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To cite this article: Helen Moewaka Barnes & Tim McCreanor (2019) Colonisation, hauora and whenua in Aotearoa, Journal of the Royal Society of New Zealand, 49:sup1, 19-33, DOI: [10.1080/03036758.2019.1668439](https://doi.org/10.1080/03036758.2019.1668439)

To link to this article: <https://doi.org/10.1080/03036758.2019.1668439>



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Published online: 06 Oct 2019.



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## Colonisation, hauora and whenua in Aotearoa

Helen Moewaka Barnes and Tim McCreanor 

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### ABSTRACT

Colonisation has deeply harmed Maori communities, seriously and consistently undermining their vitality, aspirations and potentials, particularly since the 1860s, at inestimable cost to the entire nation. The British arrival in Aotearoa commenced a relationship between two very different peoples that has profoundly influenced their distinct and collective fortunes ever since. Despite manifest breaches of te Tiriti o Waitangi, this relationship has centred settler interests ensuring that Maori sovereignty has been displaced in favour of colonial hegemony, entrenching longstanding, preventable inequities in health and other important domains of social life. In this paper we trace some broad indicators of relational health and wellbeing in Aotearoa and consider how Maori thinking about whenua, health and wellbeing might lead healing opportunities for people and whenua. We outline ways in which a unified, dynamic, relational Maori concept based on whenua as the determinant of health could contribute. We believe this could expand, strengthen and revitalise prevention, protection and promotion approaches, to counter the injustices of colonisation, contribute toward health equity and move toward just, sustainable shared futures for the benefit of all New Zealanders.

### ARTICLE HISTORY

Received 10 May 2019  
Accepted 11 September 2019

### HANDLING EDITOR

Andrew Day

### KEYWORDS

Colonisation; Maori; Theory; disparities; social determinants; whenua; hauora; policy

## Introduction

### *Historical trauma*

Colonisation has had profound negative consequences for the health, wellbeing and indeed the very existence of Maori populations in Aotearoa (Reid and Robson 2007; Durie 2012) and of Indigenous peoples worldwide (Durie 2003b; Stephens et al. 2006; Anderson et al. 2016; Paradies 2016). Maori sovereignty, arguably a natural entitlement ratified in He Wakaputanga in 1835 (Healy et al. 2012), has been under attack since before the ink was dry on te Tiriti o Waitangi, as a central practice of establishing the colonial order in Aotearoa (Belich 1986; Walker 1990). Through land alienation, economic impoverishment, mass settler immigration, warfare, cultural marginalisation, forced social change and multi-level hegemonic racism, Indigenous cultures, economies, populations and rights have been diminished and degraded over more than seven generations.

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To help account for the impacts of the onslaught against Maori, Reid et al. (2014) articulate a framework that links devastating change with population-level shock at the losses and the multi-generational transmission of that experience. They evoke the notion of historical trauma to frame the Maori experience of colonisation, charting integrated mechanisms and processes from the ideological to the physiological. This framing helps render diverse current, entrenched disparities comprehensible and begins to suggest ways forward for Maori and society at large. Our essay sketches some of the significant changes set in train by Cook's Endeavour expedition of 1769 as a platform for an exploration of fresh conceptual approaches to the advancement of hauora for Maori and indeed the all the diverse populations of Aotearoa.

### ***A colonising gaze***

Cook's Endeavour expedition, to which we trace the origins of British colonisation, as well as introducing direct harms from killings, kidnappings, infectious diseases<sup>1</sup>, fear and anxiety (Cook 1770; Monkhouse 1769; Salmond 1991), marked the beginnings of relations of imperial domination, white supremacy and racism in its many forms (Rusden 1974; Salmond 1991, 2019; Turia 2000; O'Malley 2013). Cook's voyages are important for many reasons but acknowledgement of the links to colonisation are muted and while their impacts on Maori health were mostly latent, whatever else the Endeavour's arrival in Aotearoa created as a legacy, in this respect it was destructive, health demoting change for tangata whenua. The British landfall at Turanga on 9th October 1769 commenced a relationship between two very different peoples that has profoundly influenced their distinct and collective fortunes ever since.

The British Imperial establishment of the day, including its globally dominant Royal Navy, rapacious mercantile interests and the then emergent voice of the European enlightenment, the Royal Society (Beaglehole 1974; Salmond 1991) had chosen Cook to lead a special expedition. This combination of strategic military, political and commercial intelligence-gathering, encompassing literally the visible universe, planet and ecosphere, meant that the information, knowledge and materials he acquired and returned to England, were eagerly awaited and eminently accessible to the upper echelons of English power. Cook's findings quickly became a catalyst for further exploration, extractive commercial exploitation and eventually colonisation of Aotearoa (Ward 1839; Belich 1996).

In terms of the health and wellbeing of the people, echoing perhaps Tasman's 1642 impressions of the 'strongly built' people he encountered briefly and brutally in Taitapu (Pember Reeves 1899, p. 76), Cook (1770 in Wharton 1893) gave a brief but considered account:

The Natives of this Country are a Strong, rawboned, well made, Active People, rather above than under the common size, especially the Men; they are of a very dark brown colour, with ... very good features. ... They seem to enjoy a good state of Health, and many of them live to a good old Age.

Size, strength, vigour and longevity are highlighted in a manner that has reverberated down the centuries, but this objectification – the earliest European statement about Maori health – plays ambiguously as both resource and threat to potential imperial interests. Salmond's (1991) comparative ethnography of early contact argues that, despite

differences in population, culture and technology in Britain and Aotearoa, Maori health was likely better and longevity quite similar:

... Europeans lived about as long as pre-European Maori, but overall ... they were more prone to disease and quite often less well fed. (Salmond 1991, p. 48)

In charting a trajectory of Maori health and wellbeing, from Cook to the present, we take these and other accounts (Banks 1768–1771; Pool and Kukutai 2018) as bench-marking a broad equivalence between the health of Maori and Europeans at first contact.

