FRESH PERSPECTIVE ON FRESHWATER

NICK STRINGER

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TABLE OF CONTENTS

Introduction	3
Chapter One: Historical Perspective	7
 Three Histories Legitimising History The Present 	7 10 12
Chapter Two: Personal Perspective	16
 On Worldviews Worldview Demonstrated – A Mihi of Sorts Private Property? 	16 18 21
Chapter Three: Collective Perspective	27
2. The Heart of the North Island	28 29 31
Chapter Four: Global Perspective	
1. The Global Village	37
Chapter Five: Cosmological Perspective	42
1. The Overview Effect	42
Conclusion	

Bib	liogra	phy
DIU	10514	pny

INTRODUCTION

Looking at 'freshwater' from the eighth floor of the Richardson Building, the Leith flows gracefully from green Otago hills down through campus and into the harbour. On the ground, the Leith appears different, browner. From a distance it had seemed fresh, but standing on its concrete embankments the evidence of our relationship with the Leith is clear in the water. Bits of rubbish, broken glass, other human detritus tossed carelessly into the flowing water to be cleared out to sea. Is the Leith still freshwater? I would not drink it.

But is drinkability the measure of 'fresh' water? The matter is being debated personally and politically. The government is currently in the process of freshwater reform.¹ In the political arena, freshwater becomes muddied by competing worldviews, values and ambitions. For the National government freshwater is 'wadeable'; for the Green party freshwater is 'swimmable'; for the Maori party freshwater is 'drinkable'.² This political debate will rattle on, at least until next year's election. Politics is just one outlet for what is really an expression of an individual's worldview: What is the value of freshwater? What is its use? My answer will be different to yours because our relationship to freshwater is different. Different home waters, different watery experiences, different life ambitions. Politics homogenises this diversity of perspective.

My focus is not our political relationship with freshwater, but our legal one. It is the law that governs (mostly) and defines (somewhat) our personal, regional, and national relationship with freshwater. But water is a unique substance. Fluid, slippery, evasive. The law is a net through which water (pure or polluted) flows. Increasingly, the law is being called upon to act as a filter that preserves and sustains freshwater. But is the written law able to grasp fluid water?

¹ Ministry for the Environment "Next steps for fresh water: Consultation document" (February 2016) ME 1233; Ministry for the Environment "Freshwater reform 2013 and beyond" (March 2013) ME 1109.

² Maja Burry "Swimmable Lakes Would Require a Bird Cull – Smith" *Radio New Zealand* (online ed, Wellington, 31 August 2016); Robin Martin "Stream water should be drinkable – Fox" *Radio New Zealand* (online ed, Wellington, 4 July 2016); The Green Party "Rivers We Can Swim In" (policy statement, 6 October 2016).

With the exception of air, no other substance on this planet so deeply and existentially affects humans. We can survive only a few minutes without a breath of fresh air, only a few days without a drink of fresh water. Yet we heedlessly take freshwater for granted – leave the tap running, flush the toilet,³ have a nice long shower, do the laundry, wash our rubbish out to sea. We tend to view water as a utility, not existentially. This is the perspective of a developed nation in the twenty-first century, viewing resources through the lens of (neo)liberal, global, free-market economics. When applied to freshwater, this perspective is narrow, temporal, anthropocentric and obstinate. Today we have both the ability and necessity to look beyond this stuck viewpoint:⁴

Historically we can say that average human beings throughout pre-twentieth-century history had each seen only about one-millionth of the surface of their spherical earth. This limited viewpoint gave humans a locally-focussed, specialized viewpoint.

We have evolved, globalised, and are now offered a range of perspectives to view earth and our fundamental resource of life. The inherent nature of freshwater necessitates a broader ecological perspective, and a broader geological timescale. But the common law is based upon precedent and tradition, and therefore tends to be a bit slow to incorporate humanity's evolving perspective. I aim to experiment with this.

What does our legal relationship with freshwater look like once the perspective is broadened from I to us, from now to ages, from anthropocentric to ecological? Perspective is a crucial tool in art and literature, so too in law. But we forget this in our focus on authority. Legal positivism's dominance has pushed these sorts of consideration to the fringes, the 'outside'. But in its flow the river has no static perspective. As our lives unfold so too does our perspective. Let us not forget this in the safe ease of legitimising our legal institutions. Else we become stuck in an eddy

³ "One flush of a Western toilet uses as much water as the average person in the developing world uses for a whole day's washing, drinking, cleaning and cooking": United Nations "International Year of Freshwater 2003 – Brochure" (December, 2002) http://www.un.org/events/water/brochure.htm.

⁴ R Buckminster Fuller *Operating Manual for Spaceship Earth* (Lars Muller Publishers, Baden, 2008) at 33.

and cannot continue to explore the river's perspective. The myth of Narcissus warns of the danger of stagnant perspective.⁵

My aim is to use legal and literary techniques to broaden our perspective on freshwater. A flowing narrative on freshwater, and a dissertation evaluating our legal relationship. Stagnant perspective isolates, fluid perspective harmonises. From the law library we have an insulated and abstracted perspective on freshwater. From the riverbank we have a personal and emotional perspective. Diving beneath the surface offers a sensory and existential perspective. From atop a dam we have a utilitarian perspective. From atop a mountain we have a holistic and metaphysical perspective. Each perspective offers insight into freshwater, falling from sky to peaks, carving down hills to the farms and towns and people, meandering out to sea to one day return to the sky.

The following dissertation briefly explores a series of perspectives, each inspired by a different aspect of the water cycle. I begin with a historical perspective, tracing the evolution of freshwater and expanding our perspective beyond our temporal anthropocentric understanding of freshwater. From this historical foundation I then focus on our present perspectives: personal, collective, global and cosmological.

I do not aim to say everything about our legal relationship with freshwater. But I do aim for as broad a perspective as possible, so the specific legal viewpoints can be seen in the vast context of freshwater. As such, this dissertation is primarily jurisprudential, in the way Dias conceives of it as "thoughts about law, its nature, function and functioning, on the *broadest possible basis*, and about its adaptation, improvement and reform".⁶ Therefore, according to Dias and Hughes, "the task of the student…is only to make a panoramic survey of the field".⁷ As freshwater flows from sky to sea and back again, it is a subject matter very well suited to a fluid, panoramic perspective. It is an unorthodox approach to a dissertation, but a necessary one to enable our perspective to match the scope of freshwater. From here I seek a harmony

⁵ Ovid *Metamorphoses I–IV*, edited with translation and notes by D.E. Hill. (Wiltshire, Aris & Phillips Ltd, 1985).

⁶ RWM Dias *Jurisprudence* (5th ed, Butterworths, London, 1985) at 4. My own italics. Or as Julius Stone has written, jurisprudence is "the lawyer's extraversion…examination of the precepts, ideals, and techniques of the law in the light derived from present knowledge in disciplines other than the law".

⁷ RWM Dias and GBJ Hughes *Jurisprudence* (Butterworth & Co, London, 1957) at 5.

and synthesis across the range of perspectives, a current across them all. A braided river flowing to a lake. So to begin, let us travel back along the river of time.

CHAPTER ONE: HISTORICAL PERSPECTIVE

How long has freshwater existed? Far longer than us and our stories – oral and written; mythological, cosmological and theological. Far longer than our science, and the geographic forms we know. Water is near eternal, but our histories and stories and theories are not. An ecological perspective reminds us of this.

Prehistory requires a bit of imagination. What did 'Dunedin' look like before human settlement? What were the rivers and lakes and deltas like on Gondwana before the continents drifted apart? What was the form of Aotearoa's earliest freshwater? When the Southern Alps first rose from the ocean in a great tectonic upheave; when four sons of Raki voyaged from Hawaiiki on Te Waka o Aoraki and ran aground a hidden reef, their waka listing, the waka becoming earth and the brothers great stone peaks.⁸ Even history has perspectives, let us weave them together.⁹

Three Histories

About four and a half billion years ago, the earth was forming from gas and colliding cosmic dust. Approximately five hundred years later, the earth's molten surface had cooled to a rocky crust and volcanic gases had formed an atmosphere that was

I listen

⁹ Whakarongo rā Whakarongo ake au Ki te tangi a te manu E rere runga rawa e Tui, tui, tui, tuia Tuia i runga Tuia i raro Tuia i roto Tuia i vaho Tui, tui, tuia Kia rongo te ao Kia rongo te po Tui, tui, tuia

I listen, where up high A bird flies Its cry rings out Sew, stitch, bind it together From above From below From within From outside Sew and bind it together During the day And the night Sew, stitch, bind it together

⁸ Ngai Tahu Claims Settlement Act 1998, Schedule 14.

capable of condensing water vapour that then fell as rain and created the oceans.¹⁰ That is the current geological explanation. But astronomers argue that Earth was still far too hot, and that water arrived as ice frozen on to asteroids and comets that crashed into Earth from the cooler regions of space. This is the prevailing hypothesis. But recent geochemical testing suggests this cannot be the sole source of water on earth.¹¹ No hypothesis is conclusive, so we imagine and theorise. The earth is far older than us, and from this geological, ecological perspective we are a very young but very intelligent product of the earth. Born of water.

