content and quality of education … and many stipulate monitoring and periodic review visits … An application process for approval from such a body may overlap with [Universities New Zealand] processes ... but the two are separate review and approval processes' (Universities New Zealand, 2021, p.16).

Despite the number of government agencies, legal requirements and separate quality assurance processes involved, significant quality challenges remain. As with any large and complex bureaucracy, there is a risk of fragmentation, with many strategies, projects and reports being developed in different areas. This creates the potential for coincidental initiatives, actions and policy, resulting in inefficiency and waste in financially constrained sectors (Rhodes, 2016). Within such an environment there is a risk that innovative solutions to current challenges become disconnected, resulting in multiple parallel actions (Lapuente and Suzuki, 2020).

Two key reports have identified challenges and opportunities to address them. The Health and Disability System Review (2020) considered the existing services and opportunities to transform the system. This provided a cornerstone for the transformation of the health and disability system, with the establishment of new national structures replacing district health

Table 1: Brief overview of the health and education landscape of Aotearoa New Zealand (legislation, agencies and initiatives)

Sector	Act	Administered by	Agencies/entities	Involvement in/influence on workforce education			
				Funding/ strategic direction	Development/ quality assurance	Content/ context of curricula	Education providers
Health, disability and wellbeing	Pae Ora (Healthy Futures) (July 2022)	Ministry of Health	Health Workforce Directorate	Taskforces for medicine, nursing, midwifery, allied health			
			Te Ao Marama (External advice on implementation of Whāia Te Ao Mārama: The Māori Disability Action Plan)			Content	
			District Health Boards (disestablished)				Placements for clinical/ practical learning and assessment
			-Health New Zealand				
			-Māori Health Authority				
	New Zealand Public Health and Disability Act 2000		Health Workforce Advisory Board	Strategic oversight and advice			
			Health Quality Safety Commission			Content	
	Health Practitioners Competence Assurance Act (2003, 2020)		Responsible Authorities (18, with some incorporating more than one profession)		Accreditation, approval and monitoring of qualifications	Content and requirements (eg. clinical learning hours, restrictions on credit)	Extensive compliance
	Health and Disability Commissioner Act (1994)		Health and Disability Commissioner's Office			Essential content/ context	
	Mental Health and Wellbeing Commission Act (2020)		Mental Health and Wellbeing Commission				
	Accident Compensation Act (2001)	Ministry of Business, Innowvation, and Employment	Accident Compensation Corporation				

boards (including the first national Māori Health Authority) and of Whaikaha – Ministry of Disabled People. The most recent annual report of the Health Workforce Advisory Board (2022) highlighted ongoing challenges between and across agencies. These two key reports made similar points about the need for Māori, Pasifika and disabled communities to be better served, to have self-determination, to realise better outcomes and to be reflected in the workforce (and therefore professional education programmes). Both reports also noted the necessity for agencies and organisations across the sectors to engage with one another in planning and delivering services and engaging in the education of health professional students. See Table 2 for a summary of key points.

Discussion

The education of the health and disability workforce is part of an ecosystem linking

Sector	Act	Administered by	Agencies/entities	Involvement in/influence on workforce education			
				Funding/ strategic direction	Development/ quality assurance	Content/ context of curricula	Education providers
		Ministry of Social Development	Whānau Ora/ Enabling Good Lives approaches to service design and delivery			Content/ philosophical position	
			Office for Disability Issues/ Ministry for Disabled People	Enabling Good Lives (radical change to resourcing and accessing support)		Content	
	Residential Care and Disability Support Services Act 2018		Needs Assessment and Service Co-ordination Services			Content	Context of placement/ clinical learning
Education	Education and Training Act (2020)	Ministry/ Minister of Education	Tertiary Education Commission – crown entity	Funding and resourcing education providers			
			NZ Qualifications Authority		Accreditation and monitoring of qualifications and education providers		
			Universities New Zealand				
			Universities		Approved internal quality assurance systems and processes (NZQA/ Universities New Zealand) and RA requirements – all requiring engagement with wider sector		Degree qualifications
			Wananga				Degree and pre-degree education
			Polytechnics and Institutes of Technology/Te Pōkenga				
			Private training providers				Pre-degree qualifications
			Workforce Development Councils (previously industry/work-based training organisations)				Develop pre-degree vocational qualifications

the health and disability sector, and the design, funding and delivery of educational programmes. Along with being at the nexus of the health and education systems, health professional education demands meaningful engagement with and responses to inequity. Preparation of the workforce requires deliberate strategies to ensure that the demographic of the student group reflects the community, and that the content of programmes and the educational journey for all students actively engages with context and culture, with students from Māori, Pasifika and disabled cultures being actively supported

