Contributions of Philosophy and Psychology Towards Understanding the Effectiveness of Environmental Law in a New Zealand Context

Madeline Seaman*

New Zealand is an ecologically unique landmass characterised by the radiation of species in the almost complete absence of mammals. To manage its unique environment New Zealand's landmark Resource Management Act 1991 (RMA) was conceptualised and brought into legislation by a forward-thinking Labour government elected in 1984. The RMA is informed by concepts of sustainable development such as intrinsic value for the environment and preservation of natural resources for future generations. Despite being surrounded by pristine wilderness and ways of conceptualising the world embedded in te ao Māori (the Māori worldview), which has a deep ecological ethic, the RMA has failed to effectively manage New Zealand's environmental ecosystems. New Zealand has the highest share of greenhouse gas emissions in the OECD, 40 per cent of which comes from agriculture. How and where has its environmental strategy gone so awry? It is argued that the Western thinking that has produced the RMA is fundamentally flawed when it comes to considering the environment. This is because of the disembodiment of the Western person who acts within systems that value extrinsic factors such as money, status and power that in turn contribute to ecologically destructive behaviours. The disembodiment of the Western person has separated them from nature to the point where

*The author has a Bachelor of Science in Ecology and is currently completing a Postgraduate Diploma in Environmental Management at The University of Auckland. The origins of this article stem from a desire to understand human systems, the effect these systems have on human behaviour, and the interplay between these and the environment. Email address: madeline.seaman@gmail.com.

they are unable to see past its objective properties and truly understand how connected everything is. The truth of the matter is, humans are physically constructed from nature, humans are the environment in every behaviour that they perform. Every behaviour each individual performs has an effect on the group through the psychological concepts of identity formation and modelling and copying of behaviours. It is therefore imperative that the legal system considers humans and the environment as one single system — a single system that is set up so human beings are able to flourish in ecologically conscious ways, where their true health and well-being is acknowledged and supported by a sovereign state who acts as a trustee and guardian for the environment of which itself and its people are inherently imbued.

1. INTRODUCTION

The effectiveness of environmental law can be understood to be adequate recognition of the environment in such a way as allows for its ability to function as a whole system now and into the future. Laws and rules governing human system behaviour can change how the human system acts within the environmental system. In this sense the effectiveness of environmental law can be determined by understanding the effects the human system has on the environment from the time the law was implemented to the time of assessment. If there was effective implementation during this time period it would be expected to see behaviours of the human system change to a point where the environmental system is more able to function as a whole without as much impact from the human system.

This article considers the effectiveness of New Zealand environmental law since the implementation of the Resource Management Act 1991 (RMA). To do this it examines the historical discourses that inform the nature of environmental law employed in New Zealand. It examines the physical surroundings of New Zealanders as people and how the nature of te ao Māori (the Māori worldview) might inform the behaviours of New Zealanders as a whole. Specific examples within the RMA are used to demonstrate that the Act, as a law, despite the best intentions and some sound sustainability values, is not effective at managing the environment.

The article examines the reasons behind the lack of effectiveness thematically by looking more in-depth into the predominant human system that informs the environmental law in New Zealand: Western thinking and Western ways of knowing. It addresses the effects that the development of the rational

mind has had on how Western thinking perceives the environment, and how the ability to objectify nature has its uses but that it has also led to the fundamental disembodiment of the Western person, creating a disconnect between their mind and body and also themselves and the external world.

Psychological theories surrounding values, identity and morality are discussed and examined to determine how these affect people within the human system and how they act within the environment. This is to demonstrate how intricately connected the human system really is and how the behaviour of the systems that govern affect how people act within that system because of competing values of the Western state and the individuals within it and because of the roles that identity and modelling play on human behaviour.

In the final part of the article potential legal solutions are offered that combine a concept of human health in te ao Māori that holistically embeds the true nature of people that cannot be addressed in a disembodied rational context and the concept of Buen Vivir (living well) in Ecuador in order to effectively manage the human system for what it is, rather than what it thinks it is. The legal solutions offered have the intention of providing a solution that allows humans to act in ecologically conscious ways that have as little impact on the environment as possible.

2. ORIGINS OF ENVIRONMENTAL LAW;
NEW ZEALAND AND THE RMA

2.1 Environmental Law Origins

Modern environmental law in a Western context originates in some of the earliest recorded history.[1] Studies of ancient Egypt and Greece reveal that city planning and the effects of cities on the environment were known to have an effect on human health and the ability of communities to survive well.[2] The first environmental problems that occurred arose as a result of water supply. This is evident in Babylonian legal texts that recognised environmental protection but only in an effort to protect landowners' interests.[3] For example, if there was a water supply issue the persons who had let the fields become overgrown or let them dry out had to compensate the owner. This thinking and approach are not surprising as property and contracts later formed the two pillars of Roman

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1   Kenneth Palmer "Origins and Guiding Ideas of Environmental Law" in K Bosselmann, D Grinlinton and P Taylor (eds) *Environmental Law for a Sustainable Society* (2nd ed, New Zealand Centre for Environmental Law, Auckland, 2013) 3.
2   L Mumford *The City in History* (Secker & Warburg, London, 1961).
3   K Bosselmann *When Two Worlds Collide: Society and Ecology* (RSVP Publishing Company, Auckland, 1995) at 51.

law. The concept of property from Roman law is individualistic, egoistic and antisocial and has continued to shape law today.

During the medieval period of the Middle Ages the prevalence of religious doctrines were the main drivers of community action. Underpinning this, from an environmental perspective, is the notion that humans were superior beings to animals. Actions of people were mainly to civilise and direct activities within the world. These actions began to form the dominance of an anthropocentric worldview.[4] This dominance of anthropocentrism built upon the focus during ancient times of the environment being protected only for human interest.

After the medieval period came the Enlightenment, or the "Age of Reason", where original ways of thinking about the world began to be questioned for the first time, and thought developed where humanity could be improved through rational change.[5] The philosophical schools of thought from Descartes (Cartesian thinking)[6] and Immanuel Kant characterise this period of time. Religious doctrines and the law of God began to be questioned.[7] Rather than being born with a known rule of law to be followed, people began to think of themselves as being free.[8] This was in combination with the introduction of the scientific method. It was not enough for people of this time to say "God wills this" any longer. Rather than nature being the unknowable, it began to be explored. People began questioning and seeking knowledge.

Issues of public health began to arise during the Industrial Revolution of the 19th century. The intensification of cities due to increased population led to the spread of disease and the need for better sanitation, to have adequate waste disposal, minimise the occurrence of overcrowding and diminish the effect of pollution. The Alkali Act of 1863 was established as a pollution control agency.[9] It was the first Act of its kind that regulated an environmental aspect for a human health benefit.[10] The idea of public health was extended to the use of nature and natural resources in the 20th century in urban planning. Benefits

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4 Palmer, above n 1.

5 A Grear "The Vulnerable Living Order: Human Rights and the Environment in a Critical and Philosophical Perspective" (2011) 2(1) Journal of Human Rights and the Environment 23.

6 L Alanen "The Second Meditation and the nature of the human mind" in D Cunning (ed) *The Cambridge Companion to Descartes' Meditations* (Cambridge University Press, Cambridge, 2014) 88.

7 A Baier "The Meditations and Descartes' considered conception of God" in D Cunning (ed) *The Cambridge Companion to Descartes' Meditations* (Cambridge University Press, Cambridge, 2014) 299.

8 Baier, above n 7.

9 W Ashworth *The Genesis of Modern British Town Planning: A Study in Economic and Social History of the Nineteenth and Twentieth Centuries* (Routledge & Kegan Paul, London, 1954).

10 Ashworth, above n 9.

of nature-presence in towns were recognised as a benefit to the mental health of inhabitants alongside the physical health of sanitary provisions. During this period zoning controls began to be legislated as industrial factories emitting coal and other toxic fumes began to be recognised as bad for human health. Such zoning controls as a part of environmental regulation are still used today.

The basis of environmental law up to and including the 19th and 20th centuries is primarily underpinned by the concepts of property and anthropo-centrism. Nature has been recognised and human effects on it regulated in so much of it as a function of human use and an effect on human health. The shift to thinking of humans as rational beings during the Enlightenment period is important to note. A lot of how human behaviour is perceived in economic theory and law today is based on the idea that people are rational beings who make decisions in a methodical, process-driven manner. Sometimes this may be the case, but by doing this economic and law discourses in a Western context fail to recognise that humans are emotional beings too that are not wholly driven by rational thought.[11]

The general consensus of environmental law today is that it is hollow, an empty vessel that is not up to the task of preserving the integrity of functioning ecosystems.[12] Laws of the environment are made up of general principles such as sustainable development, and the polluter pays and precautionary principles.

