

THE SCIENCE OF LANGUAGE: EXAMINING THE LINGUISTIC STRUCTURE OF TE REO MAŌRI



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INTERNSHIP REPORT

UNIVERSITY OF CANTERBURY

2016

This internship report was produced by the authors as part of a supported internship project under the supervision of the named supervisor and funded by Ngā Pae o te Māramatanga. The report is the work of the named intern and researchers and has been posted here as provided. It does not represent the views of Ngā Pae o te Māramatanga and any correspondence about the content should be addressed directly to the authors of the report. For more information on Ngā Pae o te Māramatanga and its research, visit the website on www.maramatanga.ac.nz



Title of Project:

The Science of Language

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Table of Contents

Table of Contents	2
Acknowledgements	3
Glossary	4
Preamble: Te Kawa Maiororo	6
Te Whare Kōrero o Io Matua	7
Section I: Nō Tikitikioterangi: Ethnolinguistics	8
<i>Terra Magna Linguistics</i>	9
<i>Māori Oral Traditions (a terra magna discourse)</i>	10
Section II: Ko te Pū: Historical and Political Events	13
<i>Te Tiriti o Waitangi</i>	13
<i>The New Schooling System</i>	13
<i>Current Education Policies</i>	16
Section III: Te Orooro o Io Matua: Phonology and Orthography of Te Reo	17
<i>A brief history</i>	17
<i>A strategy for advancing Māori print literacy in Kōhanga Reo: Te Arapū Māori</i>	17
Section IV: Ki te Ao Mārama: Te reo Māori in contemporary Aotearoa	21
Conclusions	23
References	25

Acknowledgements

This research project was supported by a grant from Ngā Pae o te Māramatanga; The Centre of Research Excellence funded by the Tertiary Education Commission (TEC) and hosted by The University of Canterbury- for a Research Internship during the summer of 2016/2017.

Te Rū Rangahau, the Māori Research Laboratory located at The College of Education, provided the ‘āhuru mōwai’ a physical and spiritual safe haven for the Internship.

E mihi ana ki ngā pūkōrero, ngā kākā tarahae o ngā tini whakatipuranga, koutou hoki ngā reo kua riro ki te pō. Hoki wairua mai rā ki roto ki tēnei tuhinga, ki roto ki tēnei wānanga. Nā koutou te huarahi i para hai whāinga mō ngā mumu reo o ēnei wā nei reanga. Kia tīkina atu e au ngā kupu a ahurangi Te Wharehuia Milroy:

“...Tēnā tātou ka tahuri ki te kumanu i te reo
kia tū tonu ai te whare kōrero, hei whare tāwharau
mō te reo ki te ake, ake rawa.
Āra kia mau ki te rongomaiwhiti o te reo nei.
Hei moko mō te tuakiri o ngā tātai āpōpō
kia ngunguru i te ao i te pō.”

Glossary

Aotearoa	Land of the Long White Cloud
Hapū	Sub-tribe/pregnant
Io Matua	Supreme being
Iwi	Tribe, people, bones
Karakia	Incantation
Kaiako	Teacher
Kaumātua	Elder
Kaupapa Māori Education	A distinctly Māori, philosophically and linguistically enriched, education system.
Kapa haka	Māori performing arts
Kōhanga Reo	Māori language nest
Kōrero	Talk
Kura	School
Kura Kaupapa Māori	Kaupapa Māori immersion schools
Mana	Prestige, authority, control, power, influence, status, spiritual power
Mauri	Life principle
Marae	Formal Māori gathering place
Marae Ātea	Formal Courtyard
Manu	Bird
Mātauranga Māori	Māori knowledge
Mātauranga-ā-iwi	Iwi-based knowledge
Mokopuna	Grandchild
Mōteatea	Traditional Lament
Pākehā	Non-Māori New Zealanders
Pānui	Read
Papatūānuku	Mother earth
Pātere	Traditional Chant
Pepeha	Tribal sayings
Pūkenga	Skill (skilled person)
Rangi	Sky
Ranginui	Sky Father
Tamaiti	Small child
Tamariki	Children
Tāngata	People

Tangata whenua	People of the land
Taonga	Treasure, anything prized
Taiao	Natural environment
Tohunga	Knowledgable expert
Tapu	Sacred, prohibited, under protection, restricted
Tauira	Student
Tāne Māhuta	God of trees and birds
Te Kawa Maiorooro	An incantation (Karakia)
Tikitikioterangi	Upper most of the twelve heavens
Te pū	Origins/core
Te ao Mārama	The world of light
Te ao Māori	Māori worldviews
Te ao Pākehā	Pākehā worldviews
Te ao whānui	World (wider cosmos)
Te Arapū Māori	The Māori Alphabet
Te reo	The language
Te Waipounamu	South Island
Tikanga	Custom
Tīmatanga	Beginning
Tino Rangatiratanga	Right to exercise authority, chiefly autonomy, self-determination
Tuhituhi	Write
Wairua	Spirit
Waka	Canoe
Wānanga	Institution of higher learning, discuss in depth
Whakapapa	Genealogy
Whakarongo	Listen
Whakataukī	Proverbial saying
Whānau	Family (including extended)
Whanaungatanga	Relationships, connectedness
Whare	House
Whatumanawa	Inner heart, core
Whenua	Land