Table 2: Workforce - related considerations from recent reports (emphasis added)

Issues	Health and Disability System Review (HDSR, 2020)	Health Workforce Advisory Board (HWAB Annual Report, 2022)
Health and wellbeing	need to partner across government and with other sectors to address inequity and improve outcomes, particularly for those for whom the current system is not working *Māori, Pacific peoples, disabled people*, people living in rural disadvantage and other vulnerable groups. communities or with socioeconomic disadvantage. (p.98).	The longstanding failure to address *Māori health workforce* **inequity** has failed Aotearoa New Zealand, failed Māori and Māori whānau (p. 13). Despite the various efforts by successive governments, there has *not been a significant shift in the equity concerns and the health and wellbeing of Pacific peoples* in New Zealand (p. 15). urgent health workforce development *needed to increase, legitimise and develop the disability workforce* (p.17).
Workforce	Workforce development is a *key constraint in our current health and disability system*. In line with worldwide trends New Zealand is experiencing growing clinical workforce shortages. Our system will not be sustainable unless we change models of care and use the workforce differently. (p.7).	Following communication between ministers, the Ministry's Health Workforce Directorate began working with officials at the Ministry of Education and the Tertiary Education Commission to *establish a mechanism to ensure health workforce sustainability*. (p. 5).
Tertiary education strategy	The Tertiary Education Strategy does not currently have a formal position on tertiary training for the health workforce. In future, it *should have a more explicit plan to grow the health workforce, in line with the health and disability workforce plan* (p. 185).	… There are at least a dozen health professions, trained at undergraduate level and funded by the Tertiary Education Commission with overall policy responsibility sitting with the Ministry of Education, which are *at risk of not meeting health workforce demands* (p.5).
Tertiary education providers	there are concerns that New Zealand's professional bodies, Responsible Authorities, and training organisations have *created higher training and entry barriers than other countries* (p. 190).	Several agencies and organisations have different roles and accountabilities in the education, training and regulation of the health workforce. The *policy drivers of education providers are often not in alignment with the needs of the health sector* and coherent, holistic workforce development. (p. 5).
Curricula	…growing need for work-integrated learning to *align training with the changing needs of workplaces* and allow students to learn-as-they-earn. (p. 187).	
Clinical/ placement		The health sector has no influence on the level of support offered by education providers to *ensure that students that admitted to programmes of study actually stay the course and graduate* (p.5).
Health professional regulators (RAs)	no additional Responsible Authorities should be established and *the current regulators should be encouraged to work more collaboratively in a way that is consistent with the workforce plan* and to better support agreed health and disability system objectives. (p. 194).	The Board continues to be concerned that the *17 Responsible Authorities responsible for 24 regulated professions have full autonomy in setting accreditation standards, but without the consequent responsibility for policy settings relating to accreditation standards, which are required for a responsive, pressured and changing health sector.* (p.6).

to achieve and succeed. Despite a lengthy history of consideration given to workforce issues (Gorman, Horsburgh and Abbott, 2009; Health Workforce Advisory Committee, 2003; Rees et al., 2018; Rees, 2019), critical issues remain. These issues, including cultures of institutional racism and distrust of westernised health systems, must be contextualised in the wider health, wellbeing and disability landscape of Aotearoa New Zealand, and the formal relationship between Māori and the Crown (Health and Disability System Review, 2020; Health Workforce Advisory Board, 2022).

Safety of the public is a priority, and it is reasonable that publicly funded agencies and services meet quality standards. The functions of the responsible authorities listed in the Health Practitioners Competence Assurance Act primarily, and understandably, emphasise public safety. However, regulating the health workforce does not guarantee that all registered health professionals will practise safely (see Dyer, 2005). Therefore, while regulation through competence-based registration may be intended as a measure to deter unacceptable practice, it is not infallibly able to prevent unsafe, illegal or dangerous practice in and of itself.