Over the next billions of years, the earth's water is "the great original home of all living things".¹² Two hundred thousand years ago that fluid evolution resulted in *Homo sapiens*. In the last ten thousand years, we have evolved as a species from food gatherers to agriculturalists. In the last five hundred years our agrarian species has intensified in some regions to form industrial societies. Divorcing ourselves from our ecological family with increasing intellect and vanity and stories that held us superior to the natural world. We imagined this is the way it must have always been.

The most dominant of these industrial societies competed for resources in Europe and then the world. This was partly based up the prevailing theology of the time, which in turn became the prevailing theology of New Zealand:¹³

And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.

So man is seen not as a harmonious product of earth, but a blessed being with dominion over earth and its natural resources. It was this worldview that influenced Locke's very influential viewpoint that the Earth was given by God to "mankind in

¹⁰ Hans Merkl "On the Origin of Water on Earth and Mars – A New Hypothesis" (2015) 7(2) Journal of Geography and Geology

¹¹ Francois Robert "The Origin of Water on Earth" (2001) 293 Science 1056; Michael J Drake "Origin of water in the terrestrial planets" (2005) 40 Meteoritics & Planetary Science 519 ¹² WJ Sollas *The Age of the Earth and Other Geological Studies* (3rd ed, London, T Fisher Unwin, 1912) at 166.

¹³ Cleve Barlow (ed) *Ke Te Paipera Tapu The Holy Bible: Bilingual Edition Containing the Old and New Testaments* (Rotorua, Te Pihopatanga o Aotearoa, 1992), Genesis 1:26,28, at 2–3.

common".¹⁴ As such, the boats left Great Britain to claim for themselves the common land, 'terra nullius'.¹⁵

They met tangata whenua – people of the land. It was an ecological worldview with its own pre-existing creation story. In the beginning, Raki the Sky-father and Papatuanuku the Earth-mother were entwined in a close embrace in which there was no light only darkness. Into the darkness came thought, and Hau Ora, the breath of life. From Hau Ora came motion and then the children of Raki and Papa. The children could endure the Great Night no longer and finally Tanemahuta separated his parents and into the space came light.

So that Papa was not drowned in Raki's tears, Mataaho turned over his mother so Raki could not see her distant face and despair. Now Raki weeps more softly and the earth is not drowned. Rain and the night dew are Raki's tears, the rainbow is his lament, and the morning mists are Papa's sighs.¹⁶

 $T\bar{u}$ Te Rakiwhānoa made the land fit for human habitation.¹⁷ and human mythology began to be interwoven into the story of creation. Lake Wakatipu ('Whakatipua': the hollow of the great giant) was formed when a young warrior called Matakauri rescued a beautiful young woman called Manata from the giant Matau. Fearful of Matau's revenge, Matakauri snuck up on Matau while he was sleeping in the drowsy northwest wind. With bracken and dried grass Matakauri set fire to Matau's bed of ferns. The giant's body burned and sank deep into the earth, rain began to fall and snow melted from the peaks, forming a lake in the giant's hollow. Matua's heart still beats below the surface, sometimes gently, sometimes fiercely crashing waves upon the shore.¹⁸

¹⁵ Emer de Vattel *The Law of Nations* (Law Booksellers & Publishers, London, 1834) ¹⁶ Anthony Alpers *Maori Myths and Tribal Legends* (2nd ed, Auckland, Longman, 1996); AW

¹⁴ John Locke *The Second Treatise of Government* (Liberal Arts Press, New York, 1952)

Reed Reed Book of Maori Mythology (1963 ed, Wellington, Reed Publishing (NZ), 2004); Pauline Kahurangi Yearbury The Children of Rangi and Papa: The Maori Story of Creation (2nd ed, Russell, Russell Centennial Trust Board, 2006). ¹⁷ Ngai Tahu Claims Settlement Act 1998, Schedule 14.

¹⁸ Reed, above n 15, at 446; Herries Beattie Maori Lore of Lake, Alp and Fiord (Dunedin, Otago Daily Times and Witness Newspapers Co Ltd, 1945); AW Reed Maori Myth and Legendary Tales (Auckland, New Holland Publishers (NZ), 1999).

Legitimising History

But whose explanation is right? Which people were the more righteous? As we can see, concepts of superiority and legitimacy are as imaginary as some aspects of our mythology, theology and cosmology. Superiority is a human construct, not an ecological one. People create hierarchies, nature creates cycles. When the settlers arrived they had a very well imagined justification, a 'civilising mission'. But in hindsight we can see that for all the theoretical justification, it was a matter of might over right. The English Laws Act 1858 claims English law to have been in force in New Zealand on the 14th of January 1840, a few weeks before the signing of the Treaty of Waitangi.¹⁹ Then the Treaty/Te Tiriti o Waitangi itself a fickle document(s), with errors in translation, and divisions in understanding that are only nowadays being remedied through the principle of partnership. Sovereignty was claimed over the North Island by cession, and the South Island by discovery. Although the English later discovered inhabitants there, and obtained some of their signatures too. The land we are on today was claimed by a mix of presumed discovery, partial cession, and surreptitious conquest. But sovereignty has always been difficult to justify, difficult to hold, violently enforced. Divine decree, noble blood, superior race – all imagined justifications used to legitimate rule. That is why these ideas are not supreme and permanent, but fluid and changing. Church and State were separated, the Crown is now a figurehead, the monarchy is symbolic, and divisions of race are increasingly overcome as the wounds are given time to heal. One of the poets of the last century summarised these sentiments with the phrase: 'every government is illegal'.²⁰ What Bob Marley was referring to was the imagined legitimacy of imperialism, and the imagined laws that those colonisers created to call their actions 'legal'.

Marley was a global sensation because he echoed sentiments brewing silently in the global consciousness. He called for unity rather than division. The arbitrary divisions of race, nation, and gender were losing their ideological credibility and dissolving as the twentieth century drew to a close. A united global perspective was developing as technology, communications, trade, art, and music became borderless. 'Globalisation'

¹⁹ English Laws Act 1858, s1.

²⁰ See Bob Marley "Redemption Song" *Uprising* (Kingston, Tuff Gong/Island Records, 1980)

was having strange effects on the public consciousness and the concept of humanity. We were evolving from the limited perspective that Fuller described: "that average human beings throughout pre-twentieth-century history had each seen only about one-millionth of the surface of their spherical earth. This limited viewpoint gave humans a locally-focussed, specialized viewpoint".²¹

It was an evolution in human perspective, and a revolution against the arbitrary ideological divisions that were legitimising racist colonial rule. America had its Civil Rights Movement and the Civil Rights Acts of 1964.²² New Zealand established the Waitangi Tribunal and began the process of redress. South Africa finally overthrew its warped heirarchies and Nelson Mandela was elected in 1994. The law confirmed and entrenched an evolution in human consciousness that began before the Abolition era and is still continuing today, as more people realise these divisions and supposed inferiorities are imagined and ideological.

So governments needed new ways to legitimise their sovereignty. Here in New Zealand, there has been a harmonising of history, a process of apology and redress for past wrongs, and an incorporation of silenced indigenous culture into the common law. The Ngai Tahu Claims Settlement Act 1998 is one example. No longer do Locke and terra nullius and the Bible speak for this land, granting us dominion over it. But instead our legislation speaks from a bicultural point of view, and now acknowledges "the mauri of Aoraki represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related".²³ It is quite an amazing development of legislative perspective, gaining legitimacy not through ideological force but through cross-cultural unity. From a history of competing divisions, New Zealand has entered the twenty-first century with a harmonious national worldview that has legitimacy through understanding, rather than might. The question now is whether these legal 'acknowledgements' continue to develop from declarations to actions. Is tikanga Maori becoming part of our common law regarding freshwater? We are still thinking historically, gazing around from a wee boat on the

²¹ R Buckminster Fuller *Operating Manual for Spaceship Earth* (Baden, Lars Muller Publishers, 2008) at 33.

²² See also: Civil Rights Act 1957; Civil Rights Act 1960; Civil Rights Act 1964; Voting Rights Act 1965.

²³ Ngai Tahu Claims Settlement Act 1998, Schedule 14.

river of time, so before I answer that and turn our perspective forwards, we should think about the legal history of freshwater.

The Legal History of Freshwater

Our common law tradition stretches far back before the human habitation of Aotearoa. Who knows what this land looked like when Rome was the centre of the Universe. I wonder if anyone at that time could have imagined a place like Fiordland. Probably not, because the earliest common law regarding freshwater related to irrigation. Both the Code of Hammurabi and the Roman Lex Quinctia contain provisions regulating irrigation channels.²⁴ It is interesting to ponder how related this land is to our ancient intellectual traditions.

