



ELSEVIER

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Futures

journal homepage: [www.elsevier.com/locate/futures](http://www.elsevier.com/locate/futures)

Original research article

# Decolonising Technological Futures: A dialogical tryptich between Te Haumoana White, Ruth Irwin, and Tegmark's Artificial Intelligence<sup>\*</sup>

Ruth Irwin<sup>\*</sup>, Te Haumoana White*Independent researcher*

## ARTICLE INFO

## Keywords:

Maori  
Indigenous  
AI  
Algorithm  
Philosophy of technology  
Post-colonialism  
Land injustice  
Eco-economics  
Information technology  
Oligarchy

## ABSTRACT

Colonialism has wrought great injustices across many indigenous people at the during the modern period. Maori exercise unique negotiating skills to productively engage with the power dynamics of colonialism and modernity. This dialogue between Te Haumoana White and Ruth Irwin illuminates the ongoing pressures of modernity and colonialism, unique Maori approaches to ownership, and a deep understanding of power and politics. This dialogue traces historic injustice and contemporary innovations that seek to resuscitate the landscape and the community in, through, and around modern legal and technological onto-epistemologies. At the cutting edge of contemporary technology, AI is using algorithms to aggregate and sift political communities online. Te Haumoana White's insights on land, environment, people and law are reflected on the AI tendency to advocate for the manipulation of popular opinion in the aggregation of AI algorithms. The computer science community who advocate AI seem to have little understanding of political theory, political economics outside the tired and outdated neoliberal paradigm, nor how voice constitutes politics. Thus, Tegmark and others in the AI genre, tend to advocate a 'benign dictatorship' model, based on a combination of neoliberalism and algorithms that are vulnerable to exacerbation and manipulation of populist trends.

## 1. Decolonising technological futures

What is life? The question is not merely "What is the meaning of life?" but rather, what is life itself? We are living in an Age of Extinction, with human global organisation generating ecocide on a scale not seen since the dinosaurs. Thirty-nine million acres of tropical forests were destroyed in 2017 alone ([World Resources Institute](https://www.worldresourcesinstitute.org/)), to make way for industrial agriculture. Extremes of wealth, and extremes of poverty are getting worse. Capitalist exploitation is several hundred years old, and has rapidly reshaped the globe. This paper considers wise futures, taking into account two competing world views, both of which contribute a great deal to a shift in our ways of understanding life: life, technology, ecology, and our participation in the life-world.

From the perspective of climate change, indigenous philosophy has a lot to offer the world, as we face the necessary shift from an exploitative, extractive economy, to a more sustainable one. Indigenous philosophy has an integrated cosmology that recognises how the people are a part of local ecologies, not set in a contrasting relationship of subject from object. Maori philosophy sets out a taxonomy of relationships defined as a genealogy of connection, or whakapapa. Human beings are one species embedded in a

<sup>\*</sup> This article is being submitted to a special edition from an invitation issued by Johan Siebers on Wise Futures.

<sup>\*</sup> Corresponding author.

E-mail address: [ruth.irwin@gmail.com](mailto:ruth.irwin@gmail.com) (R. Irwin).

<https://doi.org/10.1016/j.futures.2019.06.003>

Received 27 January 2019; Accepted 5 June 2019

Available online 06 June 2019

0016-3287/ Crown Copyright © 2019 Published by Elsevier Ltd. All rights reserved.

network of familial relations with ecological place. There is no separation or alienation of people from the land. The governorship is correspondingly deeply involved in preserving and protecting ecological systems, or helping the ecosystem to thrive. 'Ownership' is not designed to be bought and sold, but rather to allocate areas of resources in association with expertise; farms to farmers, pounamu or greenstone to carvers, access to trees for boat builders, and so on. These roles carry with them a responsibility of ecological sensitivity. All political systems are at the service of ecology, because the assumption is that healthy ecology produces healthy communities. These views translate well into a highly technological, contemporary world.

In contrast, the Enlightenment traditions have emphasized the individual subject in a mastery position *vis a vis* 'objects' of knowledge. The whole motif of subjective epistemology, and more lately, constructivist interpretation, is that subjective understanding or knowledge production is more important than the objects of study, which are subjected (if you will) to the interpretation of the individual. Even collective epistemologies in philosophy of language tend to emphasise human rationality and consciousness as elevated, privileged, and masterful over their objects of study. Neoliberalism is a consistent form of modern economics that emerged from this stock of enlightenment assumptions. Ironically, Artificial Intelligence (AI), which is iconic in its neoliberal politics, is radically realigning our understanding of rationality, information, taxonomy, intelligence and governance. In this paper, we take the indigenous understanding of governance, of land, and of people's place *as* land rather than *against* land and show how ideas from AI confirm the rhizomatic taxonomy of indigenous philosophy but retains an unhealthy extractive economic model, which continues to ignore the perils of climate change, pollution, exploitative industrial mining and a manipulative oligarchical governance model that rests on unexamined assumptions about the ownership and growth models of economics.

The ultimate provocation is that AI learns to self-replicate – one of the hallmarks of being 'alive' – and no longer needs humanity as a vector of reproduction or evolution. For Tegmark, and others, this is a frightening prospect. It renders humanity redundant, inadequate, and unemployed. But there are other possibilities. It also opens the question of "What is life" and how life is interconnected. It shifts humanity out of the driving seat, and back to one species in an ecological diversity of beings. Potentially it could take capitalist exploitation to a new level, and paradoxically, open up spaces alongside capitalism for ecological flourishing to take place.

The content for these latter questions emerge more clearly with my dialogue with Te Haumoana White, in response to questions about what a Wise Future might look like. Te Haumoana shows the wisdom to think about the futures with the values of the Maori World – *te Ao Maori* – intact, and with a pragmatic, perceptive, and forward thinking approach to corporates, government, Council, and traditional tribal territory and relationship to the land. His ideas are steeped in historical understanding of the duplicity of colonialism and law, and at the same time, forward thinking and optimistic about how to overcome the limitations of exploitative capitalism and urbanisation. *Whenua tuku* is the Maori form of land allocation – an alternative to ownership that allows multiple layers of resource allocation over the same territory. Together with *whakapapa*, which is the interconnected taxonomy of life, these concepts forge a continuity of humanity with ecology, collapsing the hierarchy and alienation of humanity from nature as western political philosophy has encouraged during the Age of Exploitation.