Preamble: Te Kawa Maiorooro

*“Ka tākina te kawa,
ko te kawa nui ko te kawa roa
ko te kawa whakatiketike,
ko te kawa i ahua mai nō Tikitikioterangi.
I tipu ko te pū, ko te weu, ko te rito,
Ko te take, ko te pūkenga, ko te wānanga,
Ko te taura, ko te tauira.
Tēnei rā te awhinuku, te awhirangi
Nō te orooro o Io Matua,
I puea ake i te taketake i Ueuenuku i Ueuerangi,
Tēnei ka hohou ki runga ki te tipua,
Ki runga ki te tawhito,
Ki runga ki te kāhui o ngā ariki.
Kia puta ēnei tauira ki te Whai Ao ki te Ao Mārama
uhi, wero, tau mai te mauri.
Haumi e, hui e, tāiki e!*

(Te Hau Tutua as cited in Tēmara, 2009)

Te Whare Kōrero o Io Matua

The purpose of this literature review is to examine the linguistic structure of te reo Māori and the way in which the language has evolved in response to a range of contributing phenomena, in particular education. The findings of this research will inform the functionality of te reo Māori in improving educational outcomes for Māori learners.

Te Kawa Maiorooro introduced the literature review at the outset and is an ancient karakia (incantation) that will be drawn on as the conceptual framework, it provides the philosophical underpinning as well as the structural sign posts for this literature review.

‘Ka tākina te kawa, ko te kawa nui, ko te kawa roa, ko te kawa whakatiketike, ko te kawa i āhua mai nō Tikitikioterangi’ represents the first section that focuses on ethno linguistics and how Māori oral traditions such as karakia, pātere and mōteatea (traditional chant / lament) convey insights to the past and connect Māori with tīpuna (ancestors) and the taiao (the natural environment).

‘I tipu ko te pū, ko te weu, ko te rito, ko te take, ko te pūkenga, ko te wānanga, ko te tāura, ko te tauira’ frames the second section that centres on a discussion and analysis of historical and political events that lead to policies and practices that have impacted upon te reo Māori both linguistically and socially.

‘Tēnei rā te awhinuku, te awhirangi, nō te orooro o Io Matua, i puea ake i te taketake i Ueuenuku i Ueuerangi, tēnei ka hohou ki runga ki te tipua, ki runga ki te tawhito, ki runga ki te kāhui o ngā ariki’ symbolizes the third section of this literature review that examines the phonology and orthography of te reo Māori.

‘Kia puta ēnei tauira ki te Whai Ao ki te Ao Mārama, uhi, wero, tau mai te mauri, haumi e, hui e, tāiki e!’ embodies, the final and fourth section that will traverse the relationship between te reo Māori and educational outcomes for Māori learners in contemporary Aotearoa.

Section I: Nō Tikitikioterangi: Ethnolinguistics

*Ka tākina te kawa,
ko te kawa nui ko te kawa roa
ko te kawa whakatiketike,
ko te kawa i ahua mai nō Tikitikioterangi.*

Ethno linguistics has been approached as the study of a group's experience of life as it is organised and expressed through their language and as a science, the aim being to examine the relations between linguistic and cultural behaviour (Riley, 2014). In the early 1950's there were questions raised around the cognitive aspect of ethno linguistics; whether the structure of language affects the thoughts, the memories, the perceptions and the learning abilities of those who speak that language (Lenneberg, 1953). These kinds of questions stem from a deficit structuralist approach and have been challenged in more recent years by theorists such as Trask and Mayblin (2000). They speak about *Innere Sprachform* (the synergy between the inner structure and the outer form of a language) which, they argue, is the reflection of its speaker's mind, and that the language and the thought of a people is thus inseparable.

This thinking is in tandem with the 1920's Sapir-Whorf hypothesis (Perlovsky, 2009) that the structure of our language determines the way we perceive the world. One hundred years prior in the 1820s the Reverend Thomas Kendall posited ideas of the complex interrelationship of the Māori language with the theology, mythology, spiritual and physiological knowledge of the people and the land (Skerrett, 2017 in press).

Graham (2008) claims there are two very important kinds of relationships in life, firstly those between land and people and, secondly, those among people themselves, the second being always contingent upon the first. Moreover, that it is our 'human-ness' that is the very product of our relationship with the environment which then influences, and is influenced by, the languages we speak. She concluded:

The knowledge of a place is held by the First Nations people of that place, and learning about Aboriginal knowledge of places is to learn from the people of that country who are the speaking voice with and for the land (p. 511).

It is arguably one of the most complex and contested ideas in the science of linguistics today, the extent to which thought influences language and vice versa, the language influence on thought. It is argued here that there is another dimension that ought to be taken seriously in the debate, the extent to which the land and the environment influences both thought and language; this dimension is referred to as terra magna linguistics.