After the demise of the Roman Empire, a feudal society emerged in England and the Christian worldview replaced a pagan one, establishing Man's right to dominion and control over the natural world. Medieval monasteries set up mills that harnessed the power of flowing water. This was the second great innovation in the human relationship with water. Firstly diverted for agriculture and now harnessed for its flow, its productive force. In the Domesday Book of 1086, there were 5624 mills, one for every fifty households.²⁵

The common law responded to the increasingly innovative use of freshwater. Its precedent was Roman law, Bracton holding that water was a common good, based upon the *Institutes* stating "the things that are naturally everybody's are the air, flowing water, the sea, and the sea shore".²⁶

But as water use intensified, so too did conflicts over use. The period between 1760 and 1830 has been called the 'Age of Water Power', where "industrialists could find themselves sued by existing users of mill-streams, or would sue later entrants who

²⁴ Joshua Getzler *A History of Water Rights at Common Law* (Oxford University Press, Oxford, 2004) at 1.

²⁵ Ibid, at 18.

²⁶ *Institutes* quoted in Getzler, at 67.

disturbed their newly established uses".²⁷ With all these competing uses, freshwater could apparently not be common to everyone. But legal rights claimed were ambiguous, and conflict between parties was often resolved through capital bargaining and the reallocation of rights without there being any clear rights to begin with. It seemed to essentially be a 'first in first served' approach.

The ambiguity of water rights let to the development of modern riparian law, "the law of rights to flowing streams".²⁸ But as Getzler illustrates, riparian doctrine as a legal construct has always struggled with its slippery subject:²⁹

Riparian doctrine was shaped most immediately by an inherent feature of its subject matter: that flowing water is in a constant state of change which may be diverted, abstracted, or polluted by competing users, and thence destroyed. So a running stream cannot be appropriated or possessed in the way that land as a stable, immutable object is capable of possession.

Water defies our human tendency for physical possession. Hold water in your hand and it will drain, unless you quickly drink it. Water also defies the legal constructs we have created to confirm possession. To temporarily overcome this problem, the nineteenth century courts described water rights as naturally connected to the land, with the ownership of abutting land necessary to benefit from the stream. But as industrial and urban uses of water diversified, enjoyment of water could be dissociated from neighbouring land, and claimed "as the common property of a number of individuals, or of a collectivity; or as *res communes* – collective goods available for the enjoyment of all, with legal restraints placed on rival or exclusive uses".³⁰

The common law approach is as fluid and contextual as the river itself. Getzler finds no foundational legitimacy to riparian doctrine, merely a fluid product of sociopolitcal context:³¹

²⁷ Getzler, at 34.

²⁸ Ibid, at 37.

²⁹ At 43. See also *Magistrates of Linlithgow v Elphinstone* (1786): "A river, which is in perpetual motion, is not naturally susceptible to appropriation".

 $^{^{30}}$ Getzler, at 44.

³¹ Ibid, at 329.

The lines between technical law and judicial policy and ideology could easily be blurred...Water as an ephemeral and changeable element incapable of exclusive possession was hard to fit within any available legal or philosophical categories.

So the legal and philosophical categories were stretched according to the needs of an industrialising society. A progression of ad hoc common law tinkering that led to statutory intervention:³²

Ultimately the common law's capacity to govern water entitlements proved inadequate, and an ad hoc regime of private (and later public) statute was erected to perform the task. But the common law served as the background or baseline for the statutory re-ordering of rights.

Just as the nature of water has not changed, neither has our legal response. What has changed is the social context. We are currently in the process of another statutory reordering of rights. However, our social context is different, and this has been shown to be the foundation of any water law. Common law still serves as the background, but increasingly tikanga and a global perspective are entering our current statutory reordering of rights.

The Present

This brings us to the present day, and today the rain clouds hang just above the town belt. Tahemahuta still holds his parents apart. But historically and globally deforestation is rampant. Our mythology suggests floods, and our science warns of rising sea levels.

At the same time, our colonial law, theology and philosophy are becoming less dominant and more accommodating, more harmonious. Since the second half of the twentieth century, the counter-culture, environmental and equality movements have spread worldwide. We seem to be drifting in the current of a paradigm shift. Watershed streams are converging again. Neoliberalism seems to be fading from

³² Ibid, at 44.

supremacy,³³ as demonstrated just a couple of weeks ago by the University deciding to divest from fossil fuels. Unfettered capitalism now tempered by increasing environmental concerns of sustainability. Time will tell whether our paradigm does change, or whether we presume technology and the market-economy will fix all woes. But as I intend to demonstrate, there are strong hints of change already within our law.

³³ See generally: Martin Jacques "The Death of Neoliberalism and the Crisis in Western Politics" *The Guardian* (online ed, London, 21 August 2016); Aditya Chakrabortty "You're Witnessing the Death of Neoliberalism – From Within" *The Guardian* (online ed, London, 31 May 2016); Will Martin "Nobel Prize Winning Economist Stiglitz Tells Us Why 'Neoliberalism is Dead'" *Business Insider Australia* (Online ed, Sydney, 19 August 2016).

CHAPTER TWO: PERSONAL PERSPECTIVE

Just as our common law is a contemporary reflection of its history, so are we a contemporary reflection of our personal histories. I have only seen the world through these eyes. Eyes that have spent a lot of time gazing across a great lake, gazing up at the great peaks guarding the valley. If I had been raised on the coast, I doubt I would be writing my dissertation on freshwater. Everyone views and values freshwater differently: students, farmers, fishers, children, poets, politicians, businessmen. The law attempts to harmonise the vast variety of values. But a person's personal worldview is very powerful, especially when regarding a substance we need daily to survive. The everyday survival of a glass of water. The economic survival of a farmer. These eyes only know what they have seen, so a series of perspectives, a series of spectacles are required to enhance this blue-eyed view. Legal spectacles, regional binoculars, mountain panoramas, and maybe even a telescope.

On Worldview

All beings do not see mountains and waters in the same way...Some see water as wondrous blossoms...Dragons see water as a palace or pavilion...Some beings see water as a forest or a wall. Human beings see water as water...Water's freedom depends only on water...

Now when dragons and fish see water as a palace, it is just like human beings seeing a palace. They do not think it flows. If an outsider tells them, "What you see as a palace is running water," the dragons and the fish will be astonished, just as we are when we hear the words "Mountains flow.³⁴

This quote by Dogen from the thirteenth century is a jibe at the blinding power of worldviews. We can be so proud of our worldview, but can we see that mountains

³⁴ Gary Synder, quoting Dōgen's "Mountain and Waters Sutra" in *The Practice of the Wild* (New York, North Point Press, 1999) at 107–108.

flow? Dōgen is teasing us to dismiss him as a loony Buddhist, but if we dismiss him he has proved his point and we have missed it. We have clung to our blinkered worldview automatically. But to most New Zealanders, talk of dragons is mere fantasy. Dragons surely do not exist, but do taniwha? Your instinctual answer to that comes from your 'gut' – your experiences, your condition. That is what I mean by worldview. If our worldview sees freshwater as a commodity we will not even consider its spiritual aspect, and we have missed the point that freshwater affects us all in a multitude of ways. By experimenting with legal perspective we are primarily experimenting with worldview, attempting to broaden the perspective from one man standing on the banks, towards fluid perspective of the water itself.

A person's worldview has been likened to coloured glass through which people see themselves and the world around them.³⁵ And like spectacles they allow us to see and make sense of the world. But by improving our vision in one regard, spectacles can distort it in another. I like to think of worldviews as branches of a very tall tree. Sitting on a certain branch gives a certain view of the world, blocked by certain leaves. Some views are more panoramic than others, less blurred by leaves. But even the top of the tree cannot see the whole world.

The characteristics of worldviews is that they are *generally*: inescapable (we cannot undo the past), unshakeable (this is my branch!), unprovable (don't tell me what I can and can't see!), irrefutable (how can you not see this!), unspoken, and subconscious.³⁶ Most importantly, worldview is learned, encultrated. It is only new learning (not immediately dismissed by our existing worldview) and new experiences (expanding our 'comfort zone' as its colloquially known, climbing to higher branches on the worldview tree) that expands a person's worldview. They tend to be very stubborn and inert, especially as attitudes become more entrenched and less fluid.

But the ponderous acknowledgement of our worldview is a very useful tool to broaden our perspective. Our model to explain reality is not the only one. The features

³⁵ David Burnett "Chapter One: Other Worlds" from *Clash of Worlds* in Rex Ahdar (ed) *Laws469 Law and Religion Coursebook* (Dunedin, University of Otago, 2016).

³⁶ Harold J Turner "The Surface and Deep Levels of Culture" in *Frames of Mind: A Public Philosophy for Religion and Cultures* (Auckland, DeepSight Trust, 2001); Ngaire Naffine Law's Meaning of Life: Philosophy, Religion, Darwin and the Legal Person (Oxford, Hart Publishing, 2009)

of the external world are first met by our senses, then our attention, and finally greeted by our mental model of the world. One of dragons or maybe taniwha. The critical legal studies tradition sought to highlight the bias of individual worldviews in the supposedly neutral law. Stanley Fish similarly discusses the interpretive structuring of individual interpretation.³⁷ So are we to read between the lines, or take things at face value? Literature has pondered this longer than the law has, and provides useful examples of how to transcend worldviews for the sake of communication.³⁸ Given a legal polishing, these techniques could be of great use to a scholar of jurisprudence. After all:³⁹

Law is not logic But experience

So, if the legislators (especially those wanting only 'wadeable' water) cannot dive beneath the surface of the river then I guess I'll have to.