## 2. Life

This issue is in response to a provocation by Max Tegmark's book, *Life 3.0: Being Human in the Age of Artificial Intelligence, 2017*. Tegmark has written the goals of Silicon valley, to create Artificial Intelligence, AI, into publicly accessible form. It provokes us to imagine technology in the future, and the way it may shape a more dis/topian world. Tegmark's political assumptions, closely aligned to the way that AI has been developed is for a neoliberal paternalistic oligarchy, something akin to feudal lordship, where AI is used to manipulate the 'people's will' and globalised profit making based on an extractive economics continues to siphon upwards with little or no regard for ecology or local communities.

Sustainability has been framed in neoliberal terms by some policy makers, including, arguably, Brundtland (1987), but its roots are in much older communities, that had genuinely sustainable lifestyles for thousands and thousands of years. These ancient communities are often seen as the antithesis of modernity, as 'pre-technological', primitive, or simple. Yet increasingly, as climate change, pollution, plastic disposal, and extinction levels are climbing to unbearable, and uninhabitable levels, indigenous lifestyles are taking on new meaning. Evidence shows us that industrial agriculture is a short term industry. Over the long term, it decreases soil health, lowers and poisons water tables, and reduces biodiversity and biomass. The huge loss of forest across most nations is having massive impact on biodiversity and radially reducing the earth's capacity to sequester carbon, and reduce the impacts of pollution and climate change.

Indigenous modes of life offer a fundamentally different ethos from extractive economics. The land is understood in more integrated ways, that network together with the human inhabitants, and exhibit a spirit, or immanence, that is far more than the 'standing reserve' (Heidegger, 1977) of resources waiting to be mined for the consumer machine. In this dialogue about wise futures with Te Haumoana White, his interests are continuously returning to the land, to his people's *whenua*, and the interconnection between people and ecology.

Te Haumoana White is the Ariki of the Poutama iwi, or tribe. Poutama is a very old iwi which occupies Mokau, and has hapu, or extended family affiliations to the two, more recent adjoining iwi, Tainui and Taranaki. The role of Ariki is complex, it is an outward facing role, more like a foreign minister but usually translated as Paramount Chief. Mokau is a very special place of origins for both major tribes, as both the Tainui and the Tokomaru canoes from the great migration landed in Mokau, and both have left their *punga* or anchor stones here. Mokau is on the West coast of the North Island in Aotearoa, New Zealand. It is on the upper fin of *Te Ika o te Maui*; the stingray of Maui, within sight of Mount Taranaki.

Our conversation is one between Maori and Settler, for I am Pakeha, of family from Ireland and Britain, who came out to New

Zealand before the land wars. My family occupied land in the tribal territory of Ngati Maru in Thames, and Tainui in the Waikato plain. There is no family recollection of our involvement in the land wars, but certainly my family were 'extractive' as they mined and farmed those areas. We also love this place, and we have camped, walked and sailed many places in Aotearoa's isles for many generations. As an academic, my work has been on the inequity of modern political and economic distribution, the philosophical roots of modernity, and an environmental awareness of the impact of the philosophy of technology embedded in modern lifestyles and on marine and earth ecosystems, shipping, fishing, agriculture, roading, infrastructure, planning, and so on.

Te Haumoana lives on Maori land, on the coast, and farms several blocks that have been divided up by a history of colonial land swindles and council tax foreclosures. Some of these historical problems are still ongoing. It would be easy to be bitter and resentful about the massive swathes of land theft, but Te Haumoana demonstrates enormous dignity and wisdom, and instead dwells on the future *kaitiakitanga* or caretaking, of a Poutama Heritage Park, that will incorporate much of the original Poutama territory without getting bogged down in fractious squabbling about returning ownership (although this is still hugely contentious). He has managed to think beyond the divisive surveying of ownership, theft, and reparation and reimagine a future that centres on the health and wellbeing of the land alongside, and beyond the modern principles of ownership.

He started the discussion with the relationship that Poutama has forged with the massive transnational roading firm, Fulton Hogan.

Te Haumoana: Fulton Hogan is helping fund a project of restoration, part of a programme of mitigation for damage that was done in a quarry. That mitigation is replanting of six hectares of trees, and fencing out stock. The land is mine and my hapu. Fulton Hogan funded the project of restoration of the trees. Its part of a bigger project which is the Poutama Heritage Park.

Fulton Hogan also support the Poutama Heritage Park concept and are committed to assisting to make that happen in planning etc.

Our next project is to protect the Tainui trees. The trees are opposite the restoration planting. These trees came with the Tainui canoe, the first people who are ancestors of the Tainui people. It is said that these trees came with the waka, the canoe. They were part of the canoe, from the gunnels of the waka. Which is the top section of the waka.

The restoration tree planting is on traditional land owned by Te Haumoana and his *hapu*, or family. But the Tainui trees are on land 'owned' by a local Pakeha farmer. As far as Te Haumoana is concerned though, this is important ecology, that is itself a maker of *whakapapa*; both inherent in the trees and their provenance in the origin of Maori to one of the great ancestral canoes, Tainui. This is a good example of how the landscape generates knowledge of the history of the people, and the history of belonging. It is that depth of belonging that informs the generic caretaking of Poutama territory regardless of capitalist ownership. The context of the discourse directly relates to the particular landscape, as a kind of mnemonic device for the oral recording of history (Smith T., 2000: 54).

Te Haumoana: The farmer whose farm the trees are on is unaware of the value of them. He actually started spraying around the edges. So that caught my attention. I thought we have to do something about it before it gets worse.