2.2 New Zealand

New Zealand is one of the most scenically beautiful countries in the world. Its terrestrial ecosystems are incredibly unique. Zealandia, the geological space which pre-dated New Zealand, used to be part of a super landmass called Gondwana which included Australia, South America and Antarctica. These continents separated about 82 million years ago,[13] before the evolution of mammals. New Zealand's closest large landmass was Australia 1500 kilometres away which is too far for natural dispersal of most mammals. New Zealand's terrestrial ecosystems have therefore been able to evolve without the presence of mammals which has allowed for radiations of certain species such as moa,

11 Grear, above n 5.
12 B Pardy "In search of the Holy Grail of Environmental Law: A Rule to Solve the Problem" (2005) 1(1) McGill International Journal of Sustainable Development Law and Policy 29.
13 PJJ Kamp "Late Cretaceous-Cenozoic tectonic development of the southwest Pacific region" (1986) 121 Tectonophysics 225; H Campbell and G Hutching *In Search of Ancient New Zealand* (Penguin, Auckland, 2007); SA Trewick, AM Paterson and HJ Campbell "Hello New Zealand" (2007) 34 Journal of Biogeography 1; IJ Graham (ed) *A Continent on the Move: New Zealand Geoscience into the 21st Century* (Geological Society of New Zealand in association with GNS Science, Wellington, 2008) at 388.

rails, skinks, moths, siferian crickets (weta),[14] beetles, earthworms, and trees such as *Hebe*, and *Coprosma*.[15] Palaeobiologists have been debating for a long time over the origins of New Zealand's unique terrestrial ecosystems. A small number of species such as moa, tuatara, frogs, kauri,[16] freshwater mussels and kōura (freshwater crayfish) are considered to be quite divergent from genetic relatives elsewhere and a plausible explanation for being in New Zealand is their having evolved from ancestors that were present at the time of New Zealand's split from Gondwana.[17] The majority of species, however, arrived through long-range dispersal from other continents.[18]

2.2.1 Tangata whenua

Citizens of New Zealand are clearly surrounded by some of the most unique and intense natural beauty on the planet. In combination with this, New Zealand is imbued with te ao Māori. The Māori worldview is underpinned by te reo (language) and tikanga (processes and practices). Regarding the environment it is important to understand the concepts of whakapapa, kaitiakitanga, rāhui and mauri.

Māori see themselves not quite as individuals within the world but as part of a reality where they are connected to an unbounded whole.[19] TMS Evens describes this further: "if the whole is what is basically real, then the ultimate identity of everything that is anything rests in its connection to the whole".[20] Whakapapa is the Māori genealogical concept that embodies this where

14 JC Watt "The terrestrial insects" in G Kushel (ed) *Biogeography and Ecology in New Zealand* (Dr W Junk bv Publishers, The Hague, 1975) 1.

15 RM Emberson "The Beetle (Coleoptera) fauna of the Chatham Islands" (1998) 21 New Zealand Entomologist 25.

16 K Stockler, IL Daniel and PJ Lockhart "The New Zealand Kauri (*Agathis australis* (D.Don) Lindl., Araucariacae) survives Oligocene drowning" (2002) 51(5) Systematic Biology 827.

17 M Knapp, R Mudaliar, D Havell, SJ Wagstaff and PJ Lockhart "The Drowning of New Zealand and the problem of *Agathis*" (2007) 56(5) Systematic Biology 862.

18 Raven 1973; Pole 1994; Winkworth and others 2002b, 2005; Sanmartín & Ronquist 2004; McGlone 2005 in GP Wallis and SA Trewick "New Zealand phylogeography: evolution on a small continent" (2009) 18 Molecular Ecology 3548 <http://evolves.massey.ac.nz/PDFs/Wallis%20&%20Trewick%202009. pdf>.

19 M Roberts, W Norman, N Minhinnick, D Wihongi and C Kirkwood "Kaitiakitanga: Maori Perspectives on Conservation" (1995) 2(1) Pacific Conservation Biology 7; A Salmond "Ontological Quarrels: Indigeneity, Exclusion and Citizenship in a Relational World" (2012) 12(2) Anthropological Theory 115.

20 TMS Evens "Twins are Birds and a Whale is a Fish, a Mammal, a Submarine: Revisiting 'Primitive Mentality' as a Question of Ontology" (2012) 56(3) Social Analysis 1, as quoted in Salmond, above n 19, at 124.

present and future circumstances are understood by referencing the past and all it contains. Whakapapa is embedded within Māori cosmology within which there is one set of antecedents for all entities, human, non-human, living and non-living. These are Ranginui and Papatūānuku. The concept of whakapapa assumes that all things have an origin and that all things have come into their present form through ancestors.[21] A human is therefore an active function of every person that they are related to genealogically and the environment that they live in and everything it contains. This way of seeing and categorising the world highlights how everything is connected to a whole and helps to understand the ideas that underlie kaitiakitanga and rāhui.

The concept of kaitiakitanga is at the intersection of humans, the natural environment and the element of reciprocity and can be loosely interpreted as guardianship and sustainable management between the environment and people as well as managing relationships between people in the past, present and future.[22] In reality humans need to use the environment for their own needs such as to eat and nourish ourselves. Within te ao Māori the use of aspects of the environment to these ends is approached with a reciprocal "gift" which is an understanding for the mauri (the essential quality and vitality) of the being or entity that is being used.

2.2.2 Approaches to environmental management in New Zealand

New Zealand's initial approaches to environmental management post-colonisation in 1840 were largely a reflection of public health laws that were being implemented in England at the time. The Town and Country Planning Act 1926 was the first attempt at combining these bylaws into a combined piece of planning legislation with the intent of regulating environmental resource management. The Labour government that was elected in 1984 had the intention of drastic environmental law reform. The reforms began at the same time that the Brundtland Report (1987) was being drafted which was attempting to centralise the notion of sustainable development into the international legal

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21 M Roberts "Ways of Seeing: Whakapapa" (2013) 10(1) SITES 93.

22 Roberts and others, above n 19; M Kawharu "Kaitiakitanga: A Maori Anthropological Perspective of the Maori Socio-Environmental Ethic of Resource Management" (2000) 109(4) Journal of the Polynesian Society 349; A Turvey "Te Ao Maori in a Sympathetic Legal Regime: The use of Maori Concepts in Legislation" (2009) 40(2) Victoria University of Wellington Law Review 531; Ministry for the Environment and Statistics New Zealand *New Zealand's Environmental Reporting Series: Environment Aotearoa 2015* (Ministry for the Environment and Statistics New Zealand, Wellington, 2015) MfE <https://www.mfe.govt.nz/sites/default/files/media/Environmental%20reporting/Environment-Aotearoa-2015.pdf>.

space.[23] The reforms began with the enactment of the Environment Act 1986 where the Ministry for the Environment was formally constituted. The preamble to the Act declared that:

> in the management of natural and physical resources, full and balanced account is taken of— (i) The intrinsic value of ecosystems; and (ii) All values which are placed by individuals and groups on the quality of the environment; and (iii) The principles of the Treaty of Waitangi; and (iv) The sustainability of natural and physical resources; and (v) The needs of future generations

This was the beginning of a new form of environmentalism in New Zealand and a commitment to sustainable development at a legislative level. The formation of the Ministry for the Environment was complemented by the formation of the Department of Conservation under the Conservation Act 1987. The Act defined the "conservation" objective to mean:

> the preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public, and safeguarding the options of future generations

These Acts combined allowed for the recognition of intergenerational equity of the environment, a fundamental principle for sustainable development and an enduring biological diversity that characterises the uniqueness of New Zealand.[24] They also paved the way for the landmark reform that was the Resource Management Act 1991. The RMA had an overarching purpose of "sustainable management" to guide the regulation of land and water use, air and water pollution, and coastal marine activities.[25]

The ability for the public to participate has been provided for within the RMA framework where people can get involved with the creation of policy statements, coastal plans, regional and district plans, and in the notification of resource consent applications. The Act is said to provide a model for other

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23 D Grinlinton "Integrating Sustainability into Environmental Law and Policy in New Zealand" in K Bosselmann, D Grinlinton and P Taylor (eds) *Environmental Law for a Sustainable Society* (2nd ed, New Zealand Centre for Environmental Law, Auckland, 2013) 21.