Terra Magna Linguistics

It is this very concept of ‘a land with a voice’ that has inspired the neologism of “terra magna” Latin for “loud earth” (Wikipedia, 2017). It lends itself to Skutnabb-Kangas’ (2003) idea about how the people and their languages come out of the land, our earth mother, Papatūānuku, and encapsulated in the whakataukī ‘Ko au te awa, ko te awa ko au’. The concept of ‘terra magna’ is coined here to represent the antithesis of ‘terra nullius’ which can be interpreted as the Latin equivalent of the phrase ‘vacant lands’ or ‘mute earth’ (O’Sullivan, 1999 as cited in Hemara, 2000).

The concept of ‘terra nullius’ was developed as a political colonial construct that communicates to the world the myth of native savagery and the absence of understanding how to properly ‘use’ the land (Watson, 2014 p. 509). Watson (2014) draws on evidence from book of Genesis, arguing that it provides a prescription for the land needing to be conquered so as to benefit human kind:

And God said to them, ‘Be fruitful and multiply and fill the earth and subdue it and have dominion over the fish of the sea and over the birds of the heavens and over every living thing that moves on the earth (1:28).

These ideas of human primacy over the land instructed colonial expansion and is strongly emphasised in the indoctrination of terra nullius. In short, the concept of terra nullius underpinned the social policy which enabled the dispossession of Indigenous peoples’ lands, languages and knowledges, neglecting the rich and layered understanding of the Indigenous people’s relationships with Papatūānuku (p. 509) and the languages that speak through her to the people who lived with and alongside her.

The same is especially true for research conducted on or about Indigenous languages generating what Martin and Mirraboopa (2003) call a ‘terra nullius research’ approach. Colonial ‘scientific’ research with Indigenous languages has taken on the same ‘terra nullius’ research approach where Indigenous languages were viewed as mere guttural utterances, lacking a ‘grammar’, scientifically dismissed as ‘language’ and needing to be eradicated.

The social policy that was then enabled in Aotearoa to eradicate te reo Māori was implemented through the schooling system for Māori children, and covered in the section on the historical and political developments. Terra magna linguistics, in this sense can be seen as the study of “the relationships that form and inform all aspects of how we interact with the natural world” (Watson, 2014 p. 512).

It legitimates and validates the sanctity and science of Indigenous languages, all of them. Terra magna linguistics speaks to the intrinsic connection that Indigenous peoples have with their lands that in turn shapes their languages, their lives and their cultural identities.

Māori Oral Traditions (a terra magna discourse)

*“Ka tākina te kawa,
ko te kawa nui ko te kawa roa
ko te kawa whakatiketike,
ko te kawa i ahua mai nō Tikitikioterangi”*

Te reo Māori has its origins in a time before creation. The old tohunga (expert) would chant whakapapa (genealogy) and or karakia, which started with the first stirrings of the universe and progressed to the birth of ‘Te Ao Mārama’- the world of light and all living things (Salmond, 1972). Our knowledge and culture stems from and is influenced by the union of Ranginui (Sky Father) and Papatūānuku (Earth Mother) who are ultimately the axis of the wider Universe, Te Ao Whānui (Doherty, 2014). Subsequently, a Māori worldview and one’s understanding of reality is able to be localized for instance, down through the generations via Tāne Mahuta (God of Forests and Birds) to a local rohe (district) that is verified in karakia, waiata (song) and whakataukī (proverb), which are recited when the need presents itself to strengthen and reaffirm one’s connection with tribal land and whakapapa. As put so eloquently in the following statement by John Rangihau:

As I stand on the marae, and experience the sensation of the environment around me, the land, the snow tipped mountains, the smoky hills, the forest, I recall my storied past, the myths and legends handed down from generation to generation until I am confronted by that past. It is then that I renew my affinity with the land, it is then that I say ‘Whenua, I am you and you are me. You nurtured me for nine months of my being, and that which nurtured me I called my whenua, my placenta. My whenua was deposited with much pomp and ceremony into the nooks and crannies of whenua, land, thereby renewing my vows that I come from you and in time I will return to you, whenua. That which I called my pito, my umbilical cord, was deposited into the trees set aside for such practice, signifying that, where my pito was severed, there I shall return to be reunited with it for the sweet slumber from which there is no awakening (Waitangi Tribunal, 2011 p. 27).

Temara (2013) draws attention to aspects of karakia as analogous to other forms of oral tradition, for example *pātere* and *mōteatea*:

Mēnā tātou ka titiro ki te karakia nei, kei te kī te karakia ‘ka tākina te kawa’ he aha rā te kawa? Ko te kawa he karakia. Ko te reo o te karakia he ōkawa, he ōkarakia, ka mutu he reo tapu (p. 91).

The term pātere is descriptive and graphic: each word, phrase, and sound is performed like a cascading flow of water to emphasise meaning (Black, 2014). These examples of oral tradition enable us to transcend time, to travel into our past and into worlds of our ancestors “ki te ao o tuawhakarere” (p. 90).