The various quality processes have many similarities in their requirements, and are resource intensive because of their discrete approaches. The associated expenditure, along with very fine-grained requirements set by some responsible authorities, such as a prescribed number of clinical placement hours that students must complete (Shaw and Tudor, 2021), combine to limit the number of places available in health professional

programmes. The cost of meeting duplicated, and often very detailed, quality assurance requirements has a detrimental effect on the capacity of educational institutions to contribute to addressing workforce issues. While ensuring quality and safety is critical in the health environment, educating sufficient health workers who are appropriately prepared to engage with the community and respond to their needs is equally important. Ensuring that the education system can deliver a fit-for-purpose workforce to the health and disability sector requires a review of the duplicated function of parallel compliance requirements enacted within this complex bureaucracy.

It is clear that there is a good deal of information about what is required to provide high-quality education to meet the workforce needs of the health and disability sector. Te Whatu Ora has established a taskforce to accelerate workforce development (Te Whatu Ora, 2022). Its website refers to working with education providers, regulators and employee organisations. These groups may be thought of as 'islands', with their unique perspectives and expertise in relation to workforce development and practice. Other 'islands' include the ministries of Health and Education, the Mental Health and Wellbeing Commission, Whaikaha – Ministry of Disabled People, the Tertiary Education Commission, NZQA, Universities New Zealand and Te Pūkenga. All of these agencies need to be engaged in considering how to address health workforce issues.

There is limited literature that discusses inter-agency collaboration, but trust is recognised as a critical factor in bringing about and embedding change (Essens et al., 2016), and particularly change which influences people's working lives (Hastings et al., 2014). Without open communication, it is impossible to connect, find common purpose and engage meaningfully. To that end, we suggest four bridges that may help to link these islands of expertise. These bridges provide a framework for creating shared understanding and navigating between the islands of expertise where there are differing points of view and priorities. Building and maintaining these bridges may require dedicated roles that are designed with the express purpose of establishing and maintaining connection and engagement, and ensuring that meaningful communication occurs and voices are heard.

The inequitable outcomes Māori experience clearly indicate a failure to enact te Tiriti o Waitangi, inadequate responses to previous initiatives, including He Korowai Oranga, and the need to pay attention to the Waitangi Tribunal kaupapa inquiry ...

Bridge one: person-centred equity

Ensuring that people and equity are at the heart of health professional education and practice is imperative. Te Tiriti o Waitangi is the founding document of Aotearoa New Zealand and for that reason it should underpin the design and delivery of services and the education of their associated workforces. The inequitable outcomes Māori experience clearly indicate a failure to enact te Tiriti o Waitangi, inadequate responses to previous initiatives, including He Korowai Oranga, and the need to pay attention to the Waitangi Tribunal kaupapa inquiry (Waitangi Tribunal, 2019; Came, Herbert and McCreanor, 2021).

The Critical Tiriti Analysis tool (Came, O'Sullivan and McCreanor, 2020; Kidd et al., 2022) references the four articles of te Tiriti and can be used to guide intentional and purposeful policy design oriented to achieving equity. Central to this is a person- and whānau/family-centred approach to care, support and resources that transcends rigid boundaries between agencies and services and is mindful of equity. Whānau Ora is an example of an approach to service design and provision that prioritises meaningful links across agencies (Durie et al., 2010). This was also the philosophical basis of the Enabling Good Lives initiative, the implementation of which will bring radical change to how disabled people access support and resources under the auspices of Whaikaha – Ministry of Disabled People (Shaw and Sherrard, 2022).

Ensuring that people and their experience, cultural context and access are all genuinely addressed is critical to addressing inequity. The education of health professionals must engage with the expertise of those with experiences of services to address persistent inequitable outcomes. A person-centred and equity-based approach provides a sound foundation for health workforce education, making connections with and between people, and across the boundaries between agencies and organisations.