24 K Bosselmann and BJ Richardson (eds) *Environmental Justice and Market Mechanisms* (Kluwer Law International, London, 1999) chs 1 to 3; K Bosselmann *The Principle of Sustainability: Transforming Law and Governance* (2nd ed, Routledge, New York, 2017).

25 Resource Management Act 1991 [RMA], s 5.

countries that integrates sustainable development into resource management law in a way that focuses on intergenerational equity, public participation, access to justice and integrated decision-making.

However, despite being immersed in such all-encompassing unique natural environments, having a significant part of the community that has a deep ecological ethic and having innovative legislative frameworks that embed sustainable development into resource management law, New Zealand fails to perform on an international stage with regard to environmental management.[26] The country dropped out of the Kyoto Protocol, it did not meet its emission targets, and it produces more CO_2 emissions per capita than most developed nations.[27] Despite its clean, green, 100 per cent pure image the reality is actually quite the opposite.

Part of this is due to how the RMA is implemented and how aspects of it are defined. Central government has devolved responsibility to local and regional authorities and does not provide adequate national guidance and policy direction.[28] For example, the New Zealand Coastal Policy Statement (NZCPS 2010) with a "purpose … to state policies in order to achieve the purpose of the Act [RMA 1991] to the coastal environment of New Zealand",[29] has been set to guide local authorities in their day-to-day management of the coastal environment. However, a lack of definition has reduced the ability of regional councils to act adequately with regard to natural character for example.

2.2.3 Natural character and the NZCPS 2010

(i) Definition
The concept of natural character began to be addressed in response to concern over rapid coastal development and environmental change.[30] The Town and Country Planning Amendment Act 1973 contains the first mention of natural character in New Zealand environmental law, inserting into the principal 1953 Act, a new s 2B:[31]

26 Organisation for Economic Co-operation and Development *Environmental Performance Reviews: New Zealand 2017* (OECD Publishing, Paris, 2017) OECD <https://read.oecd-ilibrary.org/environment/oecd-environmental-performance-reviews-new-zealand-2017_9789264268203-en#page1>.
27 OECD, above n 26.
28 Grinlinton, above n 23.
29 New Zealand Coastal Policy Statement 2010 [NZCPS 2010], preamble.
30 Minister of Works and Development "Coastal planning and development" (Ministerial statement, Ministry of Works and Development, Wellington, 1974).
31 Town and Country Planning Amendment Act 1973, s 2B(a).

The following matters are declared to be of national importance and shall be recognised and provided for in the preparation, implementation, and administration of regional and district schemes:

(a) The preservation of the natural character of the coastal environment and of the margins of lakes and rivers and the protection of them from unnecessary subdivision and development:

Since then, natural character has been addressed in the Resource Management Act 1991 and in the resulting New Zealand Coastal Policy Statements (NZCPSs) of 1994 and 2010. Throughout these statutes the concept of natural character has not been defined,[32] and planning for natural character has, as a result, evolved in the absence of a clear definition.

The NZCPS 2010, policy 13(2) defined natural character with attributes that "may include … experiential attributes, including the sounds and smell of the sea; and their context and setting".[33] The words "may include" were meant to allow natural character to be defined by users and not wholly by statutes and policy. As a result, scholars and regulatory bodies have sought to define it with common law decisions in New Zealand,[34] but it has since been decided that this is not enough for adequate action. The Natural Character and the NZCPS 2010: National Workshop was held in 2010 and set out to decide on a definition. The definition was based on the physical or natural elements of all coastal environments and adds a footnote:[35]

The effect of different types of modification upon natural character varies with context and may be perceived differently by different parts of the community.

The inclusion of experiential aspects of the environment in the definition of natural character is good and is supported by multiple scholars.[36]

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32 VA Froude, HG Rennie and JF Bornman "The Nature of Natural: Defining Natural Character for the New Zealand Context" (2010) 34(3) New Zealand Journal of Ecology 332; VA Froude "Preserving coastal natural character: Court interpretations of a long-standing New Zealand policy goal" (2015) 71(1) New Zealand Geographer 45; Department of Conservation *Natural Character and the NZCPS 2010: National Workshop — Summary of Discussion and Outcomes* (Department of Conservation, Wellington, 2012) DOC <https://www.doc.govt.nz/Documents/conservation/marine-and-coastal/coastal-management/natural-character-and-the-new-zealand-coastal-policy-statement-2010-national-workshop.pdf>.

33 NZCPS 2010, policy 13(2).

34 Froude (2015), above n 32.

35 Department of Conservation, above n 32.

36 J Rosier "Effectiveness of Planning to Preserve Natural Character in New Zealand's Coastal Landscapes" (2005) 12(4) Australian Journal of Environmental Management 232; B Newton, J Fairweather and S Swaffield "Public Perceptions

(ii) Implementation of natural character

Auckland Council recognises and implements natural character in its regional coastal plan. Levels of natural character in particular areas are mapped and classified. These classifications are areas of "Outstanding Natural Character", "High Natural Character" and "Outstanding Natural Landscapes", and resource use and land development classification is based on these classifications.[37] Auckland has a target of "Ensur[ing] no loss in the area of significant landscape, natural character and natural features" in Strategic Direction 7 of the Auckland Plan.[38] The Auckland regional coastal plan, however, does not appear to address s 14 of the NZCPS 2010 regarding the restoration of natural character.

In comparison, the Bay of Plenty regional coastal plan states guidelines for restoration of natural character and the protection of existing natural character (BOP RCP 2003 — Updated March 2011, Chapter 4.2.5(b) and Chapter 6.2.5(d) respectively). Much like Auckland, Environment Bay of Plenty has carried out assessments of natural character by identifying areas of natural character. Classifications were carried out by Boffa Miskell Limited and published in a 2013 report and included eight areas of "Outstanding Natural Character", 11 areas of "Very High Natural Character" and 26 areas of "High Natural Character".[39]

2.2.4 Reductionist concepts

Reductionist concepts have been developed in New Zealand to objectively classify objects of nature to ensure consistent management across regions. The historical context and thought processes that leads to this will be discussed in more depth in part 4 of this article.

Multiple sections of New Zealand environmental law state that nationally significant rivers must be identified and that notable values of outstanding freshwater need to be identified.[40] The Department of Conservation (DOC) states that objective classification systems like the River Values Assessment

of Natural Character in New Zealand: Wild nature versus cultured nature" (2002) New Zealand Geographer 17.

37 Auckland Council "Auckland Plan 2050" AC <http://theplan.theaucklandplan. govt.nz/aucklands-environment/>.

38 Auckland Council, above n 37.

39 Boffa Miskell Limited *Natural Character Assessment of the Bay of Plenty Coastal Environment* (report prepared by Boffa Miskell Limited for Bay of Plenty Regional Council, March 2013) BOPRC <https://www.boprc.govt.nz/ media/367889/boffa-miskel-final-natural-character-report-t10089_02-part-1-web. pdf>.

40 New Zealand Conservation Authority *Protecting New Zealand's Rivers* (NZCA, Wellington, November 2011); see DOC <https://www.doc.govt.nz/about-us/ statutory-and-advisory-bodies/nz-conservation-authority/publications/protecting-

System (RiVAS) seek "… to provide a standardised method for Regional councils to access the significance of both in-stream and out-of-stream river values … and can be used to generate lists of rivers graded by relative importance for different uses".[41] Several researchers also promote the benefit of a system like RiVAS, especially in a devolved system of power like the RMA, to increase the robustness and consistency of implementation. Values within the RiVAS framework are ranked either high, medium or low (3 to 1 respectively). Use and non-use values within the framework can be:[42]

- angling, salmonoid fishing
- kayaking
- native birdlife
- natural character
- cultural-indigenous people's values
- irrigation and hydro-power

One of the main issues with reductionist concepts like assessing river values, despite being blatantly anthropocentric in focus, is that the frameworks assume that values across space and time are consistent. The RiVAS framework takes a realist approach where values are assumed to be locked in and have stable, law-like attributes.[43] This assumption is not adequate because it does not allow for the richness and diversity of river values and ways of knowing rivers that are present in post-colonial New Zealand.