Doherty (2014) explains that through the concept of whakapapa as evidenced and illustrated in pātere we can also make connections to our whenua thus linking us to the local environment. The language therefore provides the nexus between mind and matter, or thinking and doing. It is the medium between people and place, particularly for Indigenous peoples. Doherty (2014) draws on the following pātere by Melbourne to exemplify this phenomenon:

***Ko Te Kore** Nothing, chaos
Ko Te Pō Darkness of unknown
Ko Te Rapunga Seeking
Ko Te Whāia Thought
Ko Te Kukune Growth
Ko Te Pupuke Increase, swelling
Ko Te Hihiri Desire, energy
Ko Te Mahara Thought
Ko Te Hinengaro Mind
Ko Te Manako Longing, desire
Ko Te Āhua Form
Ko Te Atamai Knowing, readiness
Ko Te Whiwhia Acquisition
Ko Te Rawea Satisfaction at acquisition
Ko Te Hauora Welfare
Ko Te Ātea Space*

(Melbourne, 1994 as cited in Doherty, 2014)

This pātere explains the traditional stages of development that occur from the state of nothing through to the concept of thought and desire, highlighting the cognitive stages of development and growth (Doherty, 2014). It draws on a colossal expansion of networks, which is referenced in Te Kawa Maiororo as ‘te kawa nui, te kawa roa, te kawa whakatiketike te kawa nō Tikitikioterangi’ and epitomizes “the connections to the wider cosmos, through Ranginui and Papatūānuku” (p. 37). Furthermore, Doherty (2014) claims that within mōteatea there are also examples that reinforce the iwi (tribal) links to the land base.

He states that the key to the use of mōteatea can be extrapolated from a lexicosemantic analysis of the word itself, mō (for), te (the), ātea (space in front of the whareniui) where:

Terms and concepts provide clues to their use and meaning... with continued reference to place names illustrating the influence of the environment on the language in the explanation of concepts and activities (p. 31).

Te Koko ki Ōhiwa (The surge at Ōhiwa) is another example of a pātere that reinforces tribal vinculum to the land. It is described by Black (2014) as an intellectual anthology that emphasises the interconnectedness of the natural environment, the historical sources and the customary/intellectual properties of the Ōhiwa Harbour associated with the original iwi who occupy that space. These examples (made explicit in *Te Kawa Maiororo*) are in keeping with a ‘terra magna’ theoretical underpinning, magnifying the richness of Papatūānuku; how our relationship with her helps to shape who we are, what we know and how we express ourselves.

All three Māori authors mentioned in this section reinforce the key message that our whenua (land), our reo (language) and mātauranga-ā-iwi (tribal epistemologies) are symbiotically connected and form the very nucleus of our tangata-whenuatanga (indigeneity).

Section II: Ko te Pū: Historical and Political Events

*I tipu ko te pū, ko te weu, ko te rito,
Ko te take, ko te pūkenga, ko te wānanga,
Ko te taura, ko te tauira.*

Language is an archaeological vehicle, full of the remnants of dead and living pasts, lost and buried civilisations and technologies. The language we speak is a whole palimpsest of human effort and history” (Russell Hoban, children’s writer, 1925—2011, cited in Zuckerman, 2014).

This section continues to examine the developmental phases of te reo Māori, in particular, the post-colonial historical events and policies that have affected the language both socially and linguistically for over 200 years. Since early contact times the bases of Māori society have shifted profoundly from being an undisputed majority to a 24% minority of the Māori population today (Salmond, 1972; NZ Statistics, 2013). The indigenous political system founded on a Māori worldview and Mātauranga-a-iwi was replaced by a foreign British Westminster system in which English became the everyday language (Salmond, 1972).

Te Tiriti o Waitangi

The Treaty of Waitangi signed in 1840 by representatives of the Queen of England and the Hapū (smaller tribal groups) of Aotearoa/New Zealand was a colonial instrument allowing for peaceful settlement by the British, mainly to justify land confiscations and political hegemony, particularly once British numerical dominance was achieved (Mikaere, 2011; Mutu, 2010; Walker, 2004).

The New Schooling System

According to Skerrett (2017) the first mission school in Aotearoa was established and supported by the Anglican Church Missionary Society (CMS) in December 1814. The Reverend school teacher Thomas Kendall was part of this mission and, operating under the propaganda of the Evangelicals, had instructions to gain all the information possible on the ‘natives’ (Binney, 1968 as cited in Skerrett, 2017).

He intended to begin his mission by translating the Māori language into written form through the compilation of a vocabulary (which will be explored further in section three).

Anaru (2011) claims Governor Grey enacted legislation that would place Māori children in boarding schools rather than day mission schools to shield them from what he described as the “barbaric and demoralizing influences of the Māori villages” (Lee & Lee, 2007, p.135 as cited in Anaru, 2011). Hokowhitu (2004 as cited in Anaru, 2011) exposes the missionary influence on Māori culture by stating:

In 1845, the missionary William Brown described Māori dancing and singing but noted with pride that, amongst the missionary natives they are entirely discontinued... Tīmoti Kāretu lamented the effect of missionary policy on kapa haka, noting that many tribes performed them less as the influence of missionaries intensified. Accordingly, kapa haka became obsolete in some tribes. For instance, one tribe had to be taught kapa haka by another so that they were able to host the 1934 Waitangi celebrations (p.158).