Ownership is not the priority. Te Haumoana has forged good communication with all parties, but his priority is the trees, not as resource or consumer item, and thus not as 'ownable' in any consumer sense.

Ruth: So is it quite a big stand?

Te Haumoana: Yep. Fulton Hogan was already involved in the restoration (of bush opposite), so when they came over to inspect we put it to them, and they were very enthusiastic about the project. For the sake of clarity, Fulton Hogan support the concept of conserving the Tainui Trees, they have not committed to funding any part of the project but the local council have committed to looking at the project seriously and looking at making money available through their various grant schemes. The funding is not an issue. And the Council are very supportive. Council have said they will pay for the fencing. Which will probably be a kilometre of fencing right around.

Ruth: So its now a matter of engaging with that farmer and seeing if he's willing?

Te Haumoana: We've already put it to him, the concept. They came back with agreeance except they said they wouldn't be responsible for any damage. They didn't want the responsibility. The only way around that is to get legal covenance. So we are thinking we may have to buy that stand of bush and put legal covenance for it. That's not a big deal. It can be done

The approach to the farmer fits within the Maori way of regulating land, *Tukuwhenua* or *tikanga tuku*. Takirangi Smith explains *tikanga tuku*,

As allocations of land they were never alienations of land and either land was returned, or the incoming party intermarried with the group who allocated the land, or else the allocating party willingly departed from the area, but maintained an ongoing relationship with the incoming party and the land (Smith T., 2000: 54)

Protecting the stand of Tainui trees in today's world requires adept understanding of Council bylaws, national regulations, and collaboration with corporations like Fulton Hogan who, because of their business building roads have had to engage with Maori about sacred sites many times. The collaboration Te Haumoana forges with them helps all parties to protect the important stand of Tainui trees, and to route any future road expansions in less intrusive ways, and it is way of constructively engaging with the local Council too.

Ruth: So what you are doing is partly protecting this stand of bush which is incredibly important, because its connected to the Tainui origins, the canoe. And opposite it you have got this restoration bush that Fulton Hogan are putting in. And they have

agreed to do this as restoration for damage to the quarry. So what we've got there is the ancient and the modern in a way.

The project proves to be more cutting edge than corporate social responsibility. Te Haumoana has climate change in his sights. His aims for protecting the Poutama territory is for "a thousand years". The horizon of thought is the interconnectedness of all things, and the overall health of the ecology, which creates the conditions for the health and flourishing of the local community.

Te Haumoana: Oh we can see it a thousand years out. If it becomes a World Heritage Park then it will have world protection. That's the settlement that we see for Poutama. I don't really understand the Waitangi Tribunal settlement process. Its not a very good process. And very government driven. We are saying "No we don't want that. You give us that bush back. And we'll do this." We already have corporate support. And that support can get bigger. Because there is actually a law on the books now. The large corporates who operate large fleets have to reduce their footprint, their carbon footprint. That's what I thought when Fulton Hogan's came to our table, and your starting to talk big numbers. Fulton Hogan use something like a million litres of diesel a week. The government is saying reduce that footprint. And now they are looking for projects. And its not only Fulton Hogan. There are companies bigger than that. We are saying "Here is the opportunity. What do we want. We know what we want. We are sure we know how to get it.

The plan, Whakapuakitanga o Poutama, was lodged and accepted by the Crown in 2007 (White et al., 2006).

### 3. Governance

For people living in Europe, there is an assumption that colonialism is well and truly over. Most colonies were given independence in the late 1970s. When Britain joined the EU, she gave away her privileged trading relationships with her old colonies, and prioritised trade with other EU nations. However, for indigenous people living in settler nations, colonialism is far from finished. As global population pressure increases, and the exploitative practices of industrial agriculture, oil, and mining keep spreading into 'virgin' territory, indigenous communities are obviously under threat. It is becoming increasingly apparent that some indigenous leaders that are protecting their traditional lands are losing their lives in many countries in South America, Africa, East Timor, and elsewhere. In lands like Australia and New Zealand, indigenous people are struggling in a more nuanced way. Maori have already lost vast swathes of their territory in land wars, and land swindles. Their traditional foraging grounds, gardens, and fishing territories, and often their villages and towns, are long since fragmented as first colonial settlers, Council taxes, and then industrial corporations moved into to exploit their resources. What struck me most about my dialogue with Te Haumoana, is his wisdom and experience in negotiating a safe course in relation to the land and the Crown. Te Haumoana has a strong voice, but he is also very aware of how vulnerable Maori leaders are in public and legal disputes. Te Haumoana's discourse is shaped by his need to *protect* Poutama territory, and his versatility and awareness of how to *manage* tribal territory without usurping the ownership rights of settler farmers and largely in collaboration rather than conflict with the government. Te Haumoana is both modern and traditional, technologically and commercially savvy, and determined to enhance the ecology and protect traditions. This is a fine art, and it indicates the delicate pathway that could lead us all safely towards the future, in a manner that protects land and sea and allows ecology and people to both flourish even within the confines of modern model of ownership. The tensions are illustrated in this part of the dialogue, while discussing goals for the future.

Te Haumoana: Its doable, its very doable, and your delivering something back. My criticism of iwis that have had [Waitangi] settlements is they are creating empires (Waitangi Tribunal, Te Ture Whenua Maori Act, 1993). They are also trying to create mirror government systems, but alongside the government. Well, the worst organisation you can team up with is the government. Ruth: Right!?

Te Haumoana: That's a fact of life. If you are relying on the government to keep you alive, you will die. They will overcome you. You are better off to just step away. And use them as you need to use them. Not have them drive your system. That sort of korero could get me shot. That's the korero that other leaders have lost their lives over.

Ruth: Right.

Te Haumoana: Its *Rangitiratanga*.