Worldview Demonstrated: A Mihi of Sorts

Some answers aren't in the library. So I leave the Leith and the South Pacific Ocean, driving inland along the Taeri River, past Lake Waihola that always looks a bit grubby except in the setting sun, shining silver in front of plump green hills. I have

³⁷ Stanley Fish *Is There a Text in This Class: The Authority of Interpretive Communities* (Cambridge, Harvard University Press, 1980)

³⁸ See William Faulkner *The Sound and the Fury* (London, Vintage, 1995). First published in 1929, the novel experiments with 'stream of consciousness' to describe the troubling sensitivities of the young artist Quentin, who is seen as a literary analogue for Faulkner himself. By using this technique, rather than hiding behind a veil of words, Faulkner exposes his consciousness to the reader, letting them in rather than holding them out. See also Jack Kerouac *The Subterraneans* (London, Penguin Classics, 2001), a story about a relationship that Keroauc wrote in a spontaneous three-day-and-night stream of consciousness immediately following the breakup. The aim was to write with complete personal honesty freed from the distortion of time and disguising literary devices that would betray the truth of what had been. Kerouac is too wild for a dissertation, and Faulkner too fictional. But both revolutionised the relationship between writer and reader, destabilising the division by honestly surrendering their worldview to the reader and thereby deepening the dialogue. ³⁹ Nigel Jamieson "The Lawyer's Library" (1992) 23 *The Law Librarian* 50.

not swum in those waters, I have not grown in them, so my mind hurries past to the waters of home.

Just past Roxburgh I begin to feel something, high rocky hills reaching far horizons, the Clutha River nestled below. A shortcut brings me to a looming wall of concrete, the Clyde Dam. Lake Dunstan pooled wide at the top, the Clutha swirling from its base.

For as long as I can remember the dam has been there, so I have never really questioned it. I did not know the land before, and the dam is just one flicker of the world I have grown to know. I remember stopping there once as a kid, the gates open I marvelled at the huge explosive falls of water. The human control of nature's force was astonishing. I also remember hearing my grandmother tell me how my grandfather, a farmer of Maungawera Valley, was deeply opposed, and protested the flooding of orchards. Now as I drive past I ponder the lifespan of this monolithic structure, built on top of a fault line in a steep rocky valley, dry and prone to erosion. I wonder about hydro-electricity in general, as wind- and solar-power develop.

Past Cromwell all evidence of the dam disappears, and into the Kawarau Gorge I am nearly home. The Kawarau is the outlet of Lake Wakatipu, flowing past the Remarkables (also called Kawarau), joined by the gold-rich Shotover River and the Arrow River of my childhood. The freshwater of home, flowing from peaks to lake, from peaks to valleys, converging to flow into gorges and dams, to become the Clutha and flow to the Pacific Ocean.

I felt a bit stagnant thinking about these waters from the coast where their fresh journey ended. So a couple of weeks ago I left Dunedin, driving home and then into Skippers Canyon, to an unmarked path we ambled along for a few hours to an old schist hut at the base of a steep jagged valley. A small plateau formed by rockfall and rainfall, next to a small alpine stream. At the end of the plateau another huge rockfall had split from looming peaks (rainwater carving and freezing and expanding) to tumble and gash and gouge down the valley. The stream pools a lagoon, but flows on timeless. The liquid song of silent mountains, clear and fast as gravity, carving to the sea and drifting back again.

The only visible law was the sign on the door of the hut:

THIS HUT IS MAINTAINED BY THE QUEENSTOWN TRAMPING AND HISTORICAL SOC.

Property of Coronet Peak Station.

And it got me thinking that the law governs actions, but not so easily governs relationships or ideas. It predominantly deals with the specific actions of our bodies – where it can go, what it should or should not do. It has little grasp on the individual worldview that is at play with the surrounding nature. Sometimes the law strongly structures an individual's worldview, but for others it is often a background consideration quickly pushed aside. Especially in an environment like this, with no one else around except a few friends, and the power of nature so much more manifest than the power of law. Here, law seems extremely distant and abstracted, pottering at the back of my mind as I make a personal investigation into freshwater. I wanted to follow a stream to its source, past the point where people have interfered, to see what I could find.

The next morning I took a swim (dunk) in the alpine stream where a small waterfall had created a swimming hole. It was flipping cold! Jumping out and hopping around in the warm spring sun I thaw and feel refreshed, immensely energised. Is this just a physiological response or something more? In that moment freshwater was not something abstracted by something alive, flowing with a current, a spirit perhaps, that plunged into me as I into it.

Inspired by this current, we began to climb the rocky peak, climbing upstream towards the source. We made it halfway up the mountain before we stopped exhausted at a stepped waterfall that carved hollows into hard rock. The mountain taught an important lesson in perspective. For all our ambitions, the self is small and limited. Sometimes we cannot climb high enough to gain the perspective we desire.

So the source of the water remains a mystery, flowing endlessly in small rivulets down the wide face of the peak, meeting to flow endlessly down the waterfall and past the hut, down to the Shotover, Kawarau, Clutha. But how did it flow endlessly on a sunny day without a cloud in the sky? Where does it eternally come from? Logic says it is water stored from storms in the grass and soil, trickling out until the next rains. It feels like the mountain is hiding something. We did not make it high enough to find out. But way up beyond human contact (a few goats and sheep), the water is pure and seemingly endless. And we seem small and clueless in comparison. The mountain stream shared its current and its life. It taught humility, respect for purity, and faith in nature to flow on endlessly. I do not need to know how or why it can do this.

Driving back out from Skipper's Canyon, the Wakatipu Basin suddenly appears before us, with houses and fences and ponds all dividing the land into its respective uses. People erect division but the mountains hold all together as one in a deep green embrace. Tangata whenua recognise this. Another lesson in perspective, leaving the human world and seeing it again afresh, mountain-eyed. It seems both strange and beautiful, people taming (temporarily) the land and thereby thriving in a gorgeous green basin beneath towering peaks.

Freshwater is pure and endless at its source, high above the abode of humans. It will remain that way regardless of how we tarnish the waters we use. I am not worried about the purity of water – its spirit, mauri, taonga – because it is ever-present above the mess. My worldview has always been an alpine one, and this perspective has answered my personal questions regarding the inherent nature of freshwater.

My concern now is our human relationship with water down here (and getting this dissertation done, continuing my freshwater investigations closer to the source).

Private Property?

Much of the recent debate over freshwater includes the term 'ownership'. The government's position is that no one owns freshwater. But it is also governmental policy that "our abundant freshwater resource is our greatest national asset",⁴⁰

⁴⁰ Ministry for the Environment "Freshwater reform 2013 and beyond" (March 2013) ME 1109 at 5.

"enabling sustainable economic growth to support new jobs and exports".⁴¹ Accordingly, there has been an increase in local councils considering granting water rights to individuals and exporters.⁴² When people see foreign entities profiting from a collective resource, it does not seem too distant from ownership, and they make claims for ownership themselves.

However, I think 'ownership' is a red herring for several reasons. Firstly, as we found out from Getzler, it seems to be another instance of slippery, unpossessable freshwater being squeezed into our existing philosophical and legal categories. Secondly, liberal ownership of private property is paradoxical to tikanga Maori, and any discussion of 'ownership' therefore excludes tikanga:⁴³

Onwership is premised on individual identity, central to that fundamental tenet of exclusive possession. Frame in the language of rights and liberties, it is a distinctly anthropocentric concept. By contrast, tikanga wai Māori concerns collective identity and reciprocity.

Thirdly, 'ownership' directs the discussion of freshwater into anachronistic property taxonomies. Therefore, I see no benefit in joining the debate on 'ownership' that bogs down freshwater discussions. Instead, it is more helpful to investigate our conceptions of property, and see how freshwater flows through them.

Freshwater immediately defies Blackstone's 'sole and despotic dominion', making a bit of a mockery of that as it flows on downstream. Similarly, Honoré's classical interpretation of ownership is premised upon possession: "to have exclusive physical control of a thing, or to have such control as the nature of the thing admits, is the foundation upon which the whole superstructure of ownership rests".⁴⁴ The nature of freshwater allows very little control. It is vastly different from a sheep, a house, a piece of land. Freshwater covers the breadth of the country from the Southern Alps to

⁴³ Maia Moana Elizabeth Wikaira *Māori Ownership of Freshwater: Legal Paradox or Potential?* (LLB(Hons) Dissertation, University of Otago, 2010) at 33.

⁴¹ Ministry for the Environment "Next steps for fresh water: Consultation document" (February 2016) ME 1233 at 4.

⁴² "Poroti Springs owners fight consent for water bottling factory" *Radio New Zealand* (online ed, Wellington, 24 April 2016); "Ashburton council won't sell rights to bottle water company" *Radio New Zealand* (online ed, Wellington, 11 July 2016)

⁴⁴ AM Honore "Ownership" in AG Guest (ed) *Oxford Essays in Jurisprudence* (London, Oxford University Press, 1961) at 131.

the coast. Moreover, we are used to owning physical things capable of easy possession – coins, clothes, cars. But the whole foundation seems far too rigid to deal with a liquid. We have had to invent ways of holding and containing freshwater and then own those devices – water bottles, rainwater tanks, swimming pools, dams. Water defies the foundation premises of our standard property taxonomy.