### ***Colonising hauora***

In terms of health and wellbeing, colonisation imposed abusive, exploitative, racist power relations on society that saw steady gains for Pakeha and disastrous losses for tangata whenua. Using the historical trauma framework we see the brutal injustices of the colonial insurgency (Belich 1986; O'Malley 2016), creating debilitating despair as a lived experience of devastating loss (Rusden 1974; Turia 2000) that reverberate down the generations for Maori. To ground the need and possibilities for reconceptualising health and wellbeing within a sovereign Maori paradigm, we traverse a narrative that bridges the commencement of colonisation and contemporary health disparities. Our account of the event-impact-transmission axis of historical trauma (Reid et al. 2014), interweaves data on population change (Pool and Kukutai 2018) and relative life expectancy (Ministry of Health 2018) – as crude markers of health and wellbeing – with measures of land alienation (Ministry of Culture and Heritage 2017) – indicating Indigenous cultural and economic integrity (Durie 2003a; Reid et al. 2014) – and an account of health effects of racism and privilege (Tuhiwai Smith 1999; Harris et al. 2006; Harris et al. 2012; Moewaka Barnes et al. 2013; Bell et al. 2017; Hage 2017) as the ideological core of colonisation.

The forensic demography of Pool and Kukutai, draws on diverse insights from whakapapa, economics, education, anthropology, medicine and sociology, to provide historical population assays for Maori and Pakeha since Cook's first visit (Pool 2015; Pool and Kukutai 2018). While acknowledging Cook's estimate of the Maori population of 100,000 at contact, Pool and Kukutai put their assessment at 90,000 and argue that, in line with the pre-European trajectory, between 1769 and 1810, numbers grew to 95,000. The cultures of Aotearoa remained intact and adapting, their economies were vibrant and life expectancies were likely improving (Salmond 1991; Belich 1996).

The Maori population began to contract between 1810 and 1825, falling to 90,000 as infectious diseases in particular, took their toll on both birthrates and mortality rates.

In this period the European population was small, although increasing ship visits meant transitory influxes at specific sites such as Kororareka in te Tai Tokerau (Salmond 1991; Belich 1996; O'Malley 2013) and exposure to new illnesses, guns, alcohol and tobacco. Maori population decline accelerated from 1825, falling to 80,000 by 1840, as infectious diseases spiralled into epidemics and changes to Maori economic activity (clustering for exportable resource exploitation) likely reduced life expectancy. By 1840 the European population had grown to about 2000 (Orange 1987), English life expectancy was about 40 years (Roser 2019) and the first significant acquisitions of Maori land were under way.

In the period from 1840 to the end of the nineteenth century, the Maori population fell to 42,000 as both increased mortality and decreased fertility due to infectious disease,

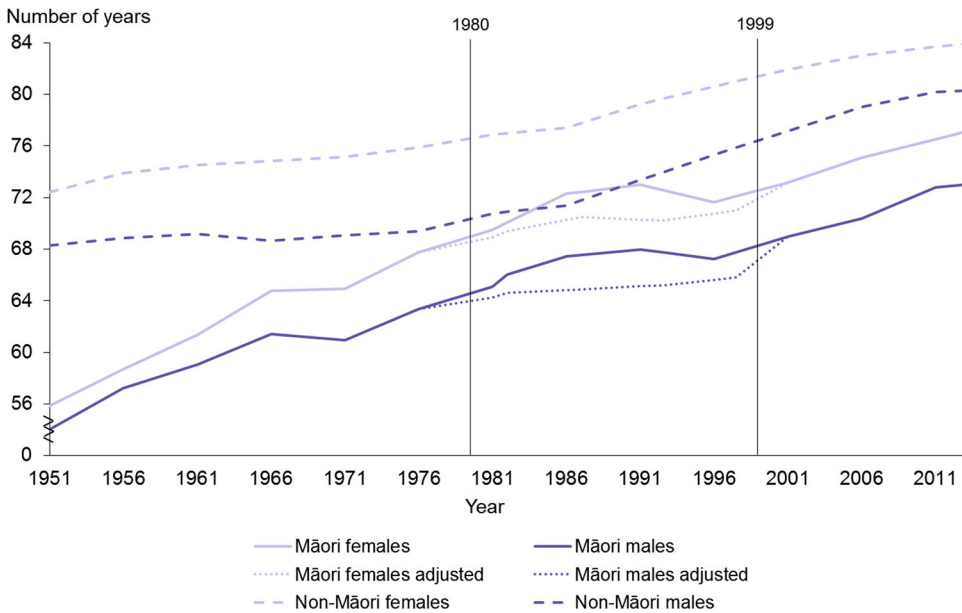
war, land alienation, malnutrition and mass immigration from Europe cut against growth. Settler numbers grew rapidly to outnumber Maori by 1860 (Statistics New Zealand 1861), reaching 770,000 by 1901 (Statistics New Zealand 1902). By the 1880s the life expectancy disparity between tangata whenua and settler was around 30 years (Pool and Kukutai 2018) as Maori longevity fell to the mid-20s and settler equivalents rose to mid-50s. Land confiscations, acquisitions and purchases saw Maori holdings fall to sixty percent by 1890 (Ministry for Culture and Heritage 2017). The period between 1860 and 1890 was one of extreme trauma, loss and hardship for tangata whenua, especially those directly affected by the material, cultural and psychological ravages of war and the consolidation of the colonial state (Rusden 1974; Belich 1986).

From the 1890s, a new generation of Maori leaders such as Te Puea Herangi, Apirana Ngata, Te Rangihiroa, Maui Pomare and James Carroll, argued that Maori development of their lands, of which about thirty percent remained in Maori ownership by this stage, they could reverse the population trajectory, through economic growth, improved nutrition and enhanced fertility (Walker 2001; Pool and Kukutai 2018). The land development schemes and other initiatives focused on clean water supplies and sanitation, reduced mortality and morbidity and helped to raise the population to 100,870 by the end of 1944 (Statistics New Zealand 1945) while the Pakeha population had grown to 1,539,978. However land ownership had fallen under 10% and despite the gains in Maori life expectancy the disparity with Pakeha was about 15 years (Pool and Kukutai 2018).