In an assessment of how the river values were working in practice one study brought up that the "most challenging [value] of all was the tangata whenua value" because "tangata whenua do not like 'ranking and prioritising rivers'".[44] A tangata whenua approach was brought in to assist with this, and it had the same ranking approach as in the RiVAS methodology but included mana whenua (customary authority) values. The same study stated that by providing this tangata whenua approach they were fulfilling obligations under s 6(e)

new-zealands-rivers/07-enhancing-river-protection-nzca-recommendations/establish-a-network-of-protected-rivers/>.

41 See DOC <http://www.doc.govt.nz/about-us/statutory-and-advisory-bodies/nz-conservation-authority/publications/protecting-new-zealands-rivers/06-other-rma-tools-for-river-protection-and-their-efficacy/methods-for-assessing-the-values/>.

42 K Hughey "Development and application of the River Values Assessment System for Ranking New Zealand River Values" (2013) 27 Water Resource Management 2013.

43 M Tadaki and J Sinner "Measure, model, optimise: understanding reductionist concepts of value in freshwater governance" (2014) 51 Geoforum 140.

44 K Hughey and K Booth "Monitoring the state of New Zealand rivers: How the River Values Assessment System can help" (2012) 46(4) Journal of Marine and Freshwater Research 545.

of the RMA 1991 to provide for the "relationship of Maori and their culture and traditions with their ancestral lands, water …" as a matter of national importance.[45] This statement is not accurate because in the development process many iwi, hapū and whānau chose not to rank values and attributes.[46] Tipa recommended that the ranking system not be used in the tangata whenua approach because it is not appropriate and does not accurately reflect te ao Māori. Tipa also stated that, "ultimately, it is the right of manawhenua [sic] to determine every waterway within their takiwa [territory] to be of the highest significance".[47] The approach of the previous scholars to state that Māori do not "like" to rank and prioritise rivers when in reality it is not a way Māori see the world highlights a lack of empathy and understanding for the diverse way of knowing rivers in reductionist scholarship in New Zealand. If the method of defining values and then ranking them is not in alignment with te ao Māori then it cannot be said to be consistent with s 6(e) of the RMA and is merely paying lip-service to it.

In considering the effectiveness of reductionist approaches to ranking rivers in New Zealand it must be considered how these values are defined. The expert panel involved in articulating these values is representative of what a predominantly Western-thinking New Zealand society considers experts. The power these experts hold is real; they decide whose values matter and who gets to have a say. Some scholars consider these value-articulating institutions rather than institutions that represent all values.[48] These institutional arrangements have been established in response to the "institutional void" that the devolution and decentralisation of power under the RMA has created.

2.2.5 Māori language use in New Zealand environmental law: kaitiakitanga

The value-articulating institution can also be seen in the use of the term kaitiakitanga in environmental legislation. Kaitiakitanga is defined in s 2 of the RMA as:[49]

> the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Maori in relation to natural and physical resources; and includes the ethic of stewardship

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45 RMA, s 6(e).
46 G Tipa "Consideration of a significance assessment method for tangata whenua river values" in KFD Hughey and M-A Baker (eds) *The River Values Assessment System: Volume 2: Application to cultural, production and environmental values* (LEaP Research Report No 24B, Lincoln University, December 2010).
47 Tipa, above n 46.
48 Tipa, above n 46.
49 RMA, s 2.

The Māori concept of kaitiakitanga, in comparison, includes the more mystical aspects of te ao Māori. For legislation a more practical, common-sense interpretation in English has been adopted.[50] Scholars state that although the general concept is included of kaitiakitanga, subtleties, context and emphasis have the risk of being lost in this translation and without care in practice can result in limited use of the concept in policy and incorrect interpretation in judgments.[51] In reality it is stated that, on the surface, Māori concepts and customary laws seem to resemble Western concepts but the true meanings that underpin these concepts are significantly different.[52] The inadequacy of the English language to accurately portray Māori concepts has partially been addressed in the use of the phrase "in accordance with tikanga Maori" alongside other legislative decisions including the RMA. On one hand it leads to some ambiguity around the definition but concurrently provides the opportunity for decision-makers to seek guidance from kaumātua (elders) or Māori experts to interpret the terms.[53] Although it has been shown in practice that this is not necessarily the case.[54]

The potential misuse of Māori language and concepts is embedded within the theory of discursive psychology where it is regarded as an inherent form of racism located within prominent discourses and language use in a society.[55] This is regarded by discursive psychologists to be a systemic racism rather than something that is at an individual cognitive level.[56] In the New Zealand context this means that te ao Māori and the Māori people are drawn into an ongoing psychological dynamic with Eurocentric power-holding colonisers who marginalise their worldview and way of life.[57]

JR Commons' theory of artificial selection states that a governing body selectively interprets the language and customs of a culture to suit their own values and interests.[58] By being in power, conscious decisions are made to create better outcomes for the power-holders and as a result the customs of a differing culture within that system are subject to be evolved by the power-

50 Turvey, above n 22.

51 M Mutu and P Rikys *Statutory Resource Management and Indigenous Property Rights: A report prepared for the Ministry for the Environment* (Uniservices, Auckland, 1993).

52 Turvey, above n 22.

53 Turvey, above n 22.

54 Nin Tomas "Key concepts of tikanga Māori (Māori Custom Law) and their use as regulators of human relationships to natural resources in Tai Tokerau, past and present" (PhD Dissertation, University of Auckland, 2006).

55 K Tuffin, A Praat and K Frewin "Analysing a silent discourse: Sovereignty and tino rangatiratanga in Aotearoa" (2004) 22(2) New Zealand Journal of Psychology 100.

56 Tuffin and others, above n 55.

57 Tuffin and others, above n 55.

58 JR Commons *The Legal Foundations of Capitalism* (Macmillan, New York, 1924).

holders. This is discussed in some more depth in part 3 of this article with the introduction and effect of identity theory on human behaviour. At the decision-making level, lawmakers and common law determine what values, beliefs and principles are valid and therefore decide what is incorporated into law and how the subsequent legislation is interpreted.

This, combined with the theory of discursive psychology, shows that because the people in power in New Zealand are predominantly non-Māori, subsequent discourses involving the environment, as shown above regarding reductionist frameworks, are predominantly anthropocentric, Eurocentric and reduce the natural environment into ways where it is seen as useful to humans. Also, because English is the predominant spoken language in New Zealand and it is spoken much more widely than te reo Māori, there are few Māori-speaking people in power. This results in less of a capacity to interpret and accurately and meaningfully incorporate Māori concepts like kaitiakitanga into legislature. This is said to be representative of a sympathetic legal regime where Māori concepts have been incorporated to symbolise a developing reconciliation between sides, increasing rights recognition and promoting Māori cultural identity.[59] Whilst appearing like a positive development, as shown above, concepts are alienated from their true meaning because of fundamental differences in ways of seeing and conceptualising the world.

Moving forward, Anne Salmond states that New Zealand "… must consider how to embed long-term relations of care into [its] institutions" because in their current way they are not enough.[60] All ontologies and ways of seeing the environment must be incorporated into environmental law rather than solely a Eurocentric, Western approach that views nature as sets of resources to be used by humans.[61]

3. PHILOSOPHICAL AND PSYCHOLOGICAL CONCEPTS UNDERLYING WESTERN THOUGHT

It is clear that the issues with the RMA identified in part 2 contribute to the effectiveness, or rather the ineffectiveness, of environmental law in practice.

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59 Roberts and others, above n 19; M Kawharu "Kaitiakitanga: A Maori anthropological perspective of the Maori socio-environmental ethic of resource management" (2000) 109(4) Journal of the Polynesian Society 349; Turvey, above n 22.

60 A Salmond, T Marc and T Gregory "Enacting new freshwater geographies: Te Awaroa and the transformative imagination" (2014) 70(1) New Zealand Geographer 47.

61 EC Hsaio "Whanganui River Agreement — Indigenous Rights and Rights of Nature" (2013) 42(6) Environmental Policy and Law 371.

These issues, though, are understandable when they are thought of as embedded in Western thinking. What, therefore, is Western thinking? How does this influence how people within these systems act? We can understand how people as individuals relate to the world around them, human and non-human, and start to build up to the state, governance and then law as a whole and the roles that these play in how people act within the systems around them. This is because human people as individuals and as individuals acting together make up a collective that affects the environment.