Ruth: But what you are suggesting though, is a different form of *rangatiratanga* (sovereignty). Its not *kawanatanga* [management] right? (He Whakaputanga o te Rangatiratanga o Nu Tireni, 1835, Te Tiriti o Waitangi, 1840, Orange, 1987). So, if you are saying there is no point in creating a parallel system, in fact you need to be thinking about it in completely different ways, and engaging with government, when and if, or if and when, the moment requires it. So you're basically allowing the government to do its legislation, infrastructure, roads, cities: decision making. And yet, what I am hearing, correct me if I'm wrong. Poutama is talking about having more input, governance, leadership over this forty square kilometres in a very direct way, in terms of looking after the bush, either engaging with or buying back the land off the farmers, and providing work, it sounds like. Quite a lot of work for your community.

Te Haumoana: Providing a lot of work. Our schools are depleted here. I think there are 5 or 6 children up at Mokau School, about 8 children down at Ahititi School. At one time, nobody, not even the government was encouraging investment in the area. This farm on either side of me is a corporate farm.

#### 4. Land

In the past, the land wars, and the land swindles, have shaped Maori experience with modern governance and power. This has helped shape Te Haumoana's unique and careful balancing of 'care and management' or *kaitiaki*, instead of 'sovereignty' or dominion (He Whakapukanga, Declaration of Independence, 1835, Tiriti of Waitangi, Treaty of Waitangi, 1840, Orange, 2004; Carpenter, 2009; Ward, 2015). That is not to say that Te Haumoana is giving away his 'rights' and often he is actively defending those rights in the court of law. But history demonstrates how frustrating and corrupt the (neo)colonial regime has been. A good example, which unfortunately got cut off from the recording in the interview, is how most of the Mokau lands got alienated, when a British subject called Joshua Jones took an interest in the land in the early 1880s. Te Haumoana describes Jones' initial interest,

Te Haumoana: Yeah, a fellow named Joshua Jones. He was a bit of a con man. He was a British subject (Stirling, 2018: 47). He'd been working in the gold fields in New South Wales. He ran into one of my uncles who was over there, one of Te Oro's brothers, Takirau. And Takirau had told him how beautiful this place was. So he came over. And he wanted the land here. He cultivated political allies. Right up to George Grey. He was friends with George Grey.

They needed to get title. There were no titles here. In order to get title they got agreeance.

Sir George Grey was the British Governor of New Zealand. He was a professional colonial Governor, who held power in South Australia, NZ, and Cape Colony in South Africa. Grey was in control of New Zealand between 1845–1853, and again from 1861 to 1868.

Grey believed in assimilation, although he did not really have the resources to implement it. Effectively education and Missionaries were deployed to teach Maori how to be like Europeans. Grey sought, as the NZ historian Keith Sinclair put it, "to 'civilise' them, and to break down the tribal structure" (Sinclair, 1990). Wherever possible, land tenure was taken out of traditional ownership – which was layered and communal, not individualised and private. In 1846, Grey declared by Charter that 'wastelands' that were contested between different tribes could be bought or taken by the government (Ward, 2015:144 – It seems likely this Charter was authored by Earl Grey in England rather than Governor Grey in New Zealand, see Brazendale below). This was by no means uncontested – both by Maori who understood *whenua tuku* in complex and interactive ways (above) and by other influential settlers, including the important Anglican Missionary Henry Williams (Carpenter, 2009: 115), who had helped forge the Whakaputanga, or Declaration of Independence (1835). Another important Wesleyan missionary, John Whiteley also contested Earl Grey's missive.

Whiteley concerned himself with all aspects of Maori welfare [at Kawhia]. In 1840 at the request of officials he encouraged chiefs on the west coast of the North Island from Kawhia to Mokau to sign the Treaty of Waitangi, and in 1847 joined protests against the contents of a dispatch dated 23 December 1846 from the secretary of state for the colonies, Earl Grey, to the governor, George Grey. He was upset that the governor was instructed to treat unoccupied land as Crown land, and to sell this land to settlers. Whiteley argued that all land in the country had customary claimants, and that if the Crown took unoccupied land it would contravene the letter and spirit of the Treaty of Waitangi (Brazendale, 1990).

Struggles over land best illustrate the complex demands of British, global colonialism on a country which had been almost entirely isolated from the rest of the world when regular voyaging from Polynesia became more intermittent some 500 years earlier. Indigenous land was not 'owned' but rather protected. Iwi had well defined territory and each *hapu* or family held different rights, knowledge, and whakapapa or interconnection with aspects of the resources of that territory. For example, a family may have expertise in canoe making, so they may have access to the forest for large Kahikatea trees. Another *hapu*, or family may have access to the same forest for pigeons or *kereru*, and another family may have access to the same forest for medicinal plants. All of them 'own' the land, all have expertise, and interconnection there. There are other relationships too that are designated by *ahi kaa*, or 'keeping the home fires burning'. All of these complexities were further added to because different tribes could have territorial claims over the same area of land or sea. Sometimes these competing claims were in affable co-existence, with marriage and kinship ties, and sometimes they were overtly contested through warfare, or political dispute.

In 1853 Governor Grey was sent by the Crown from New Zealand to South Africa, and the Settler Government took over from the British colonial Governorship. The Settler government was, if anything, more vicious in pursuit of Maori land than the earlier Governors had been. Takirangi Smith mentions this in relation to the major Settler government theft of the Wairarapa block, in contrast to Maori *tikanga tuku* form of distribution.

Crown agents continually changed the rules and the discourse for the purpose of achieving the outcomes for the agenda of the Crown, which was to acquire land and resources, and colonise the area with Europeans. The pre-colonial *tangata whenua* institution of *tikanga tuku*, which meant a conditional allocation of land in pre-colonial terms, for example, was adapted by Crown agents in the 1840s and 1850s to mean a lease or alienation of land, at will, by incorporating Maori language documents into the machinery of the colonial discourse. This was used to appropriate almost all of the Wairarapa in 1853 and 1854 by simply changing the meaning overnight, to mean sell or alienate forever and ever. (Smith T., 2000: 54).