By 1970 when the settler population had reached 2,820,814, the Maori population was given at 225,435 (Statistics New Zealand 1970) and the gap between Maori and Pakeha life expectancy had narrowed to about 10 years, but landholdings had dwindled further with the urban migration (Walker 1990; Durie 2003a). Tangata whenua shifted from tribal takiwa to the cities in the huge post-war urban migration and adapted to life as labourers in the low-wage colonial economy (Walker 1990; Poata-Smith 1997). At the 2013 census (Stats NZ 2013), the Maori population had reached 598,605 (of a total 4,242,048) with the median age of 23.9 years, signalling continuing growth, but suggesting also the challenge of the ongoing burden of entrenched health disparities within Maori communities (Figure 1).

While there have been incremental reductions in life expectancy disparities through the 1980s (Ministry of Health 2018) and some periodic increases that co-incide with the implementation of neoliberal ideologies and policies since 1984 (Ajwani et al. 2003) the disparities have persisted at around 7 years since the mid-1990s (Ministry of Health 2018).

Political shifts arising from the rekindling of Maori cultures in the urban centres (Walker 1990) and the productive interplay between homelands and the city have seen resistance, protest, cultural efflorescence and Maori engagement grow (Bargh 2008; Mulholland and Tawhai 2010) and breathed life into te Tiriti o Waitangi particularly after 1985 (Hayward and Wheen 2004; Tuhiwai Smith 2008). However overall, the narrative of colonial destruction, disastrous loss, forced adaptation and considerable recovery for Maori, represents population-level incursions against Maori and as such is a central strand of the story of historical trauma in Aotearoa (Reid et al. 2014). The trajectory of health disparities entailed in colonisation is a quintessentially relational pathway in that it encompasses the steady growth and advancement of settler populations from immigration and natural increase as colonisation took root and flourished, at the expense of Maori.



**Figure 1.** Life expectancy at birth, by gender, Māori and non-Māori, 1951–2013 (Ministry of Health 2018).

The historical record shows a continuous flow of aggressive, denigratory, racist oppression of Maori in word and deed, as power and control of the country were established in the colonial state (Ballara 1986; Belich 1986, 2001; Walker 1990; Durie 2003a; Reid and Robson 2007). The lived experience of injustice, brutality, deprivation and marginalisation has been transmitted across multiple generations, aggravated by land loss, economic disempowerment, poverty, disease and racism that are reflected in diverse statistics of disparity and particularly as we have argued, in health and wellbeing. While it is likely that the trauma experienced changes generation by generation – for example from disease epidemics and mass death, to combat with land confiscations, then tentative recovery, followed by urban migration – land loss has been a continuous and cumulative process along with racism, discrimination and marginalisation.

### ***Whenua, hauora***

In contrast to symbiotic Maori understandings of whenua, land as property was enshrined in Aotearoa New Zealand by the English Laws Act (NZLII n.d.), deeming English laws, where applicable, to have been in force from 14 January, 1840 – predating Te Tiriti. Arguably one of the earliest serious breaches of te Tiriti, the statute enabled the unremitting settler determination to possess and profit from Maori ‘land’ and resources as a key lever of economic power (Reid et al. 2014, 2016; O’Malley 2016) conceptualised and enforced within a Eurocentric capitalist model (Wynyard 2017). Under this regime the alienation of Maori lands, coupled with rapid destruction of forests, conversion to pasture, wetland drainage and other development activities, transformed whenua, disrupting its critical role in hauora.

In discussing whenua, environmental degradation and health, Moewaka Barnes (2019) described two contrasting approaches: whenua as the *determinant of health* and whenua as the *determinant of wealth*. The below table outlines these relationships and contrasts values, concepts and practices (Table 1).

Land loss separated people from their whenua, destabilising place based whanau, hapu and iwi identities, breaking long established knowledge-practices around land use, resulting in dependence on colonial economic systems and undermining the very fabric of Maori society (Walker 1990). But it is not just material damage that occurred and continues to reverberate. The lived experience of the loss of Maori relationships with whenua includes wide affective impacts in debilitating sadness, grief, anger (Rusden 1974), identity damage and cultural erosion.

These kinds of effects from European colonisation are common to Australia, Canada, the US and Aotearoa but are also experienced throughout South America, Africa and South Asia (Said 1978; Connell 2007). Indigenous people have long fought for recognition of their values of whenua in these spaces and, as well as generally stewarding ancient associations with land and place, Indigenous peoples have led specific and significant shifts in changing human relationships with the natural environment. The Ganges river was granted human rights (Safi 2017) and Ecuador’s Constitution enshrines nature’s ‘right to integral respect’ (Tanasescu 2017). In Aotearoa in 2013, Te Urewera (an area on the East Coast of Te Ika a Maui/North Island) was invested with the rights, powers, duties and liabilities of a legal person (Kruger 2019) and in 2017 the Whanganui River was declared a legal person and ‘an indivisible and living whole’ under the name Te Awa Tupua (Ruru 2018). There are also moves to declare personhood for the Crown owned National Park of Taranaki Maunga (Cheng 2017) enabling protective lawsuits to be brought on behalf of this entity. As Exton (2017) concludes in her discussion of personhood as a legal tool for furthering Maori aspirations:

With the added benefit of being a compromise between the Crown and Māori, legal personhood presents a worthwhile alternative to traditional ownership models ... Given that existing land ownership models have typically sat within western concepts of property ownership, in this manner the personification of land is undoubtedly revolutionary. (p. 56–57)

As we begin the twenty-first Century, colonisation is deeply entrenched and Maori bear the burdens of working within settler paradigms that have become the assumed and universal norm. Exploitative relationships with land as a possession and resource for humans,

**Table 1.** Conceptual relationships with whenua (Moewaka Barnes 2019).

Whenua as the determinant of wealth	Whenua as property and for resource extraction <b>Property</b> How much of the and/foreshore/river/lake can I own and control? <b>Extraction</b> How much can I get out of it as cost effectively as possible? <b>Profit</b> How much capital gain/profit can I make?	Whenua as ‘person’ with rights and mana <b>Mauri</b> How can we protect the whenua and retain its integrity?  <b>Kaitiakitanga</b> How can we work with and for the whenua for healing and sustenance? <b>Manaakitanga</b> How can we uphold and practice respectful relationships with whenua?	Whenua as the determinant of health
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continue as central to the operations of today's FIRE (finance, insurance and real estate) economy (Kelsey 2015). Economic gains are pursued as intrinsically beneficial, with little consideration of the relational obligations, values and practices of Maori (Moewaka Barnes et al. 2018) as *tangata whenua*. We argue these concepts and practices are central, not only to the health of *whenua* but also to the health of people, beyond the immediately recognisable environmental impacts that are now entering into the common consciousness.