3.1 Some Prevalent Thinkers

There are some prevalent thinkers from the early 17th century and the Enlightenment period that laid the foundations of Western thought that continues today. René Descartes (Renatus Cartesius in Latin) is one of them and has been dubbed the "father of Western philosophy".[62] Descartes' primary thinking was the concept of mind–body dualism, later known as Cartesian dualism. He explored how the mind and the body interact with each other and how they are connected mostly informed by theology and physics.[63] Descartes was also a mathematician and played a large role in the scientific revolution of the Enlightenment period.

Cartesian dualism and its role in Western thinking today is important to explore because even though it is widely assumed in scholarship to be a "non-problem" as its assumptions about the human experience are so far removed from what actually happens,[64] we can see that it still fundamentally underpins Western systems and human daily life.[65] Mind–body dualism is underpinned by the assumption that a human is the union of the mind and the body, which are different substances, where the mind or soul is defined as *thinking* and the body and matter as *unthinking*. Descartes went as far as to say, "Cogito ergo sum", or "I think, therefore I am", quite clearly highlighting the fundamental importance he placed on the mind. He viewed that a human was only so because of their mind and that their body was solely an object external to the mind.

It is important to note the context of Descartes' thinking at the time. It was during this Enlightenment period that God as the rule of law began to be questioned and the ability of people to objectify parts of nature in order to question its existence became a highly valued skill. The freedom from God as the rule of law was not lost on the thinkers of the time, and a fundamental shift

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62 Alanen, above n 6.
63 Alanen, above n 6.
64 W Lovitt in Introduction to Martin Heidegger *The Question Concerning Technology and Other Essays* (Garland Publishing, Inc, New York and London, 1977).
65 T Abrams "Cartesian dualism and disabled phenomenology" (2016) 18(2) Scandinavian Journal of Disability Research 118.

occurred where the debate of knowledge was shifted from "what is true" to "of what can I be certain".[66] The ability or the freedom to objectively look at what you could see, question its mode of being and explore possible answers would have been truly liberating. It is within this context that the scientific method began to develop.[67] Descartes still retained religious belief but one embedded in the belief that God made people free to think for themselves who each grow into a reasoning adult that is a "self-conscious shaper and guarantor" of their own reality.[68] The importance of this shift is that his thinking was centred in the anthropocentric view of the church and made this anthropocentrism further internalised by popularising the role of the mind and externalising everything else further from the human experience.

Developing on Descartes' thinking was Immanuel Kant (1724–1804). Kant continued and extended Cartesian dualism and developed the argument that the mind creates the structure of human experience and that reason is the source of morality. The way that this conceptual thought is important is because it began to lay the foundation for mind–body dualism to make its way into law and governing institutions.

Kant developed a moral agent that has become, some consider, foundational for liberal law and legal theory.[69] For Kant, moral reasoning "can have absolutely nothing to do with either human feeling or the fact that we have bodies".[70] He extends this from the idea that the body and emotion are conceptualised as external to the mind and that they take humans away from the path of pure reason.[71] The liberal legal self, even the one that is considered today, is therefore a disembodied person. Kant approaches this from the perspective of individual freedom and autonomy.[72] This autonomy stems from

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66 Baier, above n 7.

67 C Larmore "The First Meditation" in D Cunning (ed) *The Cambridge Companion to Descartes' Meditations* (Cambridge University Press, Cambridge, 2014) 48.

68 Lovitt, above n 64; D Britton "The modern practice of adult education: a post-modern critique" (1997) 41(3) Australian Journal of Education 310.

69 Grear, above n 5.

70 V Seidler "Embodied Knowledge and virtual space" in J Wood (ed) *The Virtual Embodied* (Routledge, London, 1998) at 25, as cited by Grear, above n 5.

71 J Richardson "A Refrain: Feminist Metaphysics and Law" in J Richardson and R Sandland (eds) *Feminist Perspectives on Law and Theory* (Cavendish, London, 2000) 119 at 128, as cited by Grear, above n 5.

72 P Riley "On Kant as the Most Adequate of the Social Contract Theorists" (1973) 1(4) Political Theory 450. See also Immanuel Kant *The Metaphysical Elements of Justice [Rechtslehre]* (trans J Ladd, Bobbs-Merrill Co, Indianapolis, 1965) at 97, as cited in K Bosselmann and K Jones "Planetary Integrity Project Report: Creating a Safe Operating Space Through Law and Governance" (New Zealand Centre for Environmental Law for the Planetary Integrity Project, 2016) <http://planetaryboundariesinitiative.org/wp-content/uploads/2016/10/PIP-Report-Sept-2016.pdf> at 107.

the early ideals of democracy where people have autonomy through self-rule where all law is such that all rational persons hypothetically consent to it with the state's primary role one akin to a social contract where it acts to carry out the rational will of its people.[73] Kant went so far as to say:[74]

> Everything in nature works according to laws. Rational beings alone have the faculty of acting according to the conception of laws, that is according to principles, i.e. have a will. Since the deduction of actions from principles requires reason, the will is nothing but practical reason … the will is a faculty to choose that only which reason independent of inclination recognises as practically necessary, i.e. good.

As identified in the Planetary Integrity Project Report of 2016, Christoph Horn observes that Kant's thinking is in terms of legal progress within a context where people as individuals do not have protection against the state.[75] Kant was therefore using the context of his learning and situation to envisage a more moral world, one of lasting peace, where the state recognises and fosters the will of the people. At which time these people were considered to be solely rational and at a time where being rational was popularised and glorified.

3.2 Applications of the Rational Mind

The development and prominence of people's ability to be rational and the concept of the rational mind in Western society is defining and would have been an understandably exciting period of thought development to be a part of. Having the ability to question the nature of objects around you, develop a hypothesis and figure out what could be known as certain would have been liberating and would have opened up a world that was ready for discovery. This period of time has become known as the Scientific Revolution that marked the emergence of modern science. This period began with the acknowledgement of science as an autonomous discipline with utilitarian goals.[76] The ability to be rational, utilitarian, unpresumptuous and observant with an open mind resulted in a rapid accumulation of knowledge.[77]

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73 C Horn "Kant's Political Philosophy as a theory of Non-Ideal Normativity" (2016) 107(1) Kant-Studien 89, as cited in Bosselmann and Jones, above n 72, at 108.

74 Immanuel Kant *Foundations of the Metaphysics of Morals* (trans LW Beck, Indianapolis, Bobbs-Merrill Co, Indianapolis, 1959, originally published 1785).

75 Horn, above n 73, at 108.

76 Palmer, above n 1.

77 K Bennett "The Scientific Revolution and its Repercussions on the Translation of Technical Discourse" (2011) 17(2) The Translator 189.

The ability to be rational has its benefits. However, the core problem of this metaphysical divide that being rational stems from is the fundamental split between the thinking mind and the object of the unthinking "nature". This split has internalised the mind and externalised the body and objects outside of the body including nature.[78] The foundation for civilised Western society is one in which the body, emotion and nature are governed by mind, reason and culture.[79] It is easy to see how we as members within a society have got to a point where we see nature solely as an object that is able to be exploited and consumed, used and turned into profit.

3.2.1 How can psychological concepts help us understand how this affects individuals?

The ability to be rational is undeniably useful and of value in helping us understand scientific forms of knowledge. However, it is only part of the human experience. Whether we are able to see it or not, our bodies are fundamentally inseparable from our minds — neurologically we have no mind without our body and our ability to think and be rational is solely dependent on having a body, a body which is infinitely intertwined with the world around us. Think of the effect low blood sugar levels have on our ability to concentrate, the effect of the nights closing in during winter on our desires to be active and often our mood, and what about the effect of getting together with friends or family over a shared dinner? We are deeply intertwined with the environment around us in a physical, visual and social way.

Scholars think about this in terms of embodiment. People experience life through emotions and within environments showing that personal experiences, emotions and the physical environment are mutually constitutive.[80] Human geography argues that "emotion tints all experience" and experience is the way "through which a person knows and constructs reality".[81] Emotions have been shown to influence our perceptions of daily life and enable people to give meaning to the world in which they live.[82]

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78 Alanen, above n 6.

79 Alanen, above n 6.

80 K Ryan "Incorporating emotional geography into climate change research: A case study in Londonderry, Vermont, USA" (2016) 19 Emotion, Space and Society 5.