The type of ownership is no mere semantics. The colonists were on a land grab, but more importantly, their mode of gaining land dislodged the local population, in a fresh form of the land clearances. Effectively colonial land clearances were destroying Maori villages and communities, all over the country. By the late 1860s the balance of power had decidedly shifted and Missionaries who had been stout in supporting Maori ownership of land were shifting their stance. Whiteley amongst them.

An essay which Whiteley wrote in 1868 illustrates the change in his perspective on the ownership of land. Once he had defended the right of Maori to control all their lands, whether occupied or not; now he insisted that the settlers had a claim to purchase and make use of unoccupied land. 'it has been said, "The natives are fighting for their lands." But "the earth is the Lord's" & for 600 years he has been waiting for them to "occupy", 600 years more would find them with millions upon millions of still unoccupied acres; and Providence indicates that now shall this portion of his earth be occupied by those who are able and willing to bring forth the fruits thereof.' (Brazendale, 1990)

All this had a bearing on Poutama and Mokau, although they managed to stave off Pakeha British settlement for a few decades. Te Haumoana explains how settlement was held off;

Te Haumoana: The military had established itself in Taranaki. They had built a garrison in Pukearuhe (Stirling, 2018:5). Parininihi which is the gateway to this area. So the garrison was to be a launching pad for militia to come in. And Te Oro, my grandfather, him and his brothers had already been down in to Taranaki fighting so they knew what was coming. They decided to, in February 1869, they took a *Taua* [group], a war *Taua* down and wiped out the garrison.

Te Haumoana: (The Europeans) weren't professional soldiers. Although a lot of them had been professional soldiers. They had been given land grants. Te Oro and them went down and wiped that out. Now, they also killed a missionary, John Whiteley. He, while he was a missionary for the Wesleyan Church. He was also a land commissioner. He was employed by the government to acquire Maori land, in what ever way he saw fit. So he was leading the way to come up here and acquire land. And Te Oro and them stopped him at Waikaramuruma stream. They told him not to cross it. 'Do not cross this stream. You go back, you are not welcome.' Whiteley had lived and preached at Kawhia. So he had a good name. He was confident.

Ruth: So his Maori was good? His language was good?

Te Haumoana: Language, everything. People in Kawhia revered him. These were different people here, so they weren't having any of that nonsense. He refused to go back. So they shot him. They shot his horse first and he kneeled down to pray, and they shot him.

Those are the cold facts of what happened. One of my uncles, he said [at the point of killing John Whiteley]

"Kahore tangi te tikaokao I mate."

"Dead chooks don't cry; dead roosters don't cry" and that was the end of that.

And they burnt that garrison down. There's a *whakatoki* [proverb] that has come out of [the death of the land commissioner John Whiteley]. And it goes like this.

"Patu ana au te momo kau o te tau.

Pania tana toto ki te rae o Parininihi."

"I have killed the fatted cow of the year and splashed his blood against the face of Parininihi." That's the cliffs. And that *whakatoki* [proverb] is still alive today.

And they returned, they didn't suffer any casualty. I think there was 8 or 9 they killed, including women and children, and soldiers, and Whiteley. They returned to here, up to Mokau. And the British sent two gunboats, the Sturt and the St Kilda. A boat load of marines landed, where we were down at the mouth of the river. They landed there. But they wouldn't go inland. They were too scared to go inland. Te Oro and them had gone up the river because they knew the British would come. But the British didn't know the territory. Ngati Porou had deserted them. They bought Ngati Porou over here to fight. But Ngati Porou never came. They had urgent business at home and Ngati Porou never came. They fired shots into the village. And we've only just found one of the canon balls. Its in the museum.

Ruth: And this is the village? Literally here?

Te Haumoana: Oh, Mokau was one big village. & that was to send a message to the British "Don't come here". They didn't. They didn't come. They didn't get up here until the 1880s. This place wasn't settled.

Our people traded. They had a boat here. They traded. But it was still a No-go area for white people.

Te Haumoana refers to the old saying. "It takes a village to raise a child."

But the colonisers destroyed our village. So we must rebuild that village. The Poutama Heritage Park is central to that village. The village is now a global village [As the Maori diaspora is now widespread]. We are very much part of the global make up. We have to contribute to the sustainable global environment, social fabric, and economy. Otherwise, what is the point of being?

Te Haumoana's vision of the future is shaped by his experience and knowledge about the past. The layers of political wisdom come from precolonial, colonial, and contemporary democracy/ corporate capitalism and the future projections emerge from the way these past episodes shape our understanding of power, technology and knowledge in the future.

The dialogue is about how to mitigate the long term damage of exploitative colonialism, and the ongoing alienation generated by capitalist ownership, and reinvigorate the health of the land and the *kaitiakitanga* [caretaking] role to Poutama. As we could say about capitalism, 'people assume we own the land, but that is not right, we *are* the land.'

## 5. Artificial Intelligence and Silicon Valley's Corporate Utopia

How does my dialogue with Te Haumoana reflect on the utopian futures outlined by Max Tegmark? There are two substantively different things going on in Tegmark; perpetuated patronising and exploitative economics, and in contrast, the beginnings of a new philosophical understanding that everything is connected, and that everything is 'intelligent' – ideas that are imbued in Maoritanga

from the outset.

Tegmark is a mathematician and very naive about the patronising and right wing politics he sets out as ideal in his first chapter on Artificial Intelligence. He merely perpetuates the colonialist, exploitative attitude that Maori, Irish, and other indigenous peoples have had to endure for centuries. He writes an imaginative description of the AI machine, Prometheus (see Stiegler 1998 on how the Greek god Prometheus introduced fire and technology to humanity), that is too powerful to be released upon the internet, and must be contained. The small group of programmers (an elite) who call themselves the Omega, utilise Prometheus to make money, generate self-replicating AI machinery, create and distribute the ideas for new technologies, influence the media and education, and shape politics to a more ‘moderate’ set of imperatives. He then lists some really right wing ideas, especially ‘free trade’ and ‘minimal government’ that he assumes are moderate. Freedom is espoused by Silicon Valley, on the grounds of free speech and non-regulation of the internet. Free trade and non-regulation owes its origin to neoliberal theory, especially Buchanan, Tullock, Hayek and Milton Freedman (Devine, 2004, Maclean, 2017). Buchanan overtly strategized to reduce democracy to a shadow of its old self, and legitimise the power of super-rich elites, who now own most of the assets of the planet in about seven companies. Ironically, Tegmark’s imaginary AI, Prometheus, is completely regulated, and kept isolated from direct access to the internet because of human fears of its uncontrolled power. The end result, is that the programmers become a ‘benevolent dictatorship’ of the entire global modern world.