### ***Hauora, justice***

Maori political action has seen *te Tiriti* progressively assume a significant place in legislation, jurisprudence and social life, albeit begrudging, partial and adversarial on the part of the Crown. In health *te Tiriti*, or at least its 'principles', has been inscribed in legislation particularly since 2000 (Came et al. 2018) but such measures, which are already weak in terms of social justice, are further diluted and neglected in the application of policy. The upshot is that health disparities and their components in mortality and morbidity (Ajwani et al. 2003; Reid and Robson 2007) are finally beginning to get some political recognition at the national level, though with little impact so far.

In the recently concluded first stage of the WAI 2575 claim to the Waitangi Tribunal, severe criticisms of the conduct of health services and policy, particularly those systems in play since the mid-1980s were not contested by the Crown. According to the Tribunal report:

The Crown acknowledged, however, that the Māori health experience remains inequitable and, therefore, unacceptable. (WAI 2575 2019, p. 10–11)

Critically they add that the very foundations of Crown policy, frameworks and practices are deeply flawed and likely creating or exacerbating the entrenched problems of health disparities.

... providing care in a way that respects and understands Māori sociocultural paradigms is a care access issue, and impacts on the quality of health care received, or indeed dictates whether care is received at all. (WAI 2575 2019, p. 155)

Further, these views are reiterated in the interim report of the Health and Disability System Review (2019) where the failings of health services in relation to *tangata whenua* are acknowledged:

The Panel recognises that the New Zealand health and disability system has evolved with a strong western medical tradition. The inequities which have arisen for Maori from this system cannot be fully addressed without ensuring that going forward the system embraces the Maori worldview of health. (p. 9)

The current system must address issues of access and equity as part of Crown accountabilitys to Maori health (Health and Disability System Review 2019) and we argue this requires the open exploration, engagement and embracing of *matauranga Maori* in relation to health and wellbeing. However, unless there is also a commitment and determination to consider decolonisation as a central impetus in moves toward health equity, this is unlikely to do more than lightly touch on the 'sociocultural paradigms' the Tribunal has pointed to. While we do not here intend to elaborate on decolonisation and the societal transformations it entails, we point to the conceptual work articulated in the efforts of



Independent Working Group on Constitutional Transformation (Matike Mai 2016) that envisages recognition of a social order based on distinct Maori and Tauiwi domains linked by shared relational space. Without societal transformations of this kind, reform will fail in addressing historical trauma and the assumed universality of entrenched health systems, leaving injustice entrenched in the system.

Health providers are increasingly attempting to encompass Maori approaches to health and wellbeing, supported by Maori models of health, which emphasise holistic understandings and multiple dimensions that cannot be separated. These are often represented as discrete but related elements; for example as the sides of a house in Te Whare Tapa Wha (Durie 1998), the intertwined tentacles of an octopus in Te Wheke (Pere 1997), or the stars of a constellation in Te Pae Mahutonga (Durie 1999). The Royal Commission on Social Policy proposed four pou (supporting posts) as interacting components required for health and wellbeing. The physical environment te ao turoa and turangawaewae make up two of the pou and waiora, environmental protection, is one element of Te Pae Mahutonga (Durie 1998). Other key elements are whanau (family), culture, physical and mental health and emotions (Durie 1998). Durie (2003a, p. 36) describes Maori health platforms as:

... constructed from land, language and whānau; from marae and hapū; from Rangi and Papa; from the ashes of colonisation; from adequate opportunity for cultural expression; and from being able to participate fully within society.

An Indigenous ethic embedded in approaches to health and wellbeing points to whenua as *the* key determinant of health and wellbeing. We are not the first to describe Maori health alongside the loss of land, but given the state of the planet, we advance the need to position whenua as the determinant of health in Aotearoa and reorient public health approaches to this concept. The identification of Maori as tangata whenua encompasses Indigenous people with particular rights and responsibilities, but also critically expresses a relational Maori metaphysics around the inseparability of humans and environments (Marsden 2003). We characterise this as Tangata Whenua Tangata Ora to emphasise the unity of both people and te tai ao (wider environment). They are not separate but operate as an ecosystem with visible and invisible, tangible and intangible dimensions. This does not mean that we discontinue multiple prongs of attack oriented to advancing Maori health and wellbeing, but that we centralise issues of environments and relationships with environments, in particular the 'natural' environment. Rather than one arm of the tentacle or one star of the constellation, whenua becomes the holistic base for wellbeing, a catchment for multiple, integrated approaches where human effort is focused.

### ***Tangata Whenua Tangata Ora***

The dominant ideology that people and land can be treated as separate is challenged through Indigenous knowledge frameworks that demonstrate the interwoven nature of human wellbeing with the health of our lands, waters and environment (Durie 2003a; Reid et al. 2014; Simpson 2017). These epistemologies are expressed through iwi pepeha (tribal identity markers), te reo Maori, waiata, whakataukii and many other forms. The interactions between environments and people are more readily studied and understood in relation to how the environment can make us unwell, for example, via

pollution, pathogens and ecotoxins. There are however, growing numbers of studies and theories that seek to integrate health with broader environments; for example ecological systems theories and the concept of the ecological wellbeing of childhood (Bartos and Wood 2017; Schaffer and Kraftl 2017). Broader frameworks include Planetary Health (Whitmee et al. 2015), One Health (King et al. 2008) and Ecohealth (Charron 2012)