In 1867 the New Zealand Government passed the Native Schools Act, thereby creating a separate system of government schools built primarily for Māori children (Barrington, 2008). Barrington (2008) argued that the architects of the Act expected and hoped that the separate system of native schools controlled by the Crown would be a fairly short term transitory solution to the teaching of English to Māori children in order to Europeanise them. Skerrett (2017) argued that whilst the first missionary school was a failure, the missionary school system which later became the native school system was highly successful because of the language of instruction, te reo Māori. That is, up until the 1847 Education Ordinance which ushered in a change of policy, cemented in policy with the Native Schools Act of 1867. The practice then became the teaching of standard subjects in an English-only school curriculum thereby assimilating and anglicizing Māori children. By 1894 English-only language schools became compulsory for Māori.

The institutionalisation of European education was a destructive tool and one that was used to attack the identity, the culture and the esteem of the autochthonous Māori (O’Regan, 2011). This position is supported by Ngūgī wa Thigo’s book, *Decolonising the Mind: The Politics of Language in African Literature* (1986 as cited in O’Regan, 2011) who reminisces on his own Kenyan experience:

The night of the sword and bullet was followed by the morning of the chalk and the blackboard. The physical violence of the battlefield was followed by the psychological violence of the classroom. But where the former was physically brutal, the latter was visibly gentle (p. 9).

In Aotearoa, te reo Māori was banned in schools and children were often violently forced into using the English vernacular (Waitangi Tribunal, 1986). Clearly eradication was top of the agenda.

This is somewhat akin to Anthony Forster's ideology of colonial linguacide (Zuckerman, 2014). The idea was that natives would be sooner civilized if their language was extinct (p. 183-184). One hundred years on from the development of assimilation policies te reo Māori was in a seriously unhealthy state (Skerrett, 2017):

In 1847 100% of Māori children spoke te reo Māori. Just 50 years later, in 1900, that figure had been reduced to 90% Public policy, wars and urbanisation facilitated further rapid decline. By 1960 only 26% of children were Māori speakers (Walker, 2004 as cited in Skerrett, 2017).

According to Anaru (2011) The Māori urban migration commenced around the late 1940s and continued into the 1960s. Bishop and Glynn (1999 as cited in Anaru, 2011) state:

Through urbanisation, te reo Māori suffered as those who migrated to the cities left behind not only their extended family unit, but also their tribal support of customs, culture and language (p. 31).

In addition to urbanization, Bishop and Glynn (1999) maintain the Second World War claimed the lives of many young men who would have otherwise been leaders and contributors to the prosperity of the Māori language and culture.

The viewpoint of the karakia at the outset of this section depicts the ontogenesis of Māori knowledge and ways of being (Tēmara, 2013) as a metaphor for the development of the Kōhanga Reo Movement (Māori immersion centres for early childhood). It originated out of decades of concern relating to the steady decline of the Māori language (Tāwhiwhirangi, 2013). Tāwhiwhirangi (2013) affirms that finally in 1981 Kaumātua (Māori elders) claimed there should be a move away from expecting government to address the decline, and that whānau should assume responsibility. Their guiding philosophy was to “find the baby at birth and put it to the breast; that's where the language starts” (p. 139).

In a broader sense Kōhanga Reo was a socio-cultural approach to the acquisition of language by bridging the sociolinguistic gap between the native older Māori-speaking generation and the younger generation/s (Skerrett, 2017; Tāwhiwhirangi, 2013). This meant that some of the socio-cultural disruption associated with language loss would be mitigated whilst also contributing to a socio culturally rejuvenated iwi Māori (Skerrett, 2017).

The likes of Kōhanga reo, Kura kaupapa Māori (te reo Māori immersion Primary Schools), Wharekura (te reo Māori immersion Secondary Schools) and Whare Wānanga (Māori equivalent of tertiary institutions) have been recognised as large contributors to increasing the population of speakers (Tāwhiwhirangi, 2013) and alongside those who sought to resist

colonial power hierarchies, form the building blocks of the Tino Rangatiratanga movement and have revolutionised Māori education.

Current Education Policies

The New Zealand Curriculum (Ministry of Education, 2007), in conjunction with *Tātaiako: Cultural Competencies for Teachers of Māori Learners* (Ministry of Education, 2011), acknowledges the principles of the Treaty of Waitangi and the bicultural foundations of Aotearoa New Zealand. They both guarantee ‘Tangata Whenuatanga’ in the provision of learning environments that are meaningful and “where the language and the cultural-identity of Māori learners and their whānau is affirmed” (p. 4). Concurrent with these policies have been two critical strategies *Tau Mai Te Reo: Māori language in Education 2013-2017* (Ministry of Education, 2013) and *Ka Hikitia: Managing for Success* (Ministry of Education, 2008); including the latter’s successor, *Ka Hikitia: Accelerating Success* (Ministry of Education, 2013).

Both strategies reinforce the key message that children/students do much better when education is contextualized, whānau-orientated and reflects their identity, language and culture. Despite efforts by the government to develop policies and strategies that support the re-vernacularisation of te reo Māori, it has not yet been made compulsory in the curriculum alongside English (Skerrett, 2017). Skerrett (2017) asserts that instead the Māori language is having to compete for space and resource in the curriculum across all sectors of education. She attributes this to a continued injustice and a breach of linguistic rights, whereby children have stopped acquiring te reo Māori as a birth right and as an official language of this country.