It is worth quoting the agenda of these benevolent dictators, which Tegmark lays out in a list;

- 1 Democracy
- 2 Tax cuts
- 3 Government social service cuts
- 4 Military spending cuts
- 5 Free trade
- 6 Open borders
- 7 Socially responsible companies

The outlined politics plays lip service to democracy, but tax, welfare, and military cuts all reduce the role of the State. Free trade and open borders also destroy the Nation State. All that is left is increasingly large, corporate monopolies with a ‘social responsibility’. However there is little means for legislature or regulative bodies to ensure their compliance with ecological or social welfare.

Notably absent in Tegmark’s utopian imaginary AI, and its controlling elite Omega faction, is any mention of the consequences of any type of exploitative economics. There is no mention of climate change, of pollution, of soil erosion, or the loss of so much habitat that some 90% of species are facing extinction. All of this is simply missing from his imagination, and if we were to raise it, he would no doubt speculate that AI would develop technologies that could fix all such problems, bring back the Dodo, or the dinosaur’s in some sort of *Jurassic Park*.

There is no commitment to equality or fraternity in Tegmark’s neoliberal utopian vision. Corporate Social responsibility is given the task of philanthropy, which includes the trickle down effect (the rich spend more, and thus stimulate the economy for the poor). The State need not provide welfare because benevolent companies will do so. There is no genuine attempt at equitable redistribution or a shift in the concept of ownership. Tegmark writes,

the poorest 50% of Earth’s population had earned only about 4% of the global income, enabling the Omega controlled companies to win their hearts (and votes) by sharing only a modest fraction of their profits with them.

For me, it is a real worry when the politics espoused by someone like Tegmark are so normalised and ubiquitous that the exploitative agenda goes unregistered by such worthy newspapers as *The Guardian*. *Guardian* reviewer Harari enthuses, “Instead of pushing any one agenda or prediction, Tegmark seeks to cover as much ground as possible, reviewing a wide variety of scenarios concerning the impact of AI on the job market, warfare and political systems” (Harari, 2018).

Furthermore, Tegmark is overt about the influence AI experts (already) have over democracy. He describes the ways that the AI, Prometheus, will ‘influence’ democratic views by feeding elaborate articles to newspapers and creating films that discourage ‘extremes’ of viewpoint. Brexit and Trump’s election are good examples of the real life influence AI algorithms are already having. Cambridge Analytica was involved in both UK and USA democratic elections, and used big data to identify vulnerable and nationalist leaning individuals through their Facebook accounts, and then bombarded them with advertising slogans and links to influence their vote. Effectively these algorithms are already promoting ‘free trade’, distracting the global community from doing anything effective about climate change. The money trail from Cambridge Analytica seems to point to right wing billionaires.

A subsequent Editorial in *The Guardian* was much more cautious about Tegmark, and about AI. Brexit and Trump are two examples, and another the Editor quoted is the Chinese government who uses big data to “predict the development trajectory for internet incidents ... preemptively intervene in and guide public sentiment to avoid mass online public opinion outbreaks, and improve social governance capabilities” (*China Digital Times; Guardian Editorial Jan 1, 2019*)

The coerciveness inherent in the way AI algorithms are being used to manipulate democracy and public opinion goes completely against the UN Declaration of the Rights of Indigenous Peoples,

Convinced that control by indigenous peoples over developments affecting them and their lands, territories and resources will enable them to maintain and strengthen their institutions, cultures and traditions, and to promote their development in accordance with their aspirations and needs (2007: 4).

Indeed, most communities need this level of protection from the coerciveness of AI, whether it is in the hands of the State or

Corporations.

In my view, AI does not exactly have a mind of its own, as it is incapable of goals and aspirations unless they are prior programmed. However, it is a very useful tool for elites, whether governments or corporations, that can wield it to influence large scale discourse and voting behaviour. It is another powerful weapon in the history of late capitalism and it is often being used in the service of exploitative extraction rather than the good of the ecosystem and communities. There is no reason to assume AI itself is the problem. If the Green Party, or the UN, or some other organisation also took control of big data, then influential decision making to promote a cultural transition away from oil and climate change, could be more politically palatable.

## 6. Minimal state

On the face of it, Te Haumoana's suspicious position on government seems similar to Tegmark's neoliberal, minimal government stance. Te Haumoana is keen to put corporate responsibility and sustainability to good use in developing the Poutama Heritage Park. However, the two positions are fundamentally different. Te Haumoana's position is decolonial. He is not an anarchist. The law is co-opted by colonial and settler power plays, and by corruption but it has given Poutama some leverage in protecting the territory and resources of the iwi. Te Haumoana's problem is the continuous erosion of Maori land and rights of the sea and waterways through privatisation, debt, and public works. The ultimate goals of Tegmark and Te Haumoana are at odds. For Te Haumoana, it is the good of the whenua, the land and its people, that is at stake. For Tegmark, it's the freedom to carry on capitalist economic growth and private enterprise that is the goal. The government fails to do enough to protect the environment and ordinary people. For Te Haumoana, and for Tegmark, the government inhibits the extractive exploitation that neoliberalism confers on corporations as a social responsibility, not the State. Te Haumoana is quite clear that corporations will only offer him the opportunities to gain support for restorative replanting, and the protection of stands of Tainui trees if the State obliges them to do so. Voluntarily these corporations are unlikely to come forward and help communities to protect the environment, even sacred sites like graveyards, or historical treasures.