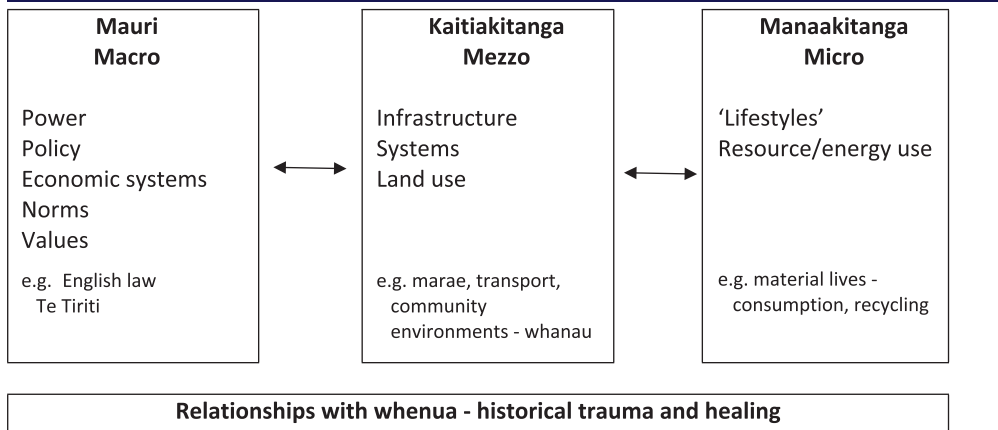
Maori scholars provide ways of looking at te tai ao that are grounded in te ao Maori; for example Kapa Morgan’s Mauri Model (Morgan 2011), Tipa and Teirney’s (2006) Cultural Health Index and Garth Harmsworth et al.’s (2002) Maori Environmental Performance Indicators. Cram et al. (2003) note that Maori views of health are holistic and

“... contextualised within te whenua (land providing a sense of identity and belonging), te reo (the language of communication), te ao turoa (environment), and whanaungatanga (extended family)”. (p. 1)

The fundamental indivisibility of the health of the people from the integrity of the land is critical to how Maori understand health and, with the critical state of the environment becoming a part of the global psyche, globally, we are now coming to see these relationships as foremost to all human life. Human survival is in question, driving multiple local, national and global efforts at mitigation and recovery. We argue that positioning whenua as the determinant of health will contribute to human health and wellbeing at all levels; not only addressing survival as a species but providing a holistic direction for health promotion and individual healing. Table 2 below unpacks key ideas outlined in Table 1, briefly sketching domains of influence on human health and wellbeing as they relate to whenua, drawing on the World Health Organization’s Commission on Social Determinants of Health conceptual framework (CSDH 2008) as an organising schema.

Although the schema is organised in boxes, this is to enable a practical representation of determinants that work conceptually within and across all spheres of life. Mauri signals the life force or essence that derives from a common centre, binding us together. In terms of Tangata Whenua Tangata Ora, kaitiakitanga and manaakitanga are key values and operating principles needed to guide and promote hauora for both. Tangata Whenua Tangata Ora encompasses the fields that public health is engaged with but declines to partition them into distinct domains of action, preferring instead an integrated values-based

**Table 2.** Maori conceptualisations for the social determinants of health (Moewaka Barnes 2019).



approach that can include practical, esoteric and spiritual influences, interests and imperatives. Relationships between humans and the rest of the ecosphere are of critical importance to the status of the whole and while this does not preclude specialised, focussed, investigation or action, the drive is always toward integration. This orientation helps to preserve the democratic, communitarian basis for human existence as there are roles for all, from the most skilled and practiced, through to diverse positions of lay interest where asking 'naive' questions or finding unprofessional ways of applying or using knowledge, enhance and grow capacity and capability.

Maori concepts and practices still hold to these interconnections and provide conceptual underpinnings through which we can re-create health models for all. Within these framings, *hauora Māori*, in which health and wellbeing, the biopsychosocial, are understood as a dynamic and unified system, represents an aspiration to fully realise the power, potential and significance of Tangata Whenua Tangata Ora to our collective social, material and futures.

In so many places and spaces around the country, often unseen and unsung in settler circles, mana whenua are working in diverse ways from protection, rahui and restoration projects to organic production, eco-forestry, sustainable harvest and to restore mauri, rebuild integrity and re-establish sustainability of Papatuanuku (Harmsworth et al. 2002; Panelli and Tipa 2007; Henwood and Moewaka Barnes 2008; Hikuroa et al. 2018). In the process they are healing themselves by exerting agency, addressing trauma, grief, rebuilding connection, expressing values, achieving outcomes and strengthening culture in holistic, relational and restorative ways. Maori methodologies and concepts promoting the primacy of whenua aim to develop deeper understandings of *reconnecting people to place* as conceptual and practical ways of promoting the wellbeing of both people and whenua. We argue this is a decolonising movement that all peoples can participate in, returning us to more mutually respectful and health promoting relationships with our planet.

## Conclusion

The colonial state of New Zealand and the longstanding relationships between tangata whenua and tangata Tiriti that it has generated has much to celebrate but vast challenges to address in order to create just, sustainable, equitable futures for all of the peoples of the nation. In particular we have argued that the process of colonisation has wrought an unremitting and continuous process of historical trauma upon tangata whenua that is reflected in disparities between Maori and settler peoples in most important areas of contemporary life. Decolonisation is high on the list of what needs to be discussed, debated and actioned if we are to gain momentum in redressing trauma and pursuing health equity and although we have not attempted to say specifically what decolonisation may mean, we argue that the domain of health and public health in particular has a key role to play in the transformations we collectively aspire to. Reconceptualising relationships with whenua as a underpinning determinant of health and a way of healing people and environments, calls for a move away from land as property to respectful relationships where whenua is person. It also requires significant investment, research and development in decolonising concepts such as Tangata Whenua Tangata Ora, as the vanguard of the policy and applied platforms needed to redress historical trauma and eliminate health disparities.

The historical transformations and contemporary health inequities that we sketched in this paper are social phenomena first and foremost, wrought in the power relations of the development of the nation rather than immutable destiny. What has been made through relations that have unfolded can be remade through the progressive enactment of Tiriti-led, decolonising praxis that takes the understandings of the *matauranga hauora* of tangata whenua as critically informing the actions we need to pursue.

Connections with whenua are of interest to public health, not just for wellbeing potential in terms of, for example, connections with nature or opportunities for physical activities and social interactions, but in terms of what places mean to people and the relationships we have, ideologically, emotionally and spiritually. Responses to planetary degradation are not only about fear for human survival but involve our whole beings, expressed through, for example, emotions such as anger, grief frustration and helplessness. In these emotions we can come to greater understandings of Indigenous experiences of loss, moving well beyond whenua as simply a resource and pointing to ways we can heal the people, the whenua and by extension the planet.