As Michael Robertson demonstrates, it is classical liberalism that has both created and supported this taxonomy, ideologically justifying the supremacy of private property.⁴⁵ As we are operating in the liberal tradition, it is not my aim to suggest socialist alternatives, but instead to critique the blindspots of our anachronistic taxonomy, and suggest where freshwater may fit into a contemporary taxonomy.

The classical liberal taxonomy has three forms of property: private, state and common. Common property was valid in ancient and medieval times, but diminished as capitalism and liberalism became dominant.⁴⁶ As classical liberalism flourished, it prioritised individual liberty, and individual private property was seen as the best tool for advancing this. The Cold War and the collapse of the Soviet Union was held to be "conclusive historical evidence of the inferiority of state property regimes and the superiority of societies based upon private property".⁴⁷ This left a weak conception of common property as the only competitor against private property within the standard taxonomy.

However, it was generally accepted *a priori* that common property would inevitably self destruct following Garrett Hardin's *Tragedy of the Commons*.⁴⁸ However, given the scope of the argument, which relates to population control, it is incredible that it has been taken en-mass to discredit common property. It appears its strength is more ideological than informative. Furthermore, a rational herdsman unabatedly seeking to maximise his gain is far different from a rational herdsman today, who must balance his economic interests with the environmental consideration now that we have developed an ecological understanding of nature. Essentially, Hardin makes presumptions about human nature, ones that align very well with those of Locke and

 ⁴⁵ Michael Robertson "Common Property Redux" in Michael Robertson (ed) Laws452 Legal Theory Coursebook (University of Otago, Dunedin, 2016)
 ⁴⁶ Ibid.

⁴⁷ Robertson, at 4.

⁴⁸ Garrett Hardin "The Tragedy of the Commons" (1968) 162 Science 1243.

classical liberalism. His presumptions pretend to be eternal, but are instead temporal, strongly influenced by the prevailing ideology of the time.

In our modern, diverse, globalised, multicultural world, I do not think every rational 'herdsman' seeks to maximise their herd. Instead, more and more groups are seeking to maximise 'pasture', in opposition to those 'rational' herdsmen who seek to maximise their individual gain and thereby destroy our common Earth in the process. The global perspective that did not exist in the time of Locke and classical liberalism necessitates we reconceptualise the 'commons' as the globe, not merely a rural pasture. Once we do this, history demonstrates that the pursuit of private property (mining, deforestation, fossil fuels, commercial fisheries, etc) is destroying the commons. So in this respect Hardin was right, endlessly increasing private property on a limited common earth is leading to tragedy – "freedom in a commons brings ruin to all". Yet our prevailing property paradigm continues to stress the superiority of private property, pursuing individual self interest, freely entering contracts to do so, and presuming the invisible hand of the free-market will protect the environment. Hardin's argument is too narrow, too temporal, too limited in scale for our modern world. It is a fallacy to think this one argument *a priori* justifies the demise of common property.

So instead of taking one man's word as gospel, let us instead focus on what 'common property' actually means, and thereby gain a deeper understanding of where freshwater may fit within an updated property taxonomy that does not ideologically prioritise one of property as supreme.

In contrast to private property, "common property is created by the guarantee to each individual that he will not be excluded from the use or benefit of something".⁴⁹ Common property has presumptive access to all. Freshwater seems to fit into that, our rivers, streams and lakes open to all, unless someone has a use right that enables them to exclude others. This parallels the Roman and early common law tradition of water as *res communes* – collective goods available for the enjoyment of all, with legal restraints placed on rival or exclusive uses. Exclusive uses such as water bottling are subject to the legal restrain that they are temporary lease rights, not permanent rights to exclusive possession which would therefore be ownership.

⁴⁹ CB Macpherson, quoted in Robertson at 3.

But as I mentioned earlier, the fluid nature of freshwater defies these categorisations. It can be private property in the form of exclusive use rights, common property open to all, or even collective property that Robertson proposes in his new taxonomy:⁵⁰

Collective property combines elements of both private property and common property...when a number of individuals combine their separate property interests in a resource, manage the resource jointly and all share in the benefits, while nonmembers of this limited ownership group are excluded from the use or benefit of the resource.

This categorisation seems the best description of the water cycle, a series of collective and sometimes private rights that vary public access along the water course. Some areas are open to all, some areas limit access to a specific group. The river continues to flow past the area of limited use and becomes common again. The main issue with freshwater is not with water being utilised, but with the water being polluted by licensed users before it flows freely again. This relates to the slipperiest part of this new category – joint management of the resource. Innovative methods are required to collectively manage the whole freshwater resource, whilst still allowing individual uses. I will discuss examples of this in the upcoming chapter.

Importantly, with collective management the resource is not subject to Hardin's tragedy, which only applies to an unmanaged, open-access commons.⁵¹ But collective property should not be thought of as a radical innovation. Instead, as Robertson illustrates, collective property is actually "the most important and efficient property form of modern economics. The large corporations that dominate those economies are collectively owned".⁵² Despite this, collective property is forced into the outdated taxonomy as either private property or common property. By updating this taxonomy we can reconceive collective property as a distinct and important form of modern property. In doing so, we no longer need to rely solely and dogmatically on private property and the free-market to get us out of environmental crises that it helped

⁵⁰ Robertson at 20–21. Also, an 'unmanaged open-access commons' seems to aptly describe the laissez-faire free-market global economy. In which case Hardin's tragedy may nowadays apply to 'rational' multinationals and common globe, instead of rational herdsman and a common pasture.

⁵¹ See also Elinor Ostram, who initially identified 'limited access common pool resources' as distinct from Hardin's 'open access resources'.

⁵² Robertson at 22.

create. Private property is an increasingly useful tool,⁵³ however it need not be the only answer. Collective property is another method, better suited to the inherent nature of freshwater.

⁵³ See Ben France-Hudson "Private Property's Hidden Potential" (PhD thesis, University of Otago, 2014).

CHAPTER THREE: COLLECTIVE PERSPECTIVE

The collective perspective is where the self becomes a group, a place becomes a region, tributaries become a river. Yet it can also be seen as a watershed. Therefore the collective perspective is a delicate one, either diffracting worldviews like a watershed, or harmonising them like a braided river reaching a lake.

The collective perspective can also be conceived as the regional perspective. Initially I thought to also offer a national perspective on freshwater. However I have discovered that the national perspective regarding freshwater is very general:⁵⁴

Fresh water matters to all New Zealanders. It is central to the environment, the economy and our identity. It is a key aspect of who New Zealanders are and what they bring to the world. For Māori, it is a taonga, essential to life and identity.

This general perspective is expressed uniquely at the regional level, where collective frameworks are being established by the law to collectively and regionally manage the natural taonga of Aotearoa.

My aim for this section is to use selected examples to outline our expanding perspective on the regional relationship with freshwater, and highlight the developing methodologies to collectively manage these resources. These regional developments are at the forefront of environmental jurisprudence, gathering attention globally, and have even been described as "undoubtedly legally revolutionary here in Aotearoa New Zealand and on a world scale".⁵⁵ The following examples offer insight into how regional or collective groups, in this case iwi, can introduce their perspective and values into the law, radicalising our legal conception of nature and simultaneously harmonising our common law tradition with indigenous tikanga Maori.

⁵⁴ Ministry for the Environment (2016), above n 1, at 7.

⁵⁵ Jacinta Ruru "Tuhoe-Crown Settlement – Te Urewera Act 2014" *Maori Law Review* (online ed, Wellington, October 2014). See also: "Nature's a Person?" *The Guardian* (video, Facebook ed, 3 September 2016).

Tōpuni

Beginning with a South Island example, the Ngai Tahu Claims Settlement Act 1998 has twelve schedules of Tōpuni: 'an area of land which is administered under the National Parks Act 1980, the Conservation Act 1987, or the Reserves Act 1977, has Ngāi Tahu values, and is declared as Tōpuni^{".56} Under section 241, the New Zealand Conservation Authority and conservation boards "must have particular regard to Ngāi Tahu values" when considering any policy or management strategy relating to Tōpuni.

Most Tōpuni relate to significant mountains like Aoraki and Mt Earnslaw/Pikirakatahi. But there is also Tōpuni for Te Koroko, the head of the greenstone-rich Dart River that runs into Lake Wakatipu:⁵⁷

The actual slip from which the pounamu is gathered is known as Te Horo. The name of the mountain where the pounamu vein occurs is Koroka (or Koloka). When viewed from the right vantage point, Koroka resembles a reclining giant, the pounamu exiting the mountain, in fact, from the mouth of the giant. Captain Cook's men were informed while moored in Dusky Sound, of the giant in the interior that emits pounamu from his mouth...

The mauri of Te Koroka represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with Te Koroka.