Haumoana: As long as the next generation takes it on board and manages it in such a way that the environment survives. Individual's have to step up. Because governments are not going to. The corporates are only going to be forced into it. But individuals can move mountains.

## 7. Immanence, information, and the definition of life

The second aspect of Tegmark's work is for me, much more interesting. From a wide variety of fields, there is a growing acknowledgement that all matter is profoundly interconnected starting to be called the 'ontological turn' (Jensen, Ballesterro, de la Cadena, Fisch, & Ishii, 2017). This counters the western Idealist philosophical tradition that informed the development of western politics; that the rational individual human mind was far superior to everything else, and that this subjective knower was juxtaposed against the object of knowledge (Descartes, Berkeley). The Continental tradition of philosophy, from Spinoza, Nietzsche, through Heidegger, and the following generation of French philosophers including Foucault, Deleuze and Guattari, Irigaray, Kristeva, Plumwood, and others have all put a lot of effort into reconceptualising the subject *in relation* to the environmental, social, and political context, as Guattari put it, the *Three Ecologies* (1991). Nietzsche talked (briefly) about 'anorganic' life, where information is expressed by inanimate objects, Spinoza did something similar in his extensive discourse on affect, and Deleuze wrote on the consistency and exchange immanent in all things, or as he both he and Heidegger put it, the difference and repetition of being (Deleuze, 1994). This integration of all aspects of the universe is becoming recognised in a wide variety of fields. It is not merely a mechanics of ecological roles, but communication within and between species. Biologists are putting forward evidence of speech in many different species including meercats and whales (Watkins collection), plant biology is examining plant communication, from releasing pheromones and chemical signals (Plant Signaling & Behaviour, 2006- present), to exchanges through the 'wood wide web' of fungi (A.B. Frank 1885, in Trappe, 2005) trees supplement each other and respond to each other's signals. Artificial intelligence extends the definition of life and of intelligence towards the replication of information. AI makes it more acceptable to consider how information is immanent in all inanimate objects (Deleuze & Guattari, 1999), and when information, as repetition and difference, then contributes to the reproduction of matter, this is consistent with the information flows in organic 'life'. Tegmark describes this very well.

Let's instead define life very broadly, simply as a process that can retain its complexity and replicate. What's replicated isn't matter (made of atoms) but information (made of bits) specifying how the atoms are arranged. When a bacterium makes a copy of its DNA, no new atoms are created, but a new set of atoms are arranged in the same pattern as the original, thereby copying the information. In other words, we can think of life as a self-replicating information-processing system whose information (software) determines both its behaviour and the blueprints for its hardware (Tegmark, 2017: 33).

Science has rediscovered the immanent inter-relationship of all things. Science is starting to sound increasingly something akin to Maori *wairua*, or spirit, that immanence of affect that occupies everything, organic and inorganic, trees, birds, mountains, rivers, people and the *whakapapa* which connects them. The movement of information, and the affect seen in the mode of computer miniaturisation. The information has been translated onto a variety of materials. Tegmark exclaims over these rapid transformations in both materials and conceptual basis of intelligence and 'life'.

the information may get copied in rapid succession from magnetizations on your hard drive to electric charges in your computer's

working memory, radio waves in your wireless network, voltages in your router, laser pulses in an optical fiber and, finally, molecules on a piece of paper. In other words, information can take on a life of its own, independent of its physical substrate! (Tegmark, 2017: 78)

## 8. Whakapapa korero

In Maori cosmology, everything is connected. Whakapapa is usually translated as genealogy, but it is just as well understood as a taxonomy of classifications, that are contested and political rather than fixed and universal. The key point is that all *whakapapa* and *wairua* have been poorly understood by western civilisation.

Whakapapa, which is usually translated as genealogy or descent, lays out Maori views of existence, the human and natural world. It provides explanation for existence and also articulates the human role within that existence. Within whakapapa there are origins and explanations for trees, birds, parts of the human body, words and speaking, the cosmos, the gods, karakia, the moon, the wind and stones. All life is connected and interrelated. Appropriate behaviour is also indicated to all aspects of life within whakapapa (Smith, 2000: 45).

Colonial and modern interlocutors have regarded Maori cosmology as ‘myths’ with no epistemological or ontological status. This still shows up now, but it is also the case that ‘mythical’ terms bridge Maori and contemporary thought.

Te Haumoana tells me that the underlying strata goes straight out to sea, and the oil geologists come to visit here to see what is likely to be found when they are drilling under the ocean. One geologist had asked Haumoana what the local legends are, about the geography. Haumoana is reluctant to tell outsiders, and at first I think that’s because it is protected knowledge. But he is worried that the stories will be ridiculed. Long ago, the *Tohunga* (sacred person) fished up a reef from south of the major sacred mountain, Taranaki. We can see him on the horizon, southwards, solitary, down the sweep of cliffs, and across the large bay. The *Tohunga*, Poutama, dragged the reef around the mountain and brought it up to Mokau, where he left it on the beach. That geologist roared with laughter, Te Haumoana told me, not from ridicule, but because the reef here is identical to the reef formation south of Mount Taranaki.

By framing *whakapapa korero* within the context of history and myth the process commences within the decontextualizing of discourses from the particular landscapes, environments, or physical or spatial context to which they relate. This objectification process then renders them into an abstraction which is then recontextualised within the lineal time frame of history where European. Western analysis has in the past applied its own criteria of validity. That which is identified as being ‘real’ according to the criteria is labelled historical, and that which is not ‘real’ becomes myth. (Smith T., 2000: 54)

I hope that I have not joined the ranks of Pakeha lineal history, in trying to dialogue not only with Te Haumoana but also with the writing of Tegmark. This narrative traverses traditional landscapes, colonial and modern politics and economics, and a new ontological turn in IT, in science, in anthropology, and in taking forward thinking in postcolonial philosophy. The aims of this dialogue is not to mash everyone of these tangents together into a new whole, but rather show their genealogical connection, the flawed ancestors, and the way the strata of a geology of morals, of people as land can bring a sense of morality and direction to the question of life in all its iterations.