Tangata Whenua Tangata Ora is an emerging framework that, with support, development and application can help us on the transformational road toward health equity and add hugely to the wider challenges of living symbiotically with the ecosphere we all depend upon. Funding for a 5 year public health research programme from the Health Research Council of New Zealand, announced earlier this year for the lead author of this essay, is a step in the right direction that will allow the advancement and elaboration of the ideas articulated here. While we anticipate debate, dissent and diverse responses to the conceptual approach it takes, we are content to lay down this challenge and keen to work with all parties who share the aspirations to health, justice and respect that it articulates.

## Note

1. Cook knew that the Endeavour crew had widely contracted venereal diseases at Tahiti before landfall in Aotearoa.

## Acknowledgements

This research was supported in part by a programme grant HRC 19/694 from the Health Research Council of New Zealand.

## Disclosure statement

No potential conflict of interest was reported by the authors.

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## References

- Ajwani S, Blakely T, Robson B, Tobias M, Bonne M. 2003. Decades of disparity: ethnic mortality trends in New Zealand 1980–1999. Wellington: Ministry of Health and University of Otago. Public Health Intelligence Occasional Bulletin Number 16.

- Anderson I, Robson B, Connolly M, Al-Yaman F, Bjertness E, King A, Tynan M, Madden R, Bang A, Coimbra CEA, et al. 2016. Indigenous and tribal peoples' health (The Lancet–Lowitja Institute Global Collaboration): a population study. *The Lancet*. 388(10040):131–157. doi:10.1016/S0140-6736(16)00345-7.
- Ballara A. 1986. Proud to be white: a survey of racial prejudice in New Zealand. Auckland: Heinemann.
- Banks J. 1962. *The endeavour journal of Joseph Banks 1768–1771*. Vol. 1. Beaglehole JC, editor. Sydney: Angus and Robertson Limited.
- Bargh M. 2008. Resistance: an indigenous response to neoliberalism. Wellington: Huia Publishers.
- Bartos A, Wood B. 2017. Ecological wellbeing. In: Ergler C, Kearns R, Witten K, editor. *Children's health and wellbeing in urban environments*. Milton Park, Abingdon: Routledge; p. 234–247.
- Beaglehole JC. 1974. *The life of captain James Cook*. Stanford, CA: Stanford University Press.
- Belich J. 1986. *The New Zealand wars and the victorian interpretation of racial conflict*. Auckland: Auckland University Press.
- Belich J. 1996. *Making peoples: a history of the New Zealanders from polynesian settlement to the end of the nineteenth century*. Auckland: Penguin.
- Belich J. 2001. *Paradise reformed: a history of the New Zealanders from the 1880s to the year 2000*. Auckland: Allen Lane.
- Bell A, Elizabeth V, McIntosh T, Wynyard M, editors. 2017. *A land of milk and honey: making sense of aotearoa New Zealand*. Auckland: Auckland University Press.
- Came H, Doole C, McKenna B, McCreanor T. 2018. Institutional racism in public health contracting: findings of a nationwide survey from New Zealand. *Social Science & Medicine*. 199:132–139. doi:10.1016/j.socscimed.2017.06.002.
- Charron DF. 2012. Ecohealth research in practice. In: Charron DF, editor. *Ecohealth research in practice: innovative applications of an ecosystem approach to health*. New York, NY: Springer New York; p. 255–271.
- Cheng D. 2017. Mt Taranaki will be granted special legal status similar to Te Urewera and the Whanganui river. *NZ Herald*. 21 December. [accessed 2019 Sep 9]. [https://www.nzherald.co.nz/nz/news/article.cfm?c\\_id=1&objectid=11963982](https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11963982).
- Connell R. 2007. *Southern theory: the global dynamics of knowledge in social science*. Sydney: Allen and Unwin Academic.
- Cook J. April 1770. Some account of New Zealand. In: Wharton WJL, editor. *Captain Cook's journal during his first voyage round the world made in H.M. Bark "endeavour" 1768–71*. A literal transcription of the original mss. With notes and introduction. London: Elliot Stock; p. 1893.
- Cram F, Smith L, Johnstone W. 2003. Mapping the themes of Maori talk about health. *New Zealand Medical Journal*. 116(1170):357–364.
- CSDH. 2008. Closing the gap in a generation: health equity through action on the social determinants of health. Final report of the commission on Social Determinants of Health. Geneva: World Health Organization.
- Durie M. 1998. *Whaiora: Maori Health Development*, 2nd ed. Auckland: Oxford University Press.
- Durie M. 1999. Te Pae Mahutonga: a model for Maori health promotion. Napier: Health Promotion Forum Conference.
- Durie M. 2003a. *Nga Kahui Pou launching Maori futures*. Wellington: Huia Publications.
- Durie M. 2003b. The health of indigenous peoples – depends on genetics, politics, and socio-economic factors. *BMJ*. 326(7388):510–511. doi:10.1136/bmj.326.7388.510.
- Durie M. 2012. Indigenous health: New Zealand experience. *Medical Journal of Australia*. 197(1):10–11. doi:10.5694/mja12.10719.
- Exton M. 2017. *Personhood: A legal tool for furthering Māori aspirations for land*. A dissertation submitted in partial fulfilment of the requirements of the degree of bachelor of laws (Honours). University of Otago. [accessed 2018 September 6]. <https://www.otago.ac.nz/law/research/journals/otago672763.pdf>.
- Hage G. 2017. *Is racism an environmental threat? (Debating Race)*. Cambridge, UK: Polity Press.