So not only is this a statutory acknowledgement of the spiritual component of freshwater, but also a commitment to consider this worldview when the conservation authority manages the area. To access Te Koroka (from the Rees-Dart trail) requires a special permit from the Department of Conservation.⁵⁸ It is not collective management, but a collectivisation of the worldviews relevant to decision-making. It

⁵⁶ Ngai Tahu Claims Settlement Act 1998, s237.

⁵⁷ Ibid, Schedule 91.

⁵⁸ See "The Rees-Dart Track" http://www.doc.govt.nz/Documents/parks-and-recreation/tracks-and-walks/otago/rees-dart-track-brochure.pdf

is one stage further than the 'statutory acknowledgements' that legislate Ngāi Tahu cosmology and history, legislating their whakapapa. An example of this is Whakatipu-wai-māori (Lake Wakatipu):⁵⁹

Whakatipu-wai-māori is an important source of freshwater, the lake itself being fed by hukawai (melt waters). These are waters with the highest level of purity and were accorded traditional classifications by Ngāi Tahu that recognised this value. Thus it is a puna (spring) which sustains many ecosystems important to Ngāi Tahu. The mauri of Whakatipu-wai-māori represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the lake.

So although this is simply an acknowledgement with no legal force of consideration like Tōpuni, it still represents a positive step towards reconciling worldviews that were previously divided. Now our legislation confirms our indigenous, spiritual, ecosystem-based worldview, harmonising it with our Western anthropocentric worldview. It signalled a revolutionary new phase of acknowledgement and partnership, a foundation for further developments collectively, via the (now) shared platform of the common law.

The Heart of the North Island

These ideas of co-management were further developed in the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010. However, the co-management regime established was overly complex, creating the Waikato River Authority, directed by a complex mechanism of co-management through diffracted avenues of input. Iwi values can be voiced, but are just one piece of a big puzzle.⁶⁰

⁵⁹ Ibid, Schedule 75.

⁶⁰ See generally: Toon van Meijl 'The Waikato River: Changing Properties of a Living Māori Ancestor" (2015) 85 *Oceania* 219; Samuel Wevers "Recognising Rangatiratanga: Sharing Power With Māori Through Co-Management" (LLB (Hons) dissertation, University of Otago, 2011).

Therefore, the recent approaches to co-management of natural resources have taken a more simple approach, aimed at giving the resource a legal voice, rather than merely adding an iwi voice to a complex management arrangement. One example is the 'heart' of North Island.

The Te Urewera Act 2014 establishes that:⁶¹

Te Urewera is ancient and enduring, a fortress of nature, alive with history; its scenery is abundant with mystery, adventure, and remote beauty. Te Urewera is a place of spiritual value, with its own mana and mauri. Te Urewera has an identity in and of itself.

...

Te Urewera is also prized by all New Zealanders as a place of outstanding national value and intrinsic worth; it is treasured by all for the distinctive natural values of its vast and rugged primeval forest, and for the integrity of those values; for its indigenous ecological systems and biodiversity, its historical and cultural heritage, its scientific importance, and as a place for outdoor recreation and spiritual reflection.

Tūhoe and the Crown share the view that Te Urewera should have legal recognition in its own right, with the responsibilities for its care and conservation set out in the law of New Zealand. To this end, Tūhoe and the Crown have together taken a unique approach, as set out in this Act, to protecting Te Urewera in a way that reflects New Zealand's culture and values.

So Pakeha and Maori worldviews regarding freshwater are no longer distinct, and are here harmonised through legislation to reflect a New Zealand worldview that recognises the mauri, the spirit and spirituality of nature, as well as the importance of an ecological perspective.

Section 11 declares Te Urewere to be a legal entity, with its rights, powers and duties to be exercised by the Te Urewera Board. The legislative framework for the board is as follows:⁶²

1. For the first 3 years after the settlement date, the Board consists of 8 members, appointed as follows:

⁶¹ Te Urewera Act 2014, s3.

⁶² Ibid, s21.

- a. 4 members appointed by the trustees of Tūhoe Te Uru Taumatua;⁶³ and
- b. 4 members appointed jointly by the Minister and the Minister for Treaty of Waitangi Negotiations (the *Ministers*).
- 2. From the third anniversary of the settlement date, the Board is to consist of 9 members, appointed as follows:
 - a. 6 members appointed by the trustees of Tūhoe Te Uru Taumatua; and
 - b. 3 members appointed by the Minister.
- 3. In making an appointment, an appointer must consider whether the proposed member has the mana, standing in the community, skills, knowledge, or experience.

So the legal voice of Te Urewera initially reflects the partnership of the Treaty. But interestingly, a few years after settlement, the Board changes to nine members, two-thirds appointed by Tūhoe. Therefore, not only is the Act a radical legal development for the rights and standing of nature, but is also a revolutionary conceding of sovereignty, going beyond co-partnership and giving Tūhoe majority control over the 'heart' of the North Island. It is the fullest and most forceful expression of the Treaty in the legal history of Aotearoa. Tūhoe have kaitiakitanga and kāwanatanga,⁶⁴ guardianship and governance over Te Urewera. It is the closest we have ever come to te Tiriti's promise of te tino rangatiratanga, the unrestricted exercise of chieftainship over land, villages and taonga.

Te Awa Tupua

This revolutionary reconception of our legal relationship to nature has also been

⁶³ See s4: Tūhoe Te Ururu Taumatua "means the Tūhoe Trust established by trust deed dated 5 August 2011".

⁶⁴ Te Tiriti ceded "kāwanatanga" to the Crown, interpreted as governship/administration. It was compared by the missionary translators as Pontius Pilate's governship of Judea. The Treaty stated that Maori "cede sovereignty", which should have been compared to Emperor Tiberius's sovereignty over the Roman Empire. Furthermore, Maori were guaranteed te tino rangatiratanga over land, villages and taonga. This was translated as the unrestricted exercise of chieftainship, compared with God in the Bible.

applied to freshwater. The Whanganui River Settlement is currently in the process of transforming the river into a legal person. The Deed of Settlement has been signed by the Whanganui Iwi and the Crown, and is currently the Te Awa Tupua (Whanganui River Claims Settlement) Bill, sitting with the Select Committee.

The Deed of Settlement is composed of two documents. The first, Te Mana o Te Awa Tupua:⁶⁵

Contains the agreed terms of a new legal framework for Te Awa Tupua which uphold the mana of the Whanganui River and recognises the intrinsic ties which bind the Whanganui River to the people and the people to the Whanganui River.

The legal framework is based upon the recognition that "The Awa Tupua is an indivisible and living whole comprising the Whanganui River from the mountains to the sea, incorporating its tributaries and all its physical and metaphysical elements".⁶⁶ From this perspective:⁶⁷

Te Awa Tupua is a legal person

Te Awa Tupua has the rights, powers, duties and liabilites of a legal person. The rights, powers and duties of Te Awa Tupua must be exercised and performed on behalf of, and in the name of Te Awa Tupua by Te Pou Tupua.

Te Pou Tupua is "the human face of Te Awa Tupua":68

The Sacred and Revered Station

Te pou o te whakatupua Te pou o te whakatawhito Te pou o Ranginui e tu nei!

The celestial post The ancient post The pillar of universal order!

Te Pou Tupua is the face and voice of Te Awa Tupua and will uphold Tupua te Kawa.

⁶⁵ Ruruku Whakatupua: Te Mana o Te Awa Tupua (2014) at 2.

⁶⁶ Ibid, s2.1, at 6.

⁶⁷ Ibid, s2.2–2.4, at 6.

⁶⁸ Ibid, at 10.

The role is symbolic of the partnership of the Treaty, a joint role exercised by two people, one appointed by iwi and one by the Crown, to speak as one – the one voice of the river. The human voice must speak according to Tupua te Kawa, a fourfold "set of instinsic values which represent the essence of Te Awa Tupua".⁶⁹

1. The River is the source of physical and spiritual sustenance.

Te Awa Tupua is a spiritual and physical entity that supports and sustains both the life and the natural resources within the Whanganui River and the health and wellbeing of the iwi, hapu and other communities of the River.

2. The great River flows from the mountains to the sea.

Te Awa Tupua is an indivisible and living whole from the mountains to the sea, incorporating the Whanganui River and all of its physical and metaphysical elements.

3. I am the River and the River is me.

The iwi and hapu of the Whanganui River have an inalienable interconnection with, and responsibility to, Te Awa Tupua and its health and wellbeing.

4. The small and large stream that flow into one another and form one River Te Awa Tupua is a singular entity comprised of many elements and communities, working collaboratively to the common purpose of health and wellbeing of Te Awa Tupua

This summarises the inherent elements of the water cycle that we have attempted to gain perspective on. But no longer the ponderings of a single person or group, it is now a commitment by the Crown, soon to be legislated as a common understanding of freshwater. Furthermore, the Deed vests the Crown-owned riverbed in Te Awa Tupua, "to address the actions of the past and begin to reunite the River".⁷⁰ In this regard, the river is symbolic of the nation. No longer divided into components but one, speaking as one, through a framework that balances Maori and Pakeha perspective.