81 YF Tuan *Space, Place: The Perspective of Experience* (University of Minnesota Press, Minneapolis, 1977) at 8.

82 J Harding and ED Pribram (eds) *Emotions: A Cultural Studies Reader* (Routledge, London, 2009).

3.2.2 How do individuals really value and see the world?

What are values? Values can be described as ways that matter. A psychological study published in 2017 sought to find what people considered to be of value. The study asked participants to list:

- Three "infinite values" which were defined as something the participants considered to be "Sacred, precious, special. Of value for its own sake. That which makes the world truly alive. In any dimension, an emotion, relation-ship, part of the natural world, a quality or an object."
- Three "finite values" defined as "of value because of what it signifies or enables. Of value because a group of people deem it so. In any dimension, an emotion, relationship, part of the natural world, a quality or an object."

The study was conducted with 1085 participants and responses were constructed into size-based keywords to present the information in a visual way; the larger the word, the more respondents had stated it as a value. The results are shown in Figure 1 below.

Figure 1: Infinite value word cloud from Harré and others (2017).[83]

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83 N Harré, H Madden, R Brooks and J Goodman "Sharing Values as a Foundation for Collective Hope" (2017) 5(2) Journal of Social and Political Psychology 342 at 353.

The study found that the most common infinite values most people held were values concerning human connections. Common values also shared were regarding human expression such as: emotions, creativity and learning, and personal qualities including: openness, self-acceptance and honesty. Psychological research concerning self-determination theory attributes the categories found in this study as ones that are associated with human well-being such as personal growth, self-acceptance, community feeling, relationships, helpfulness.[84]

Figure 2: Finite value word cloud from Harré and others (2017).[85]

Within the finite values section of the study the single most used word was "money" with themes of commonly discussed extrinsic values in psychological research of financial success, status and image.[86]

A second study, presented in the same article, involved 121 participants that completed the same value-determining exercise as in the study discussed

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84 FM Grouzet, T Kasser, A Ahuvia and others "The structure of goal contents across 15 cultures" (2005) 89(5) Journal of Personality and Social Psychology 800; T Kasser and RM Ryan "Further examining the American dream: Differential correlates of intrinsic and extrinsic goals" (1996) 22(3) Personality and Social Psychology Bulletin 280.

85 Harré and others, above n 83, at 354.

86 At 354.

above.[87] After completing their infinite values, they were shown the infinite word clouds generated from the first study. Researchers told the participants that the clouds "represented the values contributed by over 900 people", and they were given a piece of paper to write down their "… thoughts, feelings, responses, inclinations or anything else that [came] to [them] when they [saw] the word cloud" and were asked not to speak to anyone whilst completing the exercise and were then asked to hand their papers in. The general feelings of the participants from the study were classified as below:

- A sense of belonging to a human community with shared values.
- Feeling safe and reassured as if others could be trusted.
- Being uplifted and filled with hope.
- The centrality of love.
- General comments on "positivity" and "happiness".
- Critique: where the current social situation does not reflect the values on the word clouds.
- A sense of failure at not measuring up to the challenge of these values.

The critique remains that if we are fundamentally embodied people that experience the world through emotions that have these deep, felt values of human connection and a love for nature, then why do we act in the way that we do?

3.3 Social Applications of Values

A quick observation of the word clouds can show that the systems we operate in do not represent our true values. In Western society we live within systems that attribute a greater value to extrinsic factors. We are taught in early life to succeed academically, we work within businesses that attribute success to increasing profit margins, we are surrounded in the media by people that are glorified for their social status, and also conditioned to think that we are only of value, or are considered of more value, when we purchase certain products. It has been demonstrated in values research that when we experience a value within either the intrinsic or extrinsic value cluster it has the potential to trigger other values within that cluster.[88] Extrinsic values research has repeatedly shown that a focus on values such as wealth, possessions, image and status leads to a

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87 At 356.
88 N Weinstein, AK Przybylski and RM Ryan "Can nature make us more caring? Effects of immersion in nature on intrinsic aspirations and generosity" (2009) 35(10) Personality and Social Psychology Bulletin 1315.

higher consumption of goods, reduces our ability to empathise and alienates us from others, and fundamentally leads to a lower level of well-being.[89]

In combination with this, further values research has shown that when people act within systems that do not represent their values, they feel socially isolated. By feeling socially isolated by the systems surrounding us it has been shown that people are less empathetic and are less likely to contribute to the group setting.[90] Studies have also shown that this has manifested in low voter turnout in the United Kingdom. How people act and feel within a system has an effect on democracy.[91]

3.4 Psychological Theory

Psychological theory surrounding behaviours can help us understand why we may live with the best intentions but struggle to follow through with these. Beginning with the formation of identity, the article will discuss what the role of who we are and where we belong plays in this; then the neurological concepts behind modelling and copying.

3.4.1 Identity theory

The psychological concept of identity tells us that the role of who we are and where we belong plays a large part in how we process information. Identity can be "passive" where we do not have to do a lot to keep it — for example, nationality and gender — or it can be "active" where it is largely shaped by what we do and who we are involved with. For example, I identify myself as a scuba diver because I like to go diving and am active in the diving community. Identities are social too: they make sense because of the other people involved and are registered as an identity not just because you do it yourself but because it is something that is valued by others as well. The social nature of identities contributes to a sense of belonging which is said to be one of the top psychological motivators or needs of people. The health of our identities is deeply connected to our perception of self-worth. An unhealthy sense of identity has impacts on our psychological health. People generally have a network of related identities that work together and support some identities but not others.

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89 T Kasser "Materialistic Values and Goals" (2016) 67 Annual Review of Psychology 489.
90 J Twenge "Social exclusion decreases prosocial behaviour" (2007) 92(1) Journal of Personality and Social Psychology 56.
91 D Cremer and J Stouten "When do people find cooperation most justified?" (2003) 16(1) Social Justice Research 41; U Fischbacher, S Gächter and E Fehr "Are people conditionally cooperative? Evidence from a public goods experiment" (2001) 71(3) Economics Letters 397.

In that sense identities are not just who we are but they are also who we are not. Once identities are in place within a person, they become a way to see the world. They are how we perceive and communicate information.[92]

It is therefore worth considering that rationalism, dualism, individualism and anthropocentrism constitute a Westerner's identity, because environmental law in New Zealand has largely been created by Pākehā. People who have identities that determine how they act create laws. Therefore, these aspects have been embedded into environmental law in New Zealand.

3.4.2 Modelling

Modelling is the process whereby humans watch or hear another carry out a behaviour and then perform it themselves. Modelling is more than a behavioural choice as in some ways it can be unavoidable. The unavoidability of copying another's behaviour derives from the neurological pathways that structure our brain. Neurons are specialised cells in our brain that act as messengers of thought, emotions and signals for movement. These neurons use chemical and electrical signalling to pass communications to the rest of our body. A special group of neurons termed mirror neurons were found in the early 1990s in macaques.[93] The researchers found that some of the same group of neurons fired when the animal was watching a behaviour as when it was performing the behaviour. This has also been found to be the case in humans.[94]

How does this manifest itself in people? Researchers have since found that the majority of mirror neurons that fire (two-thirds of them) are in relation to the goal of the action rather than the action itself.[95] This suggests that we are acutely attuned to the actions being performed by others but even more so to the goal of these actions. This has been said by evolutionary psychologists to have been a reproductive advantage. By being able to make quick decisions by reproducing successful behaviours performed by others around us, humans (and lots of other animals) have been able to survive long enough to reproduce and pass on our genetic material.

92 N Harré *Psychology for a Better World* (Auckland University Press, Auckland, 2018).
93 M Iacoboni "Neural Mechanisms of Imitation" (2005) 15(6) Current Opinion in Neurobiology 632.
94 Iacoboni, above n 93.
95 Iacoboni, above n 93.

Modelling and copying of behaviours also have underlying social aspects.[96] As said above, people have a need to belong. Copying the social norms demonstrated by those around us has an appeal that is hard to resist. It is important to note how "normal" can be perceived. For example, a media story telling people that carbon emissions from so many cars is causing climate change sends the message that driving cars is a social norm and therefore is reinforcing the likelihood for this behaviour to continue in people. Modelling behaviour enables a person to choose certain behaviour options over others. The drivers behind modelling can be to find the best way to complete a new task or to fit in with the norms that the person is surrounded by.

The above psychological theories show that in combination with performing behaviours that are exemplified by the people and societies around us through modelling, Westerners fundamentally identify with dualistic concepts that have become a part of our enacted identities since the 17th century and the beginning of the Enlightenment. What happens when we combine this rhetoric with common climate change media rhetoric?