- Harmsworth G, Barclay Kerr K, Reedy T. 2002. Maori sustainable development in the 21st century: the importance of Maori values, strategic planning, and information systems. *He Puna Korero: Journal of Maori and Pacific Development*. 3(2):40–69.
- Harris R, Cormack D, Tobias M, Yeh L-C, Talamaivao N, Minster J, Timitimu R. 2012. The pervasive effects of racism: experiences of racial discrimination in New Zealand over time and associations with multiple health domains. *Social Science & Medicine*. 74(3):408–415.
- Harris R, Tobias M, Jeffreys M, Waldegrave K, Karlsen S, Nazroo J. 2006. Effects of self-reported racial discrimination and deprivation on Maori health and inequalities in New Zealand: cross-sectional study. *Lancet*. 367(9527):2005–2009.
- Hayward J, Wheen N, editors. 2004. *The Waitangi tribunal: Te Roopu Whakamana i te Tiriti o Waitangi*. Wellington: Bridget Williams Books.
- Health and Disability System Review. 2019. Interim report New Zealand health and disability system review: Hauora Manaaki Ki Aoteroa Whanui. Wellington: NZ Government. <https://systemreview.health.govt.nz/interim-report/download-the-report/>.
- Healy S, Huygens I, Murphy T, Parata H. 2012. Ngāpuhi speaks. Whāngarei, Te Kawariki & Network Waitangi Whangarei.
- Henwood W, Moewaka Barnes H. 2008. *Manaaki Manawa evaluation: final report to Manaia primary health organisation*. Auckland: Te Ropu Whariki & Centre for Social and Health Outcomes Research and Evaluation, Massey University.
- Hikuroa D, Clark J, Olsen A, Camp E. 2018. Severed at the head: towards revitalising the mauri of Te Awa o te Atua. *New Zealand Journal of Marine and Freshwater Research*. 52(4):643–656. doi:10.1080/00288330.2018.1532913.
- Kelsey J. 2015. *The FIRE economy*. Wellington: Bridget Williams Books.
- King L, Anderson L, Blackmore C, Blackwell M, Lautner E, Marcus L, Meyer T, Monath T, Nave J, Ohle J, et al. 2008. Executive summary of the AVMA one health initiative task force report. *Journal of the American Veterinary Medical Association*. 233(2):259–261.
- Kruger T. 2019. Te Urewera. Plenary keynote address to International Union for Health Promotion and Evaluation conference. Rotorua: International Union for Health Promotion and Evaluation. <https://www.youtube.com/watch?v=NcxCO2mKtjo>.
- Marsden M. 2003. *The Woven universe: selected writings of Rev. Maori Marsden*. Otaki: Estate of Rev. Maori Marsden (edited by Te Ahukaramu Charles Royal).
- Matike Mai Aotearoa. 2016. *The report of Matike Mai Aotearoa – the independent working group on constitutional transformation*. Auckland: Matike Mai Aotearoa.
- Ministry for Culture and Heritage. 2017. Maori land loss, 1860–2000, 17 May. [accessed 2019 Sep 9]. <https://nzhistory.govt.nz/media/interactive/maori-land-1860-2000>.
- Ministry of Health. 2018. Life expectancy [updated 2 August; cited 5 September 2019]. <https://www.health.govt.nz/our-work/populations/maori-health/tatau-kahukura-maori-health-statistics/nga-mana-hauora-tutohu-health-status-indicators/life-expectancy>.
- Moewaka Barnes H. 2019. Healthy land, water and people: Indigeneity, relationships and planetary health. Sub-plenary to International Union for Health Promotion and Evaluation Conference; Rotorua; April.
- Moewaka Barnes H, Eich E, Yessilth S. 2018. Colonization, whenua and capitalism: experiences from Aotearoa New Zealand. *Continuum: Journal of Media & Cultural Studies*. 32(6):685–697. Doi 10.1080/10304312.2018.1525918.
- Moewaka Barnes H, Moewaka Barnes A, Baxter J, Crengle S, Pihama L, Ratima M, Robson B. 2013. *Hapu Ora: wellbeing in the early stages of life. A qualitative report*. Auckland: SHORE & Whāriki Research Centre, Massey University.
- Monkhouse WB. 1769. Transcript of journal describing the first encounters of Europeans and Maori. [MS-Papers-6717-074]. New Zealand: Alexander Turnbull Library.
- Morgan TKKB. 2011. Waiora and cultural identity: water quality assessment using the Mauri model. *AlterNative: An International Journal of Indigenous Peoples*. 3(1): 42–67.
- Mulholland M, Tawhai V. 2010. *Weeping waters: the treaty of Waitangi and constitutional change*. Wellington: Huia.