So what is the result of a river being granted legal personhood? How do we interpret the significance of this? Firstly, it is recognition by the Crown of a river as a living

⁶⁹ At 7.

⁷⁰ At 29.

being, and therefore imbued with its own interests and incapable of being owned. This demonstrates the classical liberal worldview of individualism and private property ownership is no longer supreme, and alternate worldviews are being harmonised into the law. In this case, our Western liberal government is recognising te mana o te wai, the mauri, the life essence of freshwater. In doing so we are legislating an ecocentric perspective that no longer sees humans as sovereigns of the natural world, but guardians with a responsibility to preserve and protect the ecosystem.

Furthermore, it demonstrates an evolution of the neoliberal thought that enabled corporations to be legal persons. Now this same approach has been extended to nature. As one commentator points out, "the extension of legal personhood to a 'nature object' will mean that the interests of the river will compete with the rights and interests of humans".⁷¹ If this concept was expanded beyond Treaty settlements, the natural world would have the same legal standing as the corporations that subdue and exploit nature.

Writing in 2010, Morris and Ruru speculated on this 'radical' idea of giving rivers a legal personality.⁷² The main benefit identified was that the legal emphasis shifts from assessing and affected parties economic loss, to assessing the actual impact on the resource. Currently at common law, "the economic interest of upstream polluters are contrasted with those of downstream right-holders...there is no consideration of the damage to the stream or the creatures within".⁷³ With this shift in legal focus, remedies would apply directly to the natural resource, rather than compensating a third part for loss. Essentially, this would "put the health and wellbeing of the river at the forefront of decision-making".⁷⁴ As such, it creates "an exciting link between the Maori legal system and the state legal system",⁷⁵ fulfilling the challenge posed by the Law Commission to Parliament in 2001, to "give effect to the promise of the Treaty

⁷¹ Abigail Hutchison "The Whanganui River as a Legal Person" (2014) 39 Alternative Law Journal 179 at 182.

⁷² James DK Morris and Jacinta Ruru "Giving Voice to River: Legal Personality as a Vehicle for Recognising Indigenous Peoples' Relationships to Water?" (2010) 14 Australian Indigenous Law Review 49.

⁷³ Ibid, at 54.

⁷⁴ Ibid, at 50.

⁷⁵ At 50.

of Waitangi by providing a secure place for Maori values within New Zealand society".⁷⁶ A secure place of actual legal standing, not longer just rhetoric.

The precedent has been set by the Whanganui River Settlement. Freshwater is no longer simply an asset for human use, but in some cases an entity with its own values and interests, capable of speaking for itself. The River has been given a legal voice, and time will tell how strong this voice is. But if the Bill is passed, I can see no reason why the rights of the River will not be upheld and enforced. But will the rights of the River ever extend to all rivers? Or is this legal progression reserved only for Treaty settlements? What would it take for the collective importance of other rivers to be recognised and given legal standing? What other collective groups could make this claim? From our broad panorama of freshwater it is here at the collective ecological perspective that the law holds most promise and potential. It could be a fascinating subject for a more specific, post-graduate thesis. For now let us continue our fluid perspective to gain some more insight into the future of freshwater. But it is here, at the collective perspective, that worldviews and legal traditions are being harmonised most fully. Overcoming tired taxonomies and historically divisive paradigms to create evolutionary environmental and metaphysical jurisprudence.

⁷⁶ The Law Commission "Māori Custom and Values in New Zealand Law" (March 2001) Study Paper 9 at 95.

CHAPTER FOUR: GLOBAL PERSPECTIVE

This year in global news New Zealand has been lauded for its legal approach to nature.⁷⁷ Our freshwater is being polluted, but our legal response so far has seemed to be radical and holistic. But what is the view like when we zoom out of our jurisdiction to a more global perspective? How is freshwater approached globally?

New Zealand is not the only place where politics is increasingly attempting to resolve the tensions between the byproducts of capitalism and indigenous spirituality. The Ganges is claimed to be the holiest river in the world, but "absorbs more than a billion gallons of waste each day, three-quarters raw sewerage and domestic waste and the rest industrial effluent, and it one of the ten most polluted rivers in the world".⁷⁸ But for Hindus the water is a manifestation of a deity who cleanses the Earth and purifies sins.⁷⁹ Because of this, some believe that the Ganges River can never be polluted and is eternally pure. Others believe this is delusional, and destroying 'Mother India'. As one Swami states: "too many people think the Ganges not only purifies sins but also has the power to cleanse itself...and they forget that while Ganga can take care of your sins it cannot take care of your waste, of your pollution".⁸⁰ As the population of the world increases, worldviews are manifesting themselves more and more in the physical world around us. The Ganges, the world's third largest river by discharge, flows pure from a Himalayan glacier to become a human sewer. The impact of daily human life is immense and increasing.

The results of human-induced climate change will increase throughout the century, and pose the greatest threat to global freshwater systems:⁸¹

Climate change will affect the natural water balance and water availability in several ways: changes in spatiotemporal patterns and variability of precipitation affect the

⁷⁷ Bryant Rousseau "In New Zealand, Lands and Rivers can be People Too (Legally Speaking" The New York Times (online ed, New York, 13 July 2016); "Nature's a Person?" The Guardian (video, Facebook ed, 3 September 2016).

⁷⁸ George Black "What it Takes to Clean the Ganges" *The New Yorker* (online ed, New York, 25 July 2016) ⁷⁹ See Justin Rowlatt "India's Dying Mother" *BBC* (online ed, London, 12 May 2016)

⁸⁰ Ibid.

⁸¹ The United Nations World Water Assessment Programme "The United Nations World Water Development Report 2015: Water for a Sustainable World" (Paris, 2015) at 55.

replenishment of water resources. Increases in temperature cause higher evaporation from open surfaces and soils, and increased transpiration by vegetation, potentially reducing water availability. Water quality will be affected, for instance as a result of seawater intrusion in coastal aquifers, faster dissolved oxygen depletion because of higher water temperatures, or higher content of pollutants that flow into water bodies following extreme rain events.

This has been recognised by our national government in the freshwater reform:⁸²

The West Coast of the South Island is the wettest area of New Zealand, whereas the area to the east of the mountain, just over 100 kilometres away, is one of the driest. Future climate projections are that this disparity is likely to become even more acute in the decades to come.

Yet the eastern plains of the South Island are where most of our population, pasture and enterprise occurs. The wet western side of the Alps has always posed a rugged and wild challenge to human endeavours. As the west becomes wetter and the east becomes drier, how will our irrigated farms fare? This is just one of the many potential impacts of climate change that will affect all the perspectives we have been discussing. The distribution of freshwater nationally and globally is changing, but so too is the global response.

The Global Village

In the Millenium Report, UN Secretary General Kofi Annan used the image of a 'global village' to help conceptualise a global perspective from which we could recognise the challenges humanity faced at the start of this millennium.⁸³ Imagine the entire global population is represented by a village of one thousand. One hundred and fifty live in the affluent area of this village (that is us), seven hundred and eighty are crammed in to the poorer area, and seventy live in a transitioning neighbourhood. Half of the village lives on two dollars a day. The village's water table is falling

⁸² Ministry for the Environemt (2016), above n 1, at 6.

⁸³ Kofi Annan "We The Peoples: The Role of the United Nations in the 21st Century" *The United Nations* (2000).

precipitously. What is our role in the village? Are we content in a nice home isolated in the affluent neighbourhood, or are we connected to the wellbeing of the village as a whole?

With the development of the Internet, accessible aeroplane travel, mass- and socialmedia, humanity is becoming increasingly connected. The plight of one is more and more becoming the plight of all. Rising sea levels will affect us all. Historically, we are moving past ideological divisions of race, gender, and class, becoming more acutely aware that we are one species – a global village. "As we look ahead, we can see real risks that resource depletion, especially fresh water scarcities, as well as severe forms of environmental degradation, may increase social and political tensions in unpredictable and potentially dangerous ways".⁸⁴ As we have seen in our own country this year, tensions flare over freshwater, especially when commodified, polluted or diminishing. As we respond nationally, we must also consider how to respond globally.

The challenge of this century is to balance population- and economic-growth with the carrying capacity of the earth's environment:⁸⁵

During the past hundred years, the natural environment has borne the stresses of a fourfold increase in human numbers and an eighteenfold growth in world economic output.

This is fine from the classical liberal point of view that prioritises the individual. But collectively as a global village, "we are failing to provide the freedom of future generations to sustain their lives on this planet".⁸⁶ Classical liberalism was developed when the population of the planet was less than one billion, before globalisation, before climate change, when race and class and gender were used politically and ideologically to divide. A time when the state was seen as the main threat to individuals. Nowadays dogged national sovereignty and multinational corporate interests seem that main threats. (Neo)liberalism has run its course to the point where single-mindedly pursuing self-interest is destroying the sustainability of the global village. Again, freshwater bears the brunt of this paradigm, as "global freshwater

⁸⁴ Ibid, at 44.

⁸⁵ Ibid, at 55.