Bridge two: expertise recognition

There are many 'stakeholders' in the health and disability sector, including those whom the system is designed to serve (the Health Practitioners Competence Assurance Act refers to them as 'consumers'), regulators, education providers, and health and disability service providers. The voices that struggle to be heard the most are those of people accessing and experiencing services (Elliott, 2017; Rees et al., 2018). Given the appreciation of the inequity experienced by Māori, Pasifika people and the disabled community, the assertion of the voice of the community (Elliott, 2017) and reviews of service provision (Mental Health and

Wellbeing Commission, 2022; Waitangi Tribunal, 2019), it is timely to define expertise. One approach is to prioritise expert voices in relation to specific issues or situations. Our suggestion is that the 'lead' voices are identified as follows:

- *consumers of services* – the expert 'voice' of consumers is that of groups representing their communities (rather than service providers or 'experts' within the sector);
- *education of the workforce* – the expertise in design, delivery and quality assurance of education programmes to educate and develop the workforce is that of educators;
- *regulation of practitioners* – the expertise in relation to the regulation of practitioners and oversight of their ongoing competence is that of health professional regulators;
- *work readiness of the workforce* – the expertise in relation to requirements of work readiness and nurturing of new graduates is that of employers and service provision agencies.

Recognising the 'lead' expertise in decision making, planning and action will limit overlap, duplication and confusion. This bridge would require mechanisms for communication and decision making between the experts from each area of responsibility. Defining the lead expertise in relation to educational design and practice is imperative to address overlap and duplicated resources between the health and education sectors. This, along with reconsidering some of the very rigid programme criteria instituted by some responsible authorities, has the potential to increase access to, and enhance the journey through, health professional education programmes, ultimately increasing the number of graduates, and among them graduates who have a profile that reflects the wider community.

Bridge three: crossing professional and institutional barriers

The settings and scopes in which health professionals learn and practice have the potential to constrain their experience, interests and opportunities. Prioritising interprofessional learning and practice experiences, finding ways to develop and extend relationships between students/practitioners and employers, rethinking the emphasis on research within professional learning, and recognising similar skill sets across scopes of practice all have the potential to assist with workforce challenges.

Opportunities to broaden career interests across professional boundaries in similar fields (such as nursing/ paramedicine/ anaesthetic technology) should be possible when there are clear links in the skill set and knowledge base across the professions.

The value of interprofessional learning and practice is well established and core to many health professional education programmes in Aotearoa (see Boyd and Horne, 2008; Jones, McCallin and Shaw, 2014). Beyond engaging across professional boundaries, there are also opportunities to bridge educational and practice environments. Clinical learning placements that incorporate exposure to professional diversity in health teams are instrumental in translating interprofessional learning into practice. Student scholarships can develop relationships that evolve beyond study into an employment journey (Gómez-Ibáñez et al., 2020). Transitioning early-career professionals into practice is key to workforce retention and may include internships, specific first-year programmes (as in midwifery: see Dixon et al., 2015), and preliminary professional registrations (as in other professional fields, such as teaching).

There are also opportunities to consider career development that is broad rather than deep. The current model of professional learning is tightly linked to postgraduate education, with an emphasis on research (Kesten et al., 2022). This is appropriate for many practitioners and essential to contribute knowledge to fields of practice. However, it is also driven to some degree by access to research funding for the higher education sector. This could be considered a perverse incentive which emphasises research outputs and recognition (Gair et al., 2021). Professional learning opportunities that enable practitioners to develop their practice and contribute to the sector do not necessarily require that they undertake research.

Opportunities to broaden career interests across professional boundaries in similar fields (such as nursing/ paramedicine/anaesthetic technology) should be possible when there are clear links in the skill set and knowledge base across the professions. This could be achieved by recognising the transferability of existing skills and knowledge as the basis for additional scopes, with a focus on the needs of the community, rather than the established territories and boundaries of professions (Fraher and Brandt, 2019; World Health Organization, 2010). Opportunities for combined or multiple registrations, enabling practitioners to practise in more than one role or scope, would be very cumbersome to manage across the current siloed, responsible authority structure and systems.

This bridge requires thinking beyond the boundaries of professions, established roles and structures, and considering broader options for practitioners to develop their practice and careers. Opportunities for practitioners to extend their skills (including 'skill shifting') and interests assist with workforce retention, particularly in rural areas (Franco, Lima

and Giovanella, 2021). More flexible approaches to role development and recognition have the potential to enable access to a wider range of services and support, offered by professionals who have been able to extend their interests and skill sets.

Bridge four: role innovation

There are a number of opportunities for role innovation within the health and disability workforce. Workforce shortages, transitions to extended scopes in some professions, increasing population demand and, more recently, the effects of the Covid-19 pandemic highlight the need to consider options. Opportunities and the need for innovation in primary care have been explored in some detail (see Moore, 2019). One example of innovation is the primary care practice assistant demonstration (Adair, Adair and Coster, 2013). It is timely to (re)consider other innovations, such as second-tier roles, peer workforce development and apprenticeships.