We all know in Western society that we are consuming too much, that the way we are living is using more resources and that we are destroying the environment. How, though, are we meant to act when we are acting in ways that form part of our identity, that are modelled by the people and systems around us? Lawyers are calling for their Kantian rational liberal-legal person to be more responsible for their actions. They are calling for human rights that are already primarily disembodied to contain a charter of human responsibilities. There is only so much that we, as individuals, can be responsible for in this situation within the systems that we currently live in.

3.5 How can we Manifest Change?

Above it was mentioned that values within either the extrinsic or intrinsic value clusters can trigger other values within that cluster. If extrinsic values trigger ecologically destructive behaviours and a lower sense of well-being, then it makes sense to mitigate these values occurring in combination with fostering and protecting the ability for people to express and experience values within the intrinsic cluster so that they can lead better, more satisfying lives with less.

Other than solely morally, why does the well-being of people matter? Kate Raworth's doughnut economic model (Figure 3) shows an economic model where a safe and just space for humanity resides in a space where basic human needs are met without pushing past planetary boundaries for the environment.

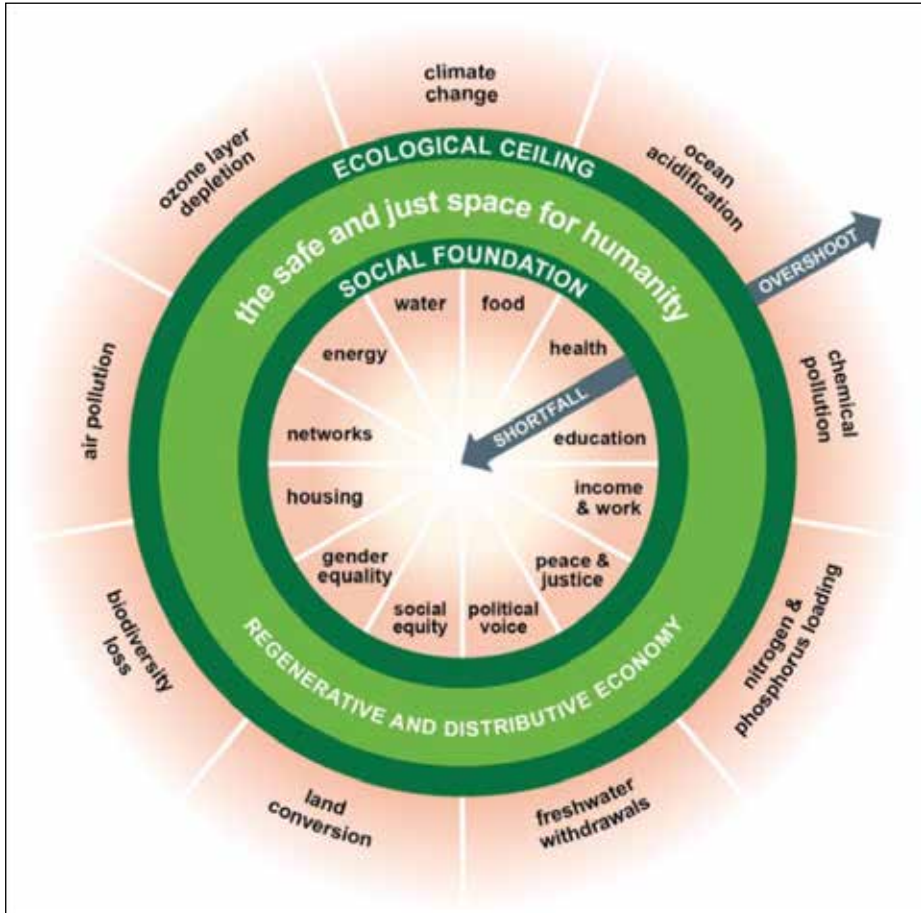
96 Iacoboni, above n 93.

Figure 3: The doughnut of social and planetary boundaries from Raworth (2017).[97]

Research by O'Neill and others uses this economic model to demonstrate that no country, including New Zealand, meets the majority of human needs without surpassing planetary boundaries. They state that the problem is with the attainment of qualitative goals such as high life satisfaction which would require a level of resource use that is two to six times the sustainable levels of what the Earth can provide.[98]

97 K Raworth *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist* (Random House Business, UK, 2017).

98 DW O'Neill, AL Fanning, WF Lamb and JK Steinberger "A good life for all within planetary boundaries" (2018) 1(2) Nature Sustainability 88.

4. ACKNOWLEDGEMENT OF CONNECTIVITY AND TRUE WELL-BEING AS DRIVERS FOR CHANGE

Whether we chose to see it or not, we are a function of everything around us. It is undeniable that nutrients within the mandarin we had on our muesli for breakfast are being broken down and re-formed into the cell structures and energy that allow our body to function and read these words. It is undeniable that the origin of these nutrients from the mandarin is a function of where the mandarin was grown. How was the flower pollinated to form the fruit that distributes the seeds to allow the plant to reproduce? Did the plant the mandarin grow on get its nutrients drawn up from the soil and its oxygen to respire from the land and atmosphere of California? What are the effects on the surrounding land of the orchard that grows the mandarins? Do the people who manage the orchard have the capacity to think about the effects that they are having on the environment?

A single mandarin is a complex social representation of where we chose to shop on that particular day. Is it a part of our habits and identity to think to look at where our nutrients come from? If we do normally care where our mandarins come from did the shop allow us to know or was it on special and placed at the front of the shop with no discernible labelling except for a bright yellow sign to draw us to it? If we normally take the time to think about where our mandarins are grown did we eat enough that day or did our social interactions we experienced that day allow us the ability to concentrate when we entered the supermarket? How did we package this mandarin to take it home? Did we perform a behaviour that is a social norm to package the mandarin in a particular way to take it home? How did we choose to dispose of the mandarin skin before we put it on our breakfast? What are the social norms surrounding this in our place of home and also the regulatory structures and requirements surrounding waste?

The complexities of one single mandarin is quite mind-boggling and the interrogation above is just scraping the surface. What about every single other product or decision we make and also what about the effects that our visible decisions and actions have on the actions of others around us? Whether we choose to see it or not, we are an inextricable function of everything around us: physical, regulatory and behaviourally on a continuum of time not just in a snapshot of the present moment.

4.1 Martin Heidegger

The thoughts and philosophy of German philosopher Martin Heidegger provide a different opportunity to see the world. Heidegger has been widely acknowledged as one of the most original and important philosophers of the

20th century.[99] He viewed the world through an ontological approach that we, as humans, are thrown into a way of living and being where we forget to notice that we are actually beings, we forget that we are alive. We are surrounded by jobs and daily routines that make us so egoistic and focused that we forget we are connected with all other beings and entities around us. Heidegger has said that mind–body dualism is a philosophical non-problem because it has such a bad sketch of human existence at its basis. He was opposed to the absolute prevalence of the rational dualistic mind and said that because of it "… we miss a whole lot of what it means to be a human being … beauty, love, anxiety; we find none of these in subjectivity. Just a cold, lifeless rational animal delivered to objective explanation of subjective human processes …"[100] Heidegger said that there is a fundamental unity of being that we miss because we live such narrow lives and are so disconnected from the people around us.

4.2 Māori Health Models

As discussed in part 2 of this article, Māori conceptualisation of the world is of one in which a human is deeply interconnected with their environment and the people around them, past and present. A health model for an individual called Te Whare Tapa Whā from Hauora Māori recognises the interconnected and inseparable nature between the below aspects/pillars in an individual:

1. Taha tinana (physical health).
2. Taha wairua (spiritual health — health or life force of an individual as part of the wider web of life of environment and people).
3. Taha whānau (their capacity to belong to and be part of a wider social group, past, present and future).
4. Taha hinengaro (mental health — positive thoughts, feelings and emotions).

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 99 Lovitt, above n 64.
100 Lovitt, above n 64.

Figure 4: Te Whare Tapa Whā model developed by Durie (1994).[101]

The absence or damage of one pillar of the whare causes instability of the whole house and signifies illness.[102] This understanding of human health identifies the seen (biomedical) and unseen contributors to health. It recognises that everything is connected and it is important to see these connections to establish the health of the collective and environmental entities on the individual.[103]

If systems were regulated to not infringe on but to recognise and foster the growth of a person's pillars of health as a fundamental human right, what kind of world could we live in?