Tegmark claims, excitedly, (and in continuity with multiple writers on planetary ecology) that humankind’s consciousness indicates a unique moment of reflectiveness in the evolutionary emergence of the universe. “Thirteen point eight billion years after its birth, our Universe has awoken and become aware of itself. From a small blue planet, tiny conscious parts of our Universe have begun gazing” (Tegmark, 2017: 31). We disagree entirely. According to the wisdom of indigenous cosmological traditions such as Maori *whakapapa*, the planet has been ‘woke’ for a very long time. First ‘life’ was already to be found some 3.8 billion years ago on planet Earth. Humanity is only one segment of that aliveness. The western question of consciousness is expanded exponentially under rubric of AI. We can be grateful that finally the west is catching up with Indigenous philosophy.

## References

- Brazendale, G. (1990). ‘Whiteley, John’ in the dictionary of New Zealand biography. Te Ara – The Encyclopedia of New Zealand Available at <https://teara.govt.nz/en/biographies/1w20/whiteley-john> (Accessed 3 February 2019).
- Brundtland, G. (1987). *Our Common Future, World Commission On Environment and Development*. Oxford and New York: Oxford University Press.
- Carpenter, S. (2009). *Te Wiremu, Te Puhipi, He Wakaputanga me te Tiriti: Henry James, James Busby, A Declaration and the Treaty, Waitangi Tribunal Report* Available at [https://forms.justice.govt.nz/search/Documents/WT/wt\\_DOC\\_1734955/Wai%201040%2C%20A017.pdf](https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_1734955/Wai%201040%2C%20A017.pdf).
- China Digital Times. Available at <https://chinadigitaltimes.net/2018/11/white-paper-outlines-potential-uses-of-artificial-intelligence/>.
- He Whakaputanga o te Rangatiratanga o Nu Tirenī (1835). *Declaration of independence of the United Tribes of New Zealand*. Available at <https://nzhistory.govt.nz/media/interactive/the-declaration-of-independence>.
- Deleuze, G., & Guattari, F. (1999). *A thousand plateaus; capitalism & schizophrenia*. Brian Massumi (trans.), (orig publ. 1980) London: Athlone Press.
- Deleuze, G. (1994). *Difference and repetition*. Paul Patton (trans.) London: Athlone.
- Devine, N. (2004). *Education and public choice; a critical account of the invisible hand in education*. Westport: Praeger Press.
- Guattari, Felix (1991). *Three Ecologies* London. New Brunswick, NJ: Athlone Press.
- Guardian Editorial (2019). *The Guardian view on the future of AI: Great power, great irresponsibility*. January.
- Jensen, C. B., Ballesterio, A., de la Cadena, M., Fisch, M., & Ishii, M. (2017). New ontologies? Reflections on some recent ‘Turns’ in STS, anthropology and philosophy. *Social Anthropology*, 25(4), 525–545.
- Harari (2018). *Life 3.0 by Max Tegmark review – We are ignoring the AI apocalypse*. The Guardian 22 Feb.
- Heidegger, M. (1977). *The question concerning technology (original publication 1954). The question concerning technology and other essays*. New York: Harper and Row 3–35

- William Lovitt, (transl. & intro.).
- Orange, Claudia (1987). *The Treaty of Waitangi*. Wellington: Bridget Williams Books. Maclean Nancy, (2017) *Democracy in Chains*. New York: Viking Press.
- Orange, C. (2004). *An illustrated history of the treaty of waitangi*. Wellington: Bridget Williams Books.
- Plant Signaling and Behaviour. (2006–present).**
- Sinclair, K. (1990). *A history of New Zealand*. orig. 1959 London: Penguin.
- Smith, C. W.-I-Te-R. (2000). Straying beyond the boundaries of belief: Maori epistemologies inside the curriculum. *Educational Philosophy and Theory*, 32(1), 43–51.
- Smith, T. (2000). Nga Tini Ahuatanga o Whakapapa Korero. *Educational Philosophy and Theory*, 32(1), 53–60.
- Stirling, B. (2018). *Taranaki regional council and new Plymouth District Council Mt Messenger Bypass Project*.
- Trappe, J. M. (2005). A.B. Frank and mycorrhizae: The challenge to evolutionary and ecologic theory. *Mycorrhiza*, 15(June (4)), 277–281.
- Te Tiriti o Waitangi (1840). *Te Tiriti o Waitangi*. Available in translation at <https://tiritiowaitangi.govt.nz/treaty/translation.pdf>.
- Te Ture Whenua Maori Act (1993). *Maori land act 1993*. Available at <http://www.legislation.govt.nz/act/public/1993/0004/80.0/DLM289882.html>.
- Tegmark, M. (2017). *Life 3.0: Being human in the age of artificial intelligence*. New York: Alfred A Knopf.
- United Nations Declaration on the Rights of indigenous Peoples (2007). *United nations declaration on the rights of indigenous peoples*. Available at [https://www.un.org/development/desa/indigenouseoples/wp-content/uploads/sites/19/2018/11/UNDRIP\\_E\\_web.pdf](https://www.un.org/development/desa/indigenouseoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf).
- Ward, A. (2015). *An unsettled history; treaty claims in New Zealand today*. Wellington: Bridget Williams Books.
- White, & Te Haumoana i te Iwi Taumata o Poutama (2006). *Whakapuakitanga o Poutama, lodged with the Crown*. 2007.
- William Watkins Whale Collection at the New Bedford Whaling Museum (2019). *William Watkins whale collection at the New Bedford Whaling Museum*.
- World Resources Institute, <https://www.wri.org/blog/2018/06/2017-was-second-worst-year-record-tropical-tree-cover-loss>.