In summary, the history of te reo Māori, like the archaeological vehicle full of the remnants of dead and living pasts, is also a palimpsest of Māori/English conflict and struggle over language, land, culture and identity. These struggles were manifest at the signing of the Treaty of Waitangi in 1840 and played out in the periods and policies of assimilation culminating in the birth of the ‘Tino Rangatiratanga Movement’ and the fight for the language to be mandated in the curriculum in the latter third of the 20th Century. This section evidenced the resistance and self-determination of whānau who sought to challenge hegemonic systems inherited through colonialism, paving the way for new waves of language activists and rejuvenated whānau, hapū and iwi Māori.

Section III: Te Orooro o Io Matua: Phonology and Orthography of Te Reo

*Tēnei rā te awhinuku, te awhirangi
Nō te orooro o Io Matua,
I puea ake i te taketake i Ueuenuku i Ueuerangi,
Tēnei ka hohou ki runga ki te tipua,
Ki runga ki te tawhito,
Ki runga ki te kāhui o ngā ariki.*

A brief history

Te reo Māori is the most southerly of Polynesian languages, a sub-group of the very widely spread Austronesian language family (Harlow, Keegan, King, Maclagan and Watson, 2009). The first known interaction between te reo Māori and English occurred in the late eighteenth century, following Cook's explorations (p. 131). Thomas Kendall described himself as one of the first European settlers to sleep on the shores of Aotearoa amongst the Māori, and was the first Pākehā to learn and study the language (Binney, 1968 as cited in Skerrett, 2017). His view was that the understanding of the language could only be gained through knowledge of the traditions and that full knowledge of the language deepens one's understanding of the people who framed it, their ideas of human nature and destiny (Skerrett, 2017 p. 13).

According to Skerrett (2017) he wrote New Zealand's first book '*A Korao no New Zealand*' intended for Māori readers; and on the first page of that book was an alphabet followed by pages of alphabetically ordered lists of words. Kendall utilised the writing conventions that were familiar to him, in the phonology he was hearing, and in doing so, he tentatively began to develop an orthography. This, however, triggered some controversy with Reverend Samuel Marsden who wanted a different orthography based on English phonology. In the final analysis, it was Kendall's orthography that became widely utilised, and formed the basis of an orthographic tool developed for use in Kōhanga Reo.

A strategy for advancing Māori print literacy in Kōhanga Reo: Te Arapū Māori

In 1999 Kate Cherrington and Mere Skerrett, both teachers and parents in Kōhanga Reo developed the first ever contemporary Māori alphabet tool (*Te Arapū Māori*) after Kendall's 1815 orthography (Skerrett, 2017). Thomas Kendall's orthography was grounded in the idea that in order to 'instruct' in Māori it was necessary to work in the vernacular (Binney, 1968) and develop an orthography consistent with Māori phonology (Skerrett, 2017). *Te Arapū Māori* has the same theoretical underpinnings.

The development was documented as part of a research project focused on the ‘functional specificity’ that Fishman (2010) speaks of; that is the importance of the domain of written language, especially in a wider context of language attrition and restricted language domains. Without taking away from the importance of oral transmission, Skerrett (2017) argues “just speaking a minority language in the Kōhanga Reo or at home is not enough to ensure its maintenance. It is just as important for tamariki to learn to read and write in te reo Māori; to appreciate and value te reo as a medium of communication, with status” (p. 25). She goes on to state:

Whilst we wanted our children to be Māori English bilinguals, Māori language first; we also wanted them to experience the richness of their Māori worlds through literature and literacy, and be able to transition comfortably and competently between their Māori and Pākehā worlds as in Mason Durie’s (2001) Māori Education Framework. (p. 25)

Moreover, she argues that the phonological tool ‘*a ha ka ma na pa ra ta wa nga wha*’, when utilized across all five vowels, gave 55 morphemes, which turned out to be too unwieldy, especially when trying to develop an alphabet frieze for young children in Kōhanga Reo.

Further, that the children needed something that promoted vowels *and* consonants, in alphabetical ‘Māori dictionary’ order. She documented how she drafted the first verse (which has a resistance element to the loss of language) which was then put to music by Kate Cherrington. The second verse (stressing the relationship of writing to reading) was subsequently added in 2000 by Maraea Hunia (then a primary school teacher).