4.3 Ecuador Constitution 2008: The Rights of a Good Way of Living — Buen Vivir or Sumak Kawsay

The Ecuador Constitution is well known for constitutionalising the legal rights of nature. It goes a step further than this and constitutes the rights to a good way of living for its people embedded in the understanding that nature, community and individuals are interconnected. Known as "sumak

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101 Mason Durie *Whaiora: Māori Health Development* (Oxford University Press, Oxford, 1994).
102 T Rochford "Whare Tapa Whā: A Māori model of a unified theory of health" (2004) 25(1) Journal of Primary Prevention 41.
103 Rochford, above n 102.

kawsay" in Quechua, "Buen Vivir" in Spanish and "living well" in English, it recognises that community life enables individuals to develop their abilities and enrich their knowledge without endangering human health or the health of the environment.[104] Environmental protection is based on reciprocity between nature, the community and the community's individuals. Active community participation in community organisations or spaces and local institutions is said to be essential in order to achieve Buen Vivir or to live well.[105]

The Constitution's preamble begins:

> We women and men, the sovereign people of Ecuador RECOGNISING our age-old roots, wrought by women and men from various peoples, CELEBRATING nature, the Pacha Mama (Mother Earth), of which we are a part and which is vital to our existence …

Title II: Rights, Chapter two: Rights of the good way of living, has eight sections that highlight the basic rights of being able to live well:

1. Water and food.
2. Healthy environment.
3. Information and communication.
4. Culture and science.
5. Education.
6. Habitat and housing.
7. Health.
8. Labour and social security.

The Constitution recognises that these rights are perceived differently by the many different groups of people that live in Ecuador, including those who live in voluntary isolation from civilisation.

Title VII: The Good Way of Living System has two chapters:

1. Inclusion and equity.
2. Biodiversity and natural resources.

Components of these two chapters highlight the view of living well as an integration and the interdependence of society and its natural environment. It is said that rather than a continuous progress towards welfare that in the Western worldview refers to an indefinite future, Buen Vivir is a way of living in the

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104 J Guardiola and F García-Quero "Buen Vivir (Living well) in Ecuador: Community and environmental satisfaction without household material prosperity?" (2014) 107 Ecological Economics 177.
105 Guardiola and García-Quero, above n 104.

present in harmony with humans of diverse ways of knowing and in harmony with other beings and non-living entities: the concept of "unity in diversity".[106]

In Ecuador, descriptive statistics studies have demonstrated that in some parts of Ecuador's society people have quite a high level of life satisfaction despite living in what might be considered to be disadvantaged circumstances. The study attributes this partly to the ethos of Buen Vivir and suggests that what looks like poverty to the industrialised world may not be regarded as poverty by the people involved. The study cautions that this is not representative of the whole of Ecuador and can only be representative of the societies studied in the research.[107]

As discussed in part 3 of this article, intrinsic values actively interfere with extrinsic values and activating one intrinsic value is able to trigger other values in the cluster. Buen Vivir appears to represent this process in practice where nature is being understood and constitutionally recognised as having value because of what it is rather than solely its use for people. It adds to this intrinsic values cluster by promoting the concept of community inclusion which, as has been discussed, increases empathy and pro-social behaviour and fulfils people's basic psychological need to belong.[108] Buen Vivir in the 2008 Constitution of Ecuador represents an opportunity to move forward socially in a way where intrinsic values are actively fostered in a manner that is conducive to ecologically conscious behaviours.

4.4 A Proposal for Change

The environment is not restricted to the social construct of regions, countries and territorial borders. For example; the river Nile flows through nine countries and is the main water source for both Egypt and the Sudan;[109] climate change is an issue that is caused by the behaviours and actions of people in certain countries and whose effects are being felt most by people in others; and currents transport debris across oceans. The social construct of a sovereign state is not currently equipped solely to deal with these kinds of problems.[110] The concept of the sovereign state was brought about by the 1648 Treaty of Westphalia with the intention to put an end to the European wars of religion. Inter-state aggression

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106 J Vanhulst and AE Beling "Buen Vivir: Emergent Discourse within or beyond Sustainable Development?" (2014) 101 Ecological Economics 54.

107 Vanhulst and Beling, above n 106.

108 Iacoboni, above n 93.

109 NN Mohamed "Nile River Biography and its Journey from Origin to End" in AM Negm (ed) *The Nile River* (Handbook of Environmental Chemistry, vol 56, Springer, Cham, 2016).

110 K Bosselmann "The State as Environmental Trustee" in K Bosselmann *The Principle of Sustainability: Transforming Law and Governance* (2nd ed, Routledge, New York, 2017).

was kept in check by a balance of power and the norm was established against interference in another state's affairs.[111] This norm is important to consider as it is easy to see that when it comes to regarding the environment, global problems transgress sovereign territorial boundaries and it would not be fair on the other countries implicated in issues by a country that is acting within its own interests to the detriment of others.

Bosselmann suggests a transformation of sovereign powers with regard to the environment where states act on a dual level of a right to use "territorial" natural resources and an obligation to protect the environment. The idea that states act as trustees or guardians underlies both approaches — the sustainability governance approach and the governance approach restricted to state sovereignty.[112]

As described above, humans are completely indivisible from nature — as individuals and as a collective we are completely indivisible from the environment. Nature is not just an object that can be questioned and seen around us but the nutrients it provides physically make up our bodies. Our social systems and psychological make-up in turn have an impact on how we act within the infinitely complex system. In every single behaviour we perform in our day we act on certain parts of our ecosystem. The environment is us and we are the environment.

The environment in this sense belongs to no person or group of persons. It belongs to itself and the ability for it to function adequately is of paramount importance because without it everything that is everything is nothing. It could be argued that, because of this, ecological sustainability needs to view humans and nature as one system. The conditions that allow humans to flourish in an ecologically conscious way must be met to allow the global environmental ecosystem to flourish.

Bosselmann calls for an ecological sustainability where states are bound by a universal principle. He calls for state sovereignties that act as trustees and guardians of the environment.[113] By being guardians in this sense and considering the paragraph above, the state also acts as guardians of its people and allows them to flourish.

As discussed in part 3 of the article, the ability for humans to flourish in an ecological way involves activating the intrinsic value cluster, being led by example by a system that works within these values so we do not actively work against it, and having models and systems around us that model these behaviours and not extrinsic ones that actively interfere with our ability to be good citizens. This is much the same way that the concept of Buen Vivir acts

111 Bosselmann, above n 110.
112 Bosselmann, above n 110.
113 Bosselmann, above n 110.

within the Ecuador Constitution. Te Whare Tapa Whā offers a way to think of a person and what contributes to a healthy person in a way that recognises the detrimental effect of people who have the inability (for some reason or another) to connect with others, te taha whānau. Using this as a metaphor for the health of a person, our community, the state has the opportunity to be a true trustee to its people to set them up to be well, healthy and sound ecological citizens and in turn be a trustee for the environment.

5. CONCLUSION

Despite having pristine wilderness, environmental laws constructed with sustainable development in mind and a part of the community that conceptualises the world with a deep ecological ethic, New Zealand performs poorly on the international environmental stage. The OECD states that New Zealand, whose growth model is largely based on exploiting natural resources, has increased carbon emissions by 23 per cent since 1990, with 49 per cent of these being from agriculture. An analysis of three concepts within the RMA: kaitiakitanga, natural character and the river values assessment system, shows a tendency towards anthropocentric approaches that are reductionist and present a very Western way of thinking about the environment. To help answer why this approach is not able to effectively manage the environmental origins of Western thinking, dualism and rationalism were explored in depth as well as the psychological concepts of identity theory, values theory and modelling of behaviour. This article concludes that current Western thought and approaches to nature and the environment are not effective at managing it at its core because the Western person is fundamentally disembodied from nature and sees it as an object external to the human experience. Psychological values theory can be utilised in practice to allow people the space and ability to interrupt extrinsic factors such as monetary growth, power and success and replace this cycle of thought and behaviour with intrinsic motivations that lead to much less ecologically destructive behaviours. As a result of these factors, a suggestion has been put forward that sovereign states should act as environmental trustees and guardians in a definition of the environment that humans are deeply embedded in rather than separate from. Therefore, the state is a guardian of its people insofar as providing the conditions where the people under its care have the capacity to act in ecologically conscious ways with the health and well-being of its people being determined by a framework similar to Te Whare Tapa Whā model in Hauora Māori and in much the same way that the concept of Buen Vivir is used in the Constitution of Ecuador.