Second-tier roles are also referred to as assistant or auxiliary roles within the health and disability sector. Professional and policy positions have seen such roles move in and out of favour over time. In New Zealand, the establishment, rise, fall and re-implementation of enrolled nurses is a good example of this (Davies and Asbery, 2020). Prior to the Health Practitioners Competence Assurance Act in 2003, some professions, which are now regulated under the Act, were framed as non-regulated auxiliaries. Oral health therapists are one example of a professional group that has transitioned from non-regulated to regulated status. More recently, the podiatry profession has recognised the potential of assistants to support access to services for the community.

The development of the peer workforce is a recognised approach in the mental health and wellbeing space (Health Workforce Advisory Board, 2022). One of the strengths of this model is that it recognises, values and engages with the voices of those with lived experience. The voice of the disabled community is also emphasised in the Enabling Good Lives approach (Shaw and Sherrard, 2022), which includes the role of a 'kaitūhono' or 'connector', accompanied by the expectation that members of the disabled community will be well equipped and supported to enter this workforce.

> Key reports note that the workforce is critical to addressing inequitable outcomes and should reflect the communities being served, along with opportunities for better connection between health professional regulators, educators and clinical service (placement) providers.

Apprenticeship-based models of workforce education and development are becoming more popular and enable students to be engaged with the sector as they learn and achieve educational credentials. Over several decades the education of the health and disability workforce moved from practice-based settings into educational institutions. This served the purpose of emphasising evidence-based practice and prioritising the educational journey, while also raising the profile of knowledge and science to inform practice. The disadvantage has been the loss of a deep connection with the workforce and environments that graduates need to navigate. The strengths of apprenticeships are that they ensure that learning is grounded in practice, reduce the need for students to work while studying, and contribute to the workforce while also establishing potential connections between employers and future employees (Bernstein, 2021). It is timely to consider some middle ground in the educational journey, which reconsiders the settings in which learning takes place. The qualifications that students would achieve may take longer to complete within apprenticeships, but they would still be awarded by accredited educational institutions and carry the same professional status.

All of these role innovations require rethinking our current design and approaches to educating the workforce and managing across professional and practice boundaries. They have the advantage of enabling flexible approaches to learning and pathways into practice. Flexibility is one of the key elements of enabling engagement of students who have strong affiliations and commitments to their communities (Duder, Foster and Hoskyn, 2022). There are opportunities for new roles that are grounded in and defined by the needs of communities and with skill sets that are complementary to (and therefore supportive of) existing registered health professional scopes of practice. If education providers were less constrained by discipline and professional silos, which are perpetuated by the extent to which some responsible authorities interpret their oversight of education, there would be more opportunity to develop roles and pathways in response to community need and context.

Conclusion

Within the context of significant change across the health and disability and education systems, and major concerns about the workforce, we undertook a brief analysis of the range of legislation, agencies and key reports that relate to educating the

regulated health professional workforce. There is a range of expertise, reports and initiatives, but little opportunity for them to be linked, which is detrimental to workforce planning. Key reports note that the workforce is critical to addressing inequitable outcomes and should reflect the communities being served, along with opportunities for better connection between health professional regulators, educators and clinical service (placement) providers.

Plans for health workforce development cannot be predicated on the idea of simply educating more people within established and regulated professions. Structural changes currently underway in the health and disability system and education sector of Aotearoa New Zealand make it timely to address some of the complexities and frustrations that exist across the myriad agencies, legislation, requirements and initiatives that inform the current workforce planning, development and education landscape. There is extensive expertise across these sectors and agencies; we have conceptualised these as 'islands' of expertise, because of challenges in relation to how they connect. We suggest four 'bridges' which may assist with these connections, the four bridges being person-centred equity, expertise recognition, crossing professional and institutional barriers, and role innovation. These bridges provide a framework for linking across the existing islands of expertise and reducing overlapping and competing systems which have a negative impact on the workforce pipeline. Creating and establishing roles that make human connections across the bridges and between the islands would be essential to their success. The reasons for the current disconnections are unlikely to be a lack of expertise, but rather of opportunities and mechanisms to work across agencies, boundaries and initiatives. Finding ways through these challenges, particularly in relation to health professional education, has the potential to make a positive impact on workforce planning and development.

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