⁸⁶ Ibid, at 55.

consumption rose sixfold between 1900 and 1995 – more than twice the rate of population growth".⁸⁷ By seeing the world through this particular paradigm, a particular worldview, things go unnoticed such as falling water tables, and "the unsustainable but largely unnoticed, exploitation of these water resources".⁸⁸

From a global perspective, the issue is not merely one of philosophies, but a visceral existential crisis:⁸⁹

The most serious and immediate challenge is the fact that more than 1 billion people lack access to safe drinking water, while half of humanity lacks adequate sanitation. In many developing countries, rivers downstream from large cities are little cleaner than open sewers. The health impact is devastating.

Unsafe water and poor sanitation cause an estimated 80 per cent of all diseases in the developing world. The annual death toll exceeds 5 million, 10 times the number killed in wars, on average, each year. More than half of the victims are children. No single measure would do more to reduce disease and save lives in the developing world than bringing safe water and adequate sanitation to all.

So while in New Zealand we are concerned with access, 'swimmability', and ownership, disenfranchised people worldwide are dying. From this perspective, how can we be so damned possessive? Our freshwater is so comparatively abundant that international companies are bottling it and selling the water overseas. But as a freely occurring resource, could we not also distribute our bottled water freely to those dying of thirst, as part of our national humanitarian aid? I guess there is no incentive without profit. Maybe this attitude will change with time.

The United Nations World Water Development Report 2015 recently reassessed the state of the globe's freshwater. The publication opens with 'A Vision for 2050':⁹⁰

Humanity has achieved a water secure world, where every person has access to adequate quantities of water of an acceptable quality and from sustainable sources, to meet their basic needs and sustain their wellbeing and development.

⁸⁷ Ibid, at 60.

⁸⁸ Ibid, at 60.

⁸⁹ At 60.

⁹⁰ Water Report, above n 81, at 8.

It is a utopian vision for freshwater, but one that the UN is committed to achieving. To do so, "equity, non-discrimination, participation and accountability have become key principles in water governance".⁹¹ New Zealand is progressing well in terms of non-discrimination and participation in freshwater. Perhaps we could continue this by granting rights of nature to other areas of the country, not just as part of Treaty settlements. But more importantly, increased accountability of the polluters of our freshwater should be the main focus. Economic growth is fine, but this must be accounted against sustaining the ecosystem that is profited from.

From this global perspective the message is clear. The global village requires a new outlook that prioritises sustainability over unhindered growth. To achieve this, nations must recognise this and recognise their ability to contribute to the global village:⁹²

Many of the pressures that impact water sustainability occur at local and national levels, are influenced by the rules and processes established at those levels.

Competition for water between water 'uses' and water 'users' increases the risk of localized conflicts and continued inequities in access to services. In this competition, the need to maintain water and ecosystem integrity in order to sustain life and economic development is often ignored. Frequently, the environment, as well as marginalized and vulnerable people, are the biggest losers in the competition for water.

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Over-abstraction is often the result of out-dated models of natural resource use and governance, where the use of resources for economic growth is under-regulated and undertaken without appropriate controls.

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Global environmental degradation, including climate change, has reached a critical level with major ecosystems approaching thresholds that could trigger their massive collapse. This is a result of past failures to design decision-making mechanisms that would appropriately govern the global and national commons and the earth's shared natural resources.

⁹¹ Ibid, at 9.

⁹² At 11–13.

The onus is on the people of the land to redesign these outdated decision making mechanisms to collectively and sustainably manage our freshwater resources. Once a sustainable platform has been established beyond those limited instances of Treaty settlements, then our attention should be directed towards the global village to aid the sustainability of humanity and our global freshwater.

CHAPTER FIVE: COSMOLOGICAL PERSPECTIVE

What does a cosmological perspective offer a legal dissertation? It is the conclusion of our experiment in perspective, culminating in a new and ever-expanding perspective that has only very recently become available to humanity. The ramifications of this viewpoint are colossal for our understanding of what it means to be human, what it means to be the most intelligent form of life on the only haven of life in the known universe. For our purposes, it offers insight into future of freshwater on the planet, due to the harmonising effect this viewpoint has on all the perspectives we have discussed so far.

The Overview Effect

In 1948, English astronomer Sir Fred Hoyle stated that "once a photograph of the Earth, taken from the outside, is available...a new idea as powerful as any in history will be let loose". It is a perspective that had previously been reserved for deities, looking down upon humanity. We created stories that speculated on their perspective. Then with space exploration this perspective was made public with photographs and film footage of the Earth, a greenblue orb suspended in black infinity. A short documentary called *Overview* shows astronauts speaking of what Earth is like from this perspective: beautiful, dynamic, alive.⁹³ They describe a transcendence of separation between self and the universe, an experience of integration and interconnection. They termed this 'the overview effect': seeing things that we know but we do not experience – the earth as one system and humans as a part of that system. It is not the intellectual recognition of the synergy of ecosystems, or scientific recognition of humans as an evolutionary expression of nature. Instead the astronauts describe a visceral and felt experience. The earth is a 'teardrop of green', and the sun

⁹³ The Planetary Collective "Overview" (video, online ed, Vimeo, 2011) https://vimeo.com/55073825>

a star in black infinite space. This is cosmic perspective. We are poised very delicately in space.

One particular scientist came back from space and searched both scientific and religious literature to explain the sensation. Finding nothing, he asked a local university who came back with an ancient explanation – *savikalpa samadhi:* seeing things as you see them with your eyes, but experiencing them emotionally and viscerally as with ecstasy and a sense of total unity and oneness.⁹⁴ It is not a new idea to ancient spiritual mystics, but a new idea in popular consciousness. A unity of all life on Earth. A new idea in the Western tradition. Self and the world are not separate but interconnected. The individual cannot pursue self-interest at the cost of the environment because their interests are interconnected.

The perspective of Earth from space enabled a cognitive shift in human consciousness previously reserved to mystics. Their ideas seemed mystical to the general public, until the members of the public went to space and had the same experience:⁹⁵

That whole process of what it is you identify with begins to shift. When you go around the Earth in an hour and a half, you begin to recognize that your identity is with that whole thing. That makes a change. You look down there and you can't imagine how many borders and boundaries you cross, again and again and again, and you don't even see them.

Individual worldviews are suddenly expanded by the world viewed. Self and Earth are not disconnected. If the Earth is sick we become sick, chemicals in the soil and water enter ourselves. If the Earth dies we die. These ideas are mirrored in the Te Urewera and Whanganui River settlements. I am the River and the River is me. Humanity does not have unhindered dominion over Earth, but utu, a reciprocal relationship in which we are kaitiakitanga, guardians of the Earth. The Maori worldview has never dissociated itself from this perspective, and has therefore been the template for introducing this perspective into our law.

⁹⁴ Ibid.

⁹⁵ Frank White *The Overview Effect: Space Exploration and Human Evolution* (American Institute of Aeronautics and Astronautics, Reston, 1998) at 11.

CONCLUSION

This brings us to the end of our experiment in legal perspective. Let us wander back down from the mountain panorama, grounding ourselves again after these metaphysical and cosmological considerations. Finding ourselves at a lake of sorts, fed with these fluid perspectives.

From this lake-view, the perspectives discussed are not separate but one. The cosmic perspective can also be the global perspective, the collective perspective and the personal perspective. Dividing these perspectives into chapters helped clarify our perspective for the sake of communication. But after looking through these lenses they all appear as one. Humanity reflected from the surface of our freshwater. The personal perspective is dissolving as classical liberalism loses grasp on an increasingly fragile and increasingly interconnected globe. As we also let go of our clinging to private property, more relevant and fluid forms emerge that enable novel ways to collectively manage shared natural resources – *res communes*.

But freshwater has always defied our philosophical and legal constructs, and instead reflects the socio-political context. Our current context is fluid, flowing from an anthropocentric and industrial focus, to a more ecological and sustainable conception of man's relation to nature. Our law reflects this paradigm shift, become more fluid, more dynamic and holistic. No longer grasping at freshwater, but creating a legal filter to sustain the life of *fresh*water. Creating a legal voice for nature. I am excited to hear the voice of the Whanganui River.

It appears that we have finally reached the stage that Christopher Stone hoped for when he first conceived of legal standing for natural entities. The directional flows in the law and public consciousness demonstrate:⁹⁶

We are beginning to discover that pollution is a process that destroys wondrously subtle balances of life within the water, and as between the water and its bank...We are not only developing the scientific capacity, but we are cultivating the personal capacities *within us* to recognize more and more the

⁹⁶ Christopher D Stone "Should Trees Have Standing? – Toward Legal Rights for Natural Objects" (1972) 45 S Cal Law Review 450 at 498.

ways in which nature – like the woman, the Black, the Indian and the Alien – is like us...The time may be on hand when these sentiments, and the early stirrings of the law, can be coalesced into a radical new theory or myth – felt as well as intellectualized – of man's relationship to the rest of nature.

These radical new stirrings in the law have come from a *feeling* of freshwater, a *feeling* of its mauri. Now felt *and* intellectualised, and given real legal force. May the spirit of the water continue to remind us of fluidity and humility, as we continue to use the law to govern a harmonious relationship with nature.

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