- New Zealand Legal Information Institute (NZLII). n.d. English laws act 1858 (21 and 22 Victoriae 1858 No 2) [cited 2019 Sep 20]. [http://www.nzlii.org/nz/legis/hist\\_act/ela185821a22v1858n2275/](http://www.nzlii.org/nz/legis/hist_act/ela185821a22v1858n2275/).
- O'Malley V. 2013. *The meeting place: Māori and Pākehā encounters, 1642–1840*. Auckland: Auckland University Press.
- O'Malley V. 2016. *The great war for New Zealand Waikato 1800–2000*. Wellington: Bridget Williams Books.
- Orange C. 1987. *The treaty of Waitangi*. Wellington: Allen and Unwin.
- Panelli R, Tipa G. 2007. Placing well-being: a Maori case study of cultural and environmental specificity. *EcoHealth*. 4:445–460.
- Paradies Y. 2016. Colonisation, racism and Indigenous health. *Journal Population Research*. 33(1):83–96. doi:10.1007/s12546-016-9159-y.
- Pember Reeves W. 1899. *Aotearoa, land of the long white cloud*. London: Horace Marshall & Son.
- Pere R. 1997. *Te Oranga o te Whanau: the health of the family*. Hui Whakaoranga: Maori Health Planning Workshop, Wellington.
- Poata-Smith ES. 1997. The political economy of inequality between Maori and Pakeha. In: Roper B, Rudd C, editor. *The political economy of New Zealand*. Auckland: Oxford University Press.
- Pool I. 2015. Maori demography and the economy to 1840. In: *Colonisation and development in New Zealand between 1769 and 1900: the seeds of Rangiatea*. Heidelberg: Springer Chum; p. 151–176.
- Pool I, Kukutai T. 2018. Taupori Māori – Māori population change: Te Ara – the encyclopedia of New Zealand [cited 2019 May 10]. <http://www.TeAra.govt.nz/en/taupori-maori-maori-population-change>.
- Reid P, Robson R. 2007. Understanding health inequities. In: Robson B, Harris R, editor. *Hauora: Maori standards of health IV. A study of the years 2000–2005*. Wellington: Te Ropu Rangahau Hauora a Eru Pomare; p. 3–10.
- Reid J, Taylor-Moore K, Varona G. 2014. Towards a social-structural model for understanding current disparities in Maori health and well-being. *Journal of Loss and Trauma*. 19:514–536.
- Reid J, Varona G, Fisher M, Smith C. 2016. Understanding Maori 'lived' culture to determine cultural connectedness and wellbeing. *Journal of Population Research*. 33(1):31–49.
- Roser M. 2019. Life expectancy: our world in data [cited 2019 Sep 5]. <https://ourworldindata.org/life-expectancy>.
- Ruru J. 2018. Listening to Papatūānuku: a call to reform water law. *Journal of the Royal Society of New Zealand*. 48(2–3):215–224. doi:10.1080/03036758.2018.1442358.
- Rusden G. 1974. *Aureretanga, Groans of the Maori*. Reprint ed. Cannons Creek: Haka Print.
- Safi M. 2017. Ganges and Yamuna rivers granted same legal rights as human beings. *Manchester Guardian* [Last update 21 March]. [accessed 2019 Sep 9]. <https://www.theguardian.com/world/2017/mar/21/ganges-and-yamuna-rivers-granted-same-legal-rights-as-human-beings>.
- Said E. 1978. *Orientalism*. London: Routledge.
- Salmond A. 1991. *Two worlds: first meetings between Maori and Europeans 1642–1772*. Auckland: Viking.
- Salmond A. 2019. IUHPE 2019 plenary session – Dame Anne Salmond. 2019 [cited 5 September 2019]. <https://youtu.be/0Z6ptv-Jr1U>.
- Schaffer S, Krafft P. 2017. Is 'natural' education healthy education? In: Ergler C, Kearns R, Witten K, editor. *Children's health and wellbeing in urban environments*. Milton Park, Abindon: Routledge; p. 174–189.
- Simpson L. 2017. *As we have always done indigenous freedom through radical resistance (Indigenous Americas)*. Minneapolis: University of Minnesota Press.
- Statistics New Zealand. 1861. Table 1. No.1. Table showing the estimated European Population of New Zealand, in December 1860, In: *statistics of New Zealand for 1860* [cited 10 May 2019]. [https://www3.stats.govt.nz/historic\\_publications/1860-statistics-nz/1860-statistics-nz.html#idtable\\_1\\_1487](https://www3.stats.govt.nz/historic_publications/1860-statistics-nz/1860-statistics-nz.html#idtable_1_1487).
- Statistics New Zealand. 1902. *Results of a census of the colony of New Zealand. Taken for the night of the 31st of March 1901* [updated 1902 Oct 1; cited 2019 Sep 5]. [https://www3.stats.govt.nz/historic\\_publications/1901-census/1901-results-census/1901-results-census.html#d50e1088](https://www3.stats.govt.nz/historic_publications/1901-census/1901-results-census/1901-results-census.html#d50e1088).

- Statistics New Zealand. 1945. The New Zealand official year-book, 1945: Digital Yearbook Collection [cited 6 May 2019]. [https://www3.stats.govt.nz/New\\_Zealand\\_Official\\_Yearbooks/1945/NZOYB\\_1945.html#idsect1\\_1\\_17392](https://www3.stats.govt.nz/New_Zealand_Official_Yearbooks/1945/NZOYB_1945.html#idsect1_1_17392).
- Statistics New Zealand. 1970. Population – New Zealand Official Yearbook, 1970: Digital Yearbook Collection [cited 6 May 2019]. [https://www3.stats.govt.nz/New\\_Zealand\\_Official\\_Yearbooks/1970/NZOYB\\_1970.html?\\_ga=2.209190545.24323837.1555361639-1148857205.1530867794#idsect1\\_1\\_390144](https://www3.stats.govt.nz/New_Zealand_Official_Yearbooks/1970/NZOYB_1970.html?_ga=2.209190545.24323837.1555361639-1148857205.1530867794#idsect1_1_390144).
- Stats NZ. 2013. Census QuickStats about Māori [updated 29 January; cited accessed 2018 Jul]. <http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-culture-identity/ethnic-groups-NZ.aspx>.
- Stephens C, Porter J, Nettleton C, Willis R. 2006. Disappearing, displaced, and undervalued: a call to action for Indigenous health worldwide. *The Lancet*. 367:2019–2028.
- Tanasescu M. 2017. Rivers get human rights: they can Sue to protect themselves. The conversation; June. <https://www.scientificamerican.com/article/rivers-get-human-rights-they-can-sue-to-protect-themselves/>.
- Tipa G, Teirney L. 2006. A cultural health index for streams and waterways: indicators for recognising and expressing Māori values. Wellington: Ministry for the Environment.
- Tuhiwai Smith L. 1999. Decolonizing methodologies: research and indigenous peoples. London: Zed.
- Tuhiwai Smith L. 2008. The native and the neoliberal downunder: neoliberalism and ‘endangered authenticities. In: de la Cadena M, Starn O, editor. *Indigenous experience today*. Oxford: Berg.
- Turia T. 2000. Speech to NZ Psychological Society Conference 2000: Speech transcript [cited July 2018]. <http://www.converge.org.nz/pma/tspeech.htm>.
- WAI 2575. 2019. Waitangi Tribunal Report. HAUORA Report on Stage One of the Health Services and Outcomes Kaupapa Inquiry. [https://forms.justice.govt.nz/search/Documents/WT/wt\\_DOC\\_150429818/Hauora%20Pre-PubW.pdf](https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_150429818/Hauora%20Pre-PubW.pdf).
- Walker R. 1990. *Ka Whawhai Tonu Matou*. Auckland: Penguin.
- Walker R. 2001. *He Tipua: the Life and Times of Sir Apirana Ngata*. Auckland: Viking.
- Ward J. 1839. *Information relative to New Zealand*. London: J.W. Parker.
- Whitmee S, Haines A, Beyrer C, Boltz F, Capon A, Ferreira de Souza Dias B, Ezeh A, Frumkin H, Gong P, et al. 2015. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health. *The Lancet*. 386 (10007):1973–2028.
- Wynyard, M. 2017. Plunder in the promised land: Maori land alienation and the genesis of capitalism in Aotearoa New Zealand. In: Bell A, Elizabeth V, McIntosh T, Wynyard M, editors. *A land of milk and honey: Making sense of Aotearoa New Zealand*. Auckland: Auckland University Press.