Te Arapū Māori

<i>Te Arapū Māori</i>	<i>English translation</i>
A-a a-a e h i k m n ng o p r t u w wh (x2)	A-a a-a e h i k m n ng o p r t u w wh (x2)
Ko tēnei te arapū Māori e	This is the Māori alphabet
Kia kore ai tō tātou reo e ngaro ne!	So that our Māori language never disappears
Arā, a-a e h i k m n ng o p r t u w wh	That is, A-a e h i k m n ng o p r t u w wh (x2)
Ko tēnei te arapū tuhituhi	This is the written Māori alphabet
Hei awhina mai i te pānui	Which assists with reading
Arā, a-a e h i k m n ng o p r t u w wh, hei ha!	That is, A-a e h i k m n ng o p r t u w wh (x2)

Skerrett maintains just as the development of the Sesame Street alphabet song and its use in the Sesame Street programme was controversial in the 1960s, so too has the Arapū and exposing tamariki (in Kōhanga Reo) to text been controversial among teachers, with policy developers and Ministry of Education officials (see Skerrett-White, 2003). She notes that when a kaumātua (tribal elder) was asked how he learnt the English alphabet as a child he replied “by singing the Sesame Street song”, which had not even been invented when he went to school (p. 27). She claims that this is proof of the extent to which the Sesame Street alphabetic tool has been ‘normalised’, and asserts that so too can *Te Arapū Māori* become an effective paralleling instrument in the promotion of Māori/English bilingualism. She explains:

The development of this tool, and its promotion, makes explicit the relationship between Māori print literacy and Māori language revitalization in Kōhanga Reo and assists with its wider aims of intergenerational transmission (p. 28).

Te Arapū Māori builds on Kendall’s work contributing to the preservation of te reo Māori and is a model that pushes the parameters of Māori literacy. It challenges ‘normative assumptions’ around teaching young children to read and write in their native language (Skerrett, 2017).

In tandem with the opening line of the karakia mentioned at the outset ‘tēnei rā te awhinuku te awhirangi nō te orooro o Io matua’ it is viewed as exploring and pushing the peripheries [of language]. ‘Te orooro o Io Matua’ refers to *Te Whare Kōrero o Io Matua* (Tēmara, 2013) interpreted here as the dynamic interface of te reo Māori, ‘i puea ake i te ueuenuku i te ueuerangi,’ as it interacts with a wide range of linguistic phenomena.

This section provided an historic overview of the first encounters between Māori and European, which lead to Kendall’s Māori orthography and many generations later, as a response to the learning needs of children in Kōhanga Reo, the invention of a new phonological tool, *Te Arapū Māori*. It is a tool that can be replicated, traversing those Indigenous cultures that may not have begun this type of work with young children in education.

Section IV: Ki te Ao Mārama: Te reo Māori in contemporary Aotearoa

Kia puta ēnei tauira ki te Whai Ao ki te Ao Mārama

The fourth and final section draws on the final stanza of Te Kawa Maiororo ‘kia puta ēnei tauira ki te whai ao ki te ao mārama’ bringing to focus the gravity of the relationship between te reo Māori and educational outcomes and achievement for Māori students.

In Aotearoa New Zealand, Māori student achievement is heavily influenced by the dominant deficit discourses of Māori people and language as being intellectually and linguistically inferior to the British colonials. These notions are perpetuated in our current education system (Webber, 2011). They are based in the socio-political history between English and Māori that privileges the English language, alienating the Māori language, and promotes hegemonic streams of knowledge (Skerrett, 2011; Macfarlane, 2015). In other words, by advantaging English over te reo Māori we are effectively limiting students to one way of thinking, one way of learning and one way of being successful.

Whitinui (2011) addresses some of the challenges in regards to finding new innovated, effective and practical ways to improve educational outcomes for Māori children. He argues “many Māori students are less likely to achieve their educational potential if schools remain resistant to what they teach and how” (p. 11). In addition, O’Regan (2011) asserts that, if we want our Māori children to be truly successful in their education, the provision and use of te reo Māori in schools is absolutely critical. She maintains that schools and educators must instill the use of te reo Māori, not only to ensure its maintenance but also to strengthen our national identity as New Zealanders. Skerrett (2011) supports this position from the view of the early childhood sector, on both ideological and pedagogical grounds. Ideologically, she professes that it is a matter of linguistic and human rights that children are given the opportunity to learn their mother tongue. Pedagogically, it is all about progressing Māori learners through the education sector without disadvantage.

Brown (2012) insists cultural activities that promote te reo Māori such as Ngā Manu Kōrero (National Speech Competition for English and te reo Māori) and Kapa haka (Performing Arts) are having a positive influence on students in the primary and secondary sectors. Increased levels of engagement among students (both Māori and non-Māori) can be expected where the pressure to achieve eloquence and expertise in the language and culture are spearheaded by

their own enthusiasm and passion (p. 23). Education advisors and teachers are being given a clear ultimatum by youth and it is very simply, “Give us our passion or give us nothing” (Danish et. al., 2004 as cited in Brown, 2012, p. 24. If politicians, educators and Māori language strategists ignore that call this would be to the detriment of the learning outcomes for students (p. 24).

Ka'ai (2011) claims there is a common expectation among international students (at tertiary level) that everyone in Aotearoa can speak both English and Māori. She adds, there are two assumptions that underpin this expectation. Firstly, that people in Aotearoa are schooled in both English and Māori and secondly is the fact that Māori and English are two of three official languages of this country. She states:

Imagine an education system where both Māori and English were compulsory. Imagine! This would mean that Māori faculties in universities could then teach Māori-language papers in the first year of a degree programme which are currently being taught at the higher levels of the degree and at Masters level. If this were the case universities could get on with the business of teaching Māori literature leaving schools and language-learning communities to teach introductory, intermediate and advanced te reo Māori. This is what we can all aspire to in the future across the education sector (p. 216).

The sanctioning of the language would cause a paradigm shift towards a bilingual/bicultural approach which acknowledges two streams of knowledge as they converge (See Macfarlane, Macfarlane and Webber, 2015). This notion also resonates with Penetito's (2015) concept of 'straddling two worlds' and that “the dynamic interface that exists between two worlds of knowledge actually creates a 'third world' for facilitating cross-cultural and inter-cultural awareness” (as cited in Macfarlane et al. 2015, p 196).

In concluding this section of the literature review, Kāretu (2008) states:

Our language leaders of tomorrow will be those who, like those of today, are committed to the proposition that this language must survive and that it is crucial to our identity as Māori (p. 5).

Furthermore, it was Sir Apirana Ngata in the 1920's who stated, “Ki te kore koe e mōhio ki te kōrero Māori ehara koe i te Māori” (Kāretu, 2008 p. 5), which was really an attempt to raise the level of 'conscientisation' around the declining state of te reo Māori and to challenge people's thinking around the relationship between language and cultural identity.

To dismiss the importance of te reo Māori and the cultural heritage of Aotearoa would be to assume the cultural capital of a predominantly Western European ideology that silences all other languages and knowledge systems. Consequently, such action only leads to the further perpetuation of substandard learning outcomes for Māori that manifest as educational disparities.

This literature review calls on the voices across all the sectors and concurs that in order to improve education outcomes for Māori learners, it is imperative that te reo Māori is formalized as part of the curriculum. ‘Kia puta ēnei taurira ki te ao mārama’ so that ‘the students can enter the world of light’ a world where they feel valued, their voices heard and their identity as Māori affirmed.

Conclusions

This literature review commenced with a discussion around cultural linguistics also known as ethnolinguistics. It has explored some of the theoretical discrepancies between a structuralist approach and an *Innere Sprachform* approach, which lead to the Sapir-Whorf hypothesis that the structure of our language determines the way we perceive the world. This hypothesis supported further thinking and analysis about the way the world (natural environment) influences our languages. It brought into focus another dimension that had not yet been considered in this field of study; the relationship between language, culture and the natural environment, which I coined ‘terra magna linguistics’. Aspects of Māori oral traditions (karakia, pātere and mōteatea) were examined and have highlighted some of the discourses around ‘terra magna’- making explicit the links between te reo Māori, whenua, whakapapa, mātauranga-ā-iwi and tangatawhenuatanga.

Section two drew on the metaphor of an archaeological vehicle that took the literature review on a journey into the political history of te reo Māori. This passage uncovered some of the assimilation policies and events of the past that lead to the decline of the Māori language and culture. A brief but succinct overview of some of the current language policies in education, discovered that whilst these policies may have a sound theoretical underpinning, there is still a need for cohesion across the curriculum, in all learning domains. Finally, in this section, the Te Kōhanga Reo movement and the efforts of whānau whose activism laid the foundations for a new generation of language/cultural warriors was examined.

Section three made reference to Te Whare Kōrero o Io Matua as a metaphor for the dynamic interface of te reo Māori, bringing to light some of the wider influences of linguistic phenomena. This analysis included the influence of the English settlers who brought with them their own language and pedagogies, which lead to Thomas Kendall's Māori orthography, and subsequently the first published book in New Zealand. This was followed by a case analysis about Te Arapū Māori, which revolutionized the way children learn to read and write in Kōhanga Reo as well as assisting the wider aims of language regeneration.

The final and fourth section gave voice to all of the sectors of education and maintained that in order to improve educational outcomes for Māori learners the language needs to be made compulsory in the curriculum. The implications of this assertion were that as the Māori language starts to repopulate Aotearoa, we will begin to notice a shift in culture to a language-in culture-in language identity-shaping praxis. Our country will become a place where the people are 'culturally connected' – they know who they are, where they come from and are steeped in their Māoritanga. This will, in turn, empower whānau, enhance the mana of our tamariki and transform community.

*Nō reira e te iwi me hoki rawa tātou ki ngā kupu o Te Kawa Maiorooro,
e whakatairanga nei i te reo o tūāuriuri whāioio, nō te Atua mai.
E whakahihiri ake nei i te mahara e tika ai tō tātou nanao atu i ngā kete o te mātauranga.
Ngaua te reo ki ō niho, kia mamae poto!
Tāmokotia ki tō arero, kia pūrua!
Tuhia ki tō ngākau ki tō whatumanawa, kia titikaha!
Kia rere, kia tika, kia Māori!
Koinei te mātāmua o ngā tuakiri e mōhio ai tātou he Māori tātou.
A kāti, waiho ake i konei ngā kupu kōrero hai whakapehapeha i te hinengaro.
Kia tau anō ai te manu kaewa o te whakaaro ki tōna kōhanga,
ā, a tōna wā ka rere atu anō ki ngā tiketike o te wānanga.
Uhi, wero, tau mai te mauri haumi e, hui e, tāiki